



## **Pinellas County Utilities**

# **Water and Sewer Rate Study – Revised Draft Report**

January 29, 2019





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Ms. Lori Sullivan  
Financial Management and  
Budget Analyst  
Pinellas County  
Office of Management and  
Budget  
14 South Fort Harrison Avenue  
Clearwater, FL 33756

Dear Ms. Sullivan:

Stantec is pleased to present this report for the Water, Sewer & Reclaimed Water Utility Rate Study that we have performed for the Pinellas County Utilities Department.

We appreciate the fine assistance provided by you and all the staff members of Pinellas County who participated in the analysis. We sincerely appreciate the opportunity to be of service to you and the County and look forward to the possibility of doing so again soon.

If you have any questions, please do not hesitate to call me at (813) 204.3331.

Sincerely,

A handwritten signature in blue ink, appearing to read "A. J. Burnham".

Andrew J. Burnham  
Vice President, Financial Services

A handwritten signature in blue ink, appearing to read "J. Dykstra".

Jeff Dykstra  
Managing Consultant, Financial Services

Enclosure

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# 1. EXECUTIVE SUMMARY

## 1.1 INTRODUCTION

Stantec Consulting Services Inc. (Stantec) has conducted a Water, Sewer, and Reclaimed Water Rate Study (Rate Study) for the water, sewer, and reclaimed water utility systems of the Pinellas County (County) Utilities Department (PCU). This report outlines the assumptions, detailed analysis, and results of the Rate Study including final conclusions and recommendations.

## 1.2 BACKGROUND

The County has established individual enterprise funds for its water and sewer utility systems that separately account for the operating, capital, and other financial requirements of each respective utility system<sup>1</sup>. To ensure that each utility system is generating sufficient revenue to satisfy its ongoing financial requirements, the Board of County Commissioners (BOCC) has historically adopted periodic water, sewer, and reclaimed water rate adjustments.

In 2015, Stantec<sup>2</sup>, along with County staff, presented a four-year plan of annual water, sewer, and reclaimed water rate adjustments to the BOCC for their consideration. The BOCC approved all aspects of the recommended four-year plan of annual retail water, wholesale water, retail sewer, wholesale sewer, and reclaimed water rate adjustments. By approving the four-year plan of rate adjustments, the BOCC established a multi-year rate setting approach to levelize and minimize annual rate adjustments while also demonstrating proactive management of the utility systems desired by the municipal bond ratings agencies. Furthermore, it was recognized by the BOCC that periodic review and updates of the financial management plans and an approved four-year plan of annual rate adjustments would be needed to account for changes in demands, regulatory requirements, and operating and capital budgets.

The BOCC approved four-year water, sewer, and reclaimed water rate adjustment plans by fiscal year (FY) are shown in Table 1-1, Table 1-2, and Table 1-3 respectively.

**Table 1-1: Water Rate Adjustments Adopted by Fiscal Year**

Customer Type	FY 2016	FY 2017	FY 2018	FY 2019
Retail	1.75%	1.75%	1.75%	1.75%
Wholesale	1.75%	1.75%	1.75%	1.75%

<sup>1</sup> Annual reclaimed water requirements are accounted for within the sewer enterprise fund.

<sup>2</sup> Stantec acquired Burton & Associates through the acquisition of MWH in 2016.

**Table 1-2: Sewer Rate Adjustments Adopted by Fiscal Year**

Customer Type	FY 2016	FY 2017	FY 2018	FY 2019
Retail	0.00%	1.00%	1.00%	1.00%
Wholesale	0.00%	1.00%	1.00%	1.00%

**Table 1-3: Reclaimed Water Rate Adjustments Adopted by Fiscal Year**

Customer Type	FY 2016	FY 2017	FY 2018	FY 2019
Retail <sup>3</sup>	5.26%	5.00%	4.76%	4.55%
Wholesale	5.00%	5.00%	5.00%	5.00%

PCU has identified and is working to address several challenges that will influence its sustainability and financial performance over the next decade. PCU anticipates reductions in wholesale water sales and subsequent reductions in wholesale water revenues as the City of Clearwater continues to implement plans to expand or develop their own water supply facilities. Potential future increased operating expenses related to purchased water from Tampa Bay Water, which makes up over half of the water system's annual operating budget would also present a challenge. Like other utility systems across the State, Country, and Tampa Bay Region, PCU is also addressing capital infrastructure investments including 1) aging infrastructure that continues to drive the need for additional renewal and replacement, 2) investment in improved metering and customer information systems, 3) improved availability of reclaimed water services, 4) significant wastewater plant improvements, and 5) efforts to improve the resiliency of the wastewater system stemming from the impacts from Hurricane Hermine.

Considering these challenges, and consistent with the expressed desire of the BOCC to review the financial management plans on a periodic basis to account for any changes in operating, capital, economic, regulatory, and other factors, the County has engaged Stantec to evaluate the adequacy of the revenue provided by the current water, sewer, and reclaimed water rates to meet its financial requirements over a multi-year projection period.

### 1.3 STUDY OBJECTIVES

The principal objectives of the Rate Study were as follows:

**Perform a Revenue Sufficiency Analysis** – To evaluate the sufficiency of the water, sewer, and reclaimed water rates over a multi-year projection period and, to the extent necessary, develop a plan of annual water, sewer, and reclaimed water rate adjustments that will provide sufficient revenues to satisfy

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<sup>3</sup> Reclaimed retail water rate adjustment percentages were calculated based on a \$1 increase to the unfunded unmetered rate and was applied to metered reclaimed volumetric retail rates.

the updated financial requirements of each fund, including 1) operations and maintenance costs (including inter-fund transfers and minor capital outlay), 2) capital improvement program costs (including renewal and replacement requirements), 3) existing and any new debt service costs and corresponding net income to debt service coverage ratios, and 4) adequate operating and R&R reserves.

**Perform a Cost of Service Analysis** – To determine the proper allocation of required rate revenue adjustments based upon the allocations of cost of service between retail and wholesale customer classes, an evaluation of the level of cost recovery provided by current retail and wholesale rates, and consideration of fixed and variable costs for each utility system.

**Perform a Rate Design Analysis** – Including 1) a review of the water, sewer, and reclaimed water structures for conformance to industry best practices, cost of service, and the County's policy and pricing objectives, 2) identification of any recommended adjustments to the retail and/or wholesale rates for water, sewer, and reclaimed water services, 3) development of recommended rates for a four-year period from FY 2020 through FY 2023, and 4) determine the resulting impacts to customers' bills.

**Conduct Rate Surveys and Bill Comparisons** – That compare 1) the monthly cost of water and sewer service to single-family residential customers of other neighboring communities at varying levels of consumption, and 2) the monthly cost of reclaimed water to single-family residential customers within various neighboring communities under metered and non-metered rate structures.

## 1.4 SUMMARY OF RESULTS

Based on the completion of the analyses described herein, Stantec has developed several conclusions and recommendations for the County's water, sewer, and reclaimed water rates. The key findings and recommendations are outlined herein.

### 1.4.1 Revenue Sufficiency

This analysis evaluated the sufficiency of PCU's revenues to meet its current and projected financial requirements over a 10-year projection period and determined the level of any rate revenue increases necessary in each year of the projection period to provide sufficient revenues to fund all PCU's cost requirements. Stantec thoroughly discussed the base data and assumptions of the analysis with County staff and reviewed several alternative rate adjustment scenarios for PCU. Through this process, Stantec identified the recommended financial management plan and associated plan of annual water, sewer, and reclaimed water rate revenue increases presented herein.

The recommended financial management plan and corresponding plan of water, sewer, and reclaimed water rate revenue adjustments are based upon the revenue and expense information, beginning balances, and assumptions as described in Section 2 of this report. Appendices A and B include detailed schedules presenting all components of the financial management plan for the water and sewer systems, respectively.

The recommended overall four-year rate revenue adjustment plan for FY 2020 through FY 2023 is presented in Table 1-4. This Study includes a ten-year forecast to ensure that these recommended rate increases, and future rate increases would be sufficient to sustain the Utility beyond the four-year rate plan. As such, a ten-year plan for water rate increases and sewer and reclaimed rate increases are shown in Schedule 1 of Appendix A and Appendix B of this report, respectively. The revenue increases are achieved within recommended rate structure adjustments identified in Section 4 of this Report.

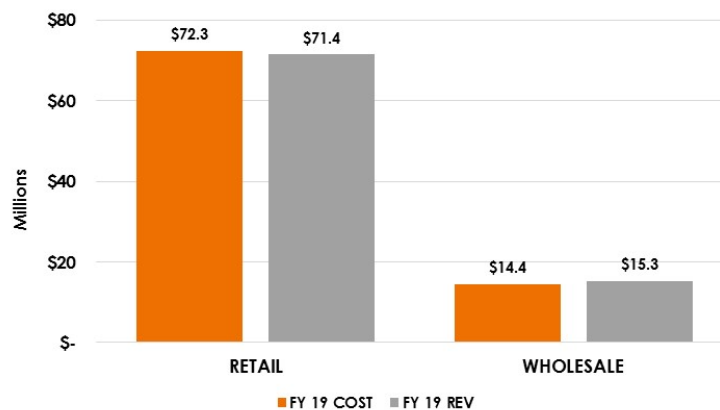
**Table 1-4: Recommended Plan of Water, Sewer, and Reclaimed Water Rate Increases**

Service Type	FY 2020	FY 2021	FY 2022	FY 2023
Effective Date	Oct. 1, 2019	Oct. 1, 2020	Oct. 1, 2021	Oct. 1, 2022
<b>Water</b>	1.00%	1.00%	1.00%	1.00%
<b>Sewer</b>	9.50%	9.50%	9.50%	9.50%
<b>Reclaimed Water<sup>4</sup></b>	11.63%	6.25%	5.90%	5.58%

### 1.4.2 Cost of Service

Stantec performed a cost of service analysis that allocated PCU's costs of its water, sewer, and reclaimed water systems to determine the level of alignment between the revenues generated from each system and the costs that PCU incurs to provide each service. In addition, costs were allocated to the functional components that make up each system and then between retail and wholesale customer classes. The cost of service analysis determined the portion of the water, sewer, and reclaimed water systems' costs allocable to retail and wholesale customers. Figures 1 and 2 present a summary of FY 2019 costs compared to revenues for retail and wholesale customers of the water and sewer funds respectively.

**Figure 1: Water Retail & Wholesale Costs vs. Revenue**



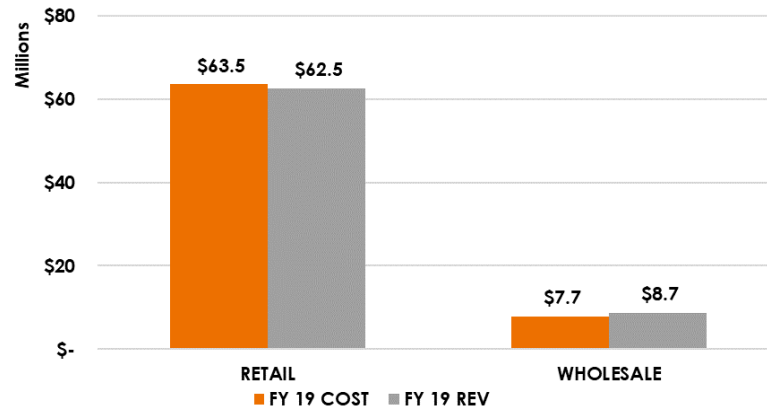
Cost of service studies such as that are reflected herein, reflect the analysis of conditions during a test year, selected to provide a normalized set of circumstances regarding key factors including operating and capital costs. Because cost of service studies reflect the influences of changing technologies, regulatory

<sup>4</sup> Represents combined (retail and wholesale) rate adjustments.



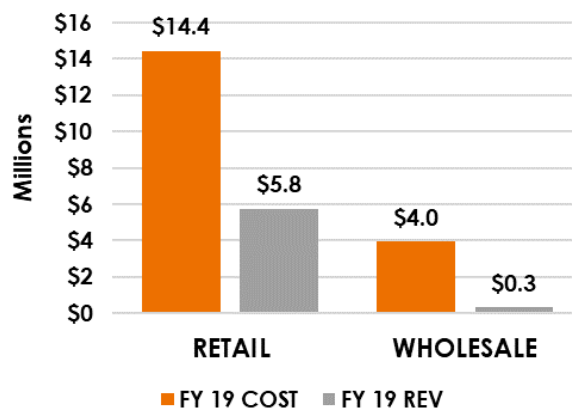
requirements, system development, and customer behavior, the results tend to change over time and as such should be conducted periodically. As a result, the process is generally used to provide direction establishing rates rather than as a direct tool to set rates whereas the multi-year financial plan identifies the rate adjustments necessary to meet the overall projected costs for the Utility over the multi-year period.

**Figure 2: Sewer Retail & Wholesale Costs vs. Revenue**



The costs and revenues for PCU’s reclaimed water system are included within the sewer fund. Once the sewer fund cost of service was identified, Stantec then allocated the sewer fund costs and revenues between the sewer and reclaimed water systems. Figure 3 presents a summary of the resulting allocated reclaimed water system’s costs and revenues by retail and wholesale customer classes.

**Figure 3: Reclaimed Retail & Wholesale Costs vs. Revenue <sup>5</sup>**



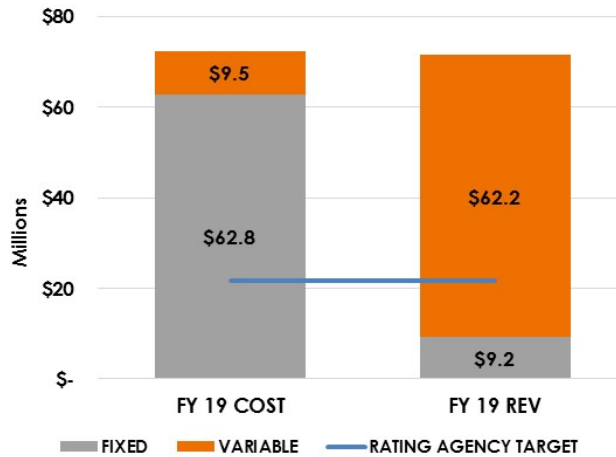
Furthermore, the cost of service analysis identified within the retail customer class the level of costs and revenues that are fixed and variable in nature to determine whether PCU’s existing rate structure and overall cost recovery by rate component was in line with the costs to provide service and industry

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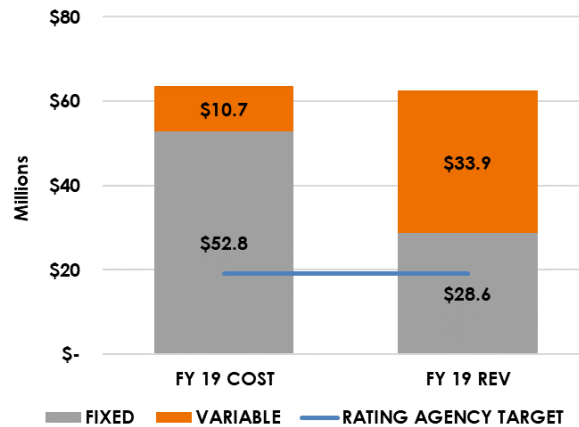
<sup>5</sup> The annual shortfall in reclaimed water revenues is covered by the sewer system.

standards and general guidelines provided by municipal credit rating agencies. Figures 4 and 5 summarize the level of retail fixed and variable costs as compared to revenues from fixed and variable charges for the water and sewer systems respectively.

**Figure 4: Water Retail Costs & Revenues Fixed vs. Variable <sup>6</sup>**



**Figure 5: Sewer Retail Costs & Revenues Fixed vs. Variable <sup>6</sup>**



### 1.4.3 Rate Design

Stantec examined PCU’s current water, sewer, and reclaimed water rates and developed recommended rate structure modifications that 1) more equitably recover PCU’s cost of service between fixed and variable costs, 2) conform to accepted national and local industry practices, 3) ensure fiscal stability and

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<sup>6</sup> As outlined in Fitch Ratings’ U.S. Water and Sewer Revenue Bond Rating Criteria, November 30, 2017 which identifies one component of the *Stronger* financial profile to achieve 30% or more of revenues recovered through base charges.

increased recovery of fixed costs through base charges, 4) promote water conservation, and 5) minimize the administrative burden during implementation while enhancing the ability to be easily understood.

Common practice is a two-part rate structure comprised of both fixed and variable charges. Generally accepted practice in the water industry include recovery of a portion of the costs of the system in a fixed readiness-to-serve charge. This practice recognizes that utilities have substantial investments in capital related costs and other fixed costs that are incurred year-round to maintain a state of readiness to meet peak demands of their customers when they occur.

The County presently has a fixed charge for water and sewer service regardless of whether there is any measured water use, which for water service is a base charge per account for all retail customers and for sewer service is a base charge per account for residential customers and a per Equivalent Residential Unit (ERU) for commercial accounts, which is 5,000 gallons of measured water use per month.

## **Water**

Regarding the water base charges, Stantec recommends the following rate structure modifications:

1. Scale the water base charges according to meter size in recognition that larger meters place a higher potential instantaneous demand on the system for the County to supply and has therefore invested in and sized the water system accordingly.
2. Phase the scaled base charges in over the four-year period so that by FY 2023 the base charge rate differential between meter sizes matches the standard maximum safe operating flow rates in proportion to a 5/8" or 3/4" as published by the American Water Works Association (AWWA)<sup>7</sup>.

No structural modifications are recommended to the County's water usage or volume-based rates. The County may want to consider developing an inclining-tier or conservation-based water volumetric rate structure in the future once AMI has been implemented and PCU switches from bi-monthly to monthly billing.

Stantec recommends scaling the water base or readiness-to-serve charges by meter size to increase the relatively low level of revenues recovered from the water system's base charges in proportion to costs and to address inequity in the current rate structure whereby customers with larger meters pay the same base charge. The revenue generated from the proposed phased-in modification to the base charges and across-the-board increases to wholesale rates provides the 1.0% annual revenue adjustment identified in Table 1-4 for the water system.

## **Sewer**

PCU's existing sewer rate structure meets the general objectives outlined previously. As such, no structural modifications are recommended to the sewer rate structure, either base or volumetric

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<sup>7</sup> Meter equivalent ratios based upon the standard maximum rate safe operating flow rates per Table 6-1 of the American Water Works Association (AWWA) Manual of Practice M22.

components. As such, the recommended sewer rate revenue adjustments identified in Table 1-4 should be applied across-the-board to both the base and volumetric charges for both retail and wholesale customers.

### **Reclaimed Water**

PCU's retail reclaimed water rate structure generally consists of charges for metered and unmetered customers. Most reclaimed water customers are unmetered and pay a fixed flat rate regardless of the amount of reclaimed water used, while metered customers pay a volumetric rate per 1,000 gallons of reclaimed water used. In addition, PCU differentiates between "funded" and "unfunded" customers. The difference between these types of customers is captured through the availability charge paid by unfunded customers that are provided service through distribution infrastructure installed and paid for by PCU, whereas funded customers' localized distribution infrastructure was installed by another party or developer.

PCU included the costs of metering its reclaimed water customers within its CIP during the projection period of this Study to assist in managing its reclaimed water supply. To account for additional metered customers and address one of PCU's objectives to simplify and standardize its reclaimed water rate structure between metered and un-metered customers and "funded" and "unfunded" customers. As such, Stantec recommends the following regarding PCU's reclaimed water rate structure;

1. Add a base charge component to the metered rate structure to include 15,000 gallons of usage per month, which represents a reasonable allowance of irrigation needs for the typical single-family parcel. Under this structure, customers would pay the volumetric charge only on usage above 15,000 gallons per month.
2. Remove existing rate differentials between un-metered funded and unfunded customers while metered funded and unfunded customers pay the same volumetric charges.
3. No changes to the monthly availability charge for unfunded customers are recommended, however, PCU should consider retiring the availability charge after FY 2028 when the debt service for the localized and County funded distribution infrastructure is paid off.
4. No changes to the bi-monthly billing charge for customers without water or sewer service are recommended.

Schedules of recommended rates for FY 2020 through FY 2023 and customer bill impacts for various meter sizes are included in Appendix F of this report.

## 2. REVENUE SUFFICIENCY

This section of the report presents the financial management plan and corresponding plan of water and sewer rate adjustments developed in the Revenue Sufficiency Analysis (RSA) that was conducted as part of the Study. To determine the level of annual rate revenue (and corresponding rate adjustments) necessary to satisfy the financial requirements of each respective utility system over a near-term planning period (FY 2019 – FY 2023) and long-term projection period (FY 2024 – FY 2028), Stantec conducted separate RSAs for each of the utility enterprise funds (i.e., the water fund and sewer fund)<sup>8</sup>. The following sub-sections herein present a description of the approach, source data, assumptions, and results of each RSA, while Appendices A and B include detailed supporting schedules for the financial management plan identified herein for the water and sewer systems respectively.

### 2.1 APPROACH

During the Study, Stantec reviewed alternative multi-year financial management plans and corresponding rate revenue adjustment plans through several interactive work sessions with County staff. During these work sessions, Stantec examined the impact of various inputs or assumptions upon key financial indicators by use of tabular and graphical output and extensive review of inputs, assumptions, and relationships between key variables. In this way, Stantec developed the recommended financial management plan and corresponding plan of annual water, sewer, and reclaimed water rate revenue adjustments presented in this report that will allow PCU to fund its' cost requirements throughout the planning period and meet its' financial performance goals and objectives.

### 2.2 SOURCE DATA

#### 2.2.1 Beginning Fund Balances

Each RSA was performed using both historical and projected information. County staff provided the historical financial information that was used to establish the beginning fund balances for each of the various funds, or sub-accounts, of each enterprise fund<sup>9</sup>. The detailed FY 2017 ending fund balances

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<sup>8</sup> The RSA begins with FY 2018 data; however, most of this information serves as base data upon which future year projections of revenue and expenses are based. As such, for the purposes of this analysis, FY 2018 is not considered part of the projection period.

<sup>9</sup> County staff provided trial balances as of September 30, 2017 for each of the various sub-accounts of the water and sewer enterprise funds that were then reconciled to the County's audited Comprehensive Annual Financial Report, as of September 30, 2017.

that serve as the FY 2018 beginning fund balances are presented on Schedule 3 of Appendices A and B of this report.

### 2.2.2 Revenues

Revenues consist of retail rate revenue, wholesale rate revenue, interest earnings revenue, water impact fee revenue, and other revenue from miscellaneous service charges. In FY 2018, retail and wholesale rate revenues, as well as other non-rate revenues, are based on unaudited actuals. Beginning in FY 2019, retail and wholesale rate revenues were projected based upon unaudited FY 2018 retail and wholesale rate revenues, adjusted annually by projected future changes in rates, demands, and customers<sup>10</sup>. All other revenue types, excluding interest earnings and water impact fee revenue (which were calculated based upon the current impact fee and the number of new connections), were based upon projected FY 2019 revenues<sup>11</sup>, adjusted annually each year thereafter per applicable growth and escalation assumptions. The projected annual cash inflows are presented in line-item detail on Schedule 4 of Appendices A and B of this report.

### 2.2.3 Expenditure Requirements

The revenue requirements of each RSA consist of all operating and maintenance (O&M) costs, inter-fund transfers, debt service expenses, and capital improvement requirements. In FY 2018, all O&M expenditures were based upon FY 2018 unaudited actuals. In FY 2019, all O&M expenditures, excluding OPEB<sup>12</sup> and purchased water costs<sup>13</sup>, were based upon the FY 2019 Budget Request provided by County staff on July 13, 2018. Beginning in FY 2020, O&M expenses were based upon the FY 2019 Budget, adjusted each year by the assumed cost escalation factors provided by County staff; whereas,

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<sup>10</sup> In FY 2019, FY 2020, and FY 2025, the water fund RSA reflects negative adjustments of approximately \$1.0 million, \$1.5 million, and \$3.2 million respectively for the anticipated reduction in purchased water by the City of Clearwater.

<sup>11</sup> Reflects the Proposed FY 2019 Budget amounts adjusted by 5%, recognizing budgetary amounts reflect 95% of expected revenues per statutory requirements.

<sup>12</sup> OPEB expenses were based upon FY 2018 unaudited actuals and are anticipated to remain at these levels per discussions with the County.

<sup>13</sup> Through FY 2024, annual purchased water costs were calculated based upon Tampa Bay Water's published projections of variable and fixed costs and Stantec's projections of annual member demands and assumed changes in the County's retail and wholesale demands.

inter-fund transfers were calculated annually<sup>14</sup>, existing debt service requirements were based upon the annual debt service amortization schedules for each outstanding borrowing, and the annual capital requirements were provided by and discussed with County staff. The projected annual cash outflows are presented in line-item detail on Schedule 5 of Appendices A and B of this Report.

### 2.2.4 Capital Improvement Program

The annual capital requirements reflected in the RSA are presented in project-level detail on Schedule 6 of Appendices A and B of this report. It is important to note that the RSA for each system includes additional unspecified future capital project costs per discussions with County staff to reflect annual capital spending in the later part of the ten-year projection period that is consistent with the current five-year project specific improvement plan. PCU is also in the process of completing master plans, flow monitoring, and condition assessment studies that may identify capital needs in addition to those presented herein. The amounts included in the RSA for each system were discussed at length with County staff and determined to be reasonable additions that will be modified and further delineated as appropriate in the future.

**Table 2-1: Water and Sewer Capital Improvement Plan<sup>15</sup>**

Utility System	FY 19	FY 20	FY 21	FY 22	FY 23	5-Year CIP
<b>Water</b>	\$14.9M	\$24.6M	\$19.6M	\$17.7M	\$15.3M	<b>\$92.0M</b>
<b>Sewer/Reclaimed Water</b>	\$39.1M	\$44.3M	\$40.2M	\$34.0M	\$39.5M	<b>\$197.2M</b>

## 2.3 ASSUMPTIONS

The following presents the assumptions, policies, and parameters of each RSA:

### 2.3.1 Customer Growth & Demand Projections

The RSA for each system reflects modest organic retail customer growth projections of 200 new water connections and 300 new sewer ERUs per year based upon recent experienced growth and discussions with County staff. Based upon these levels of new connections, the annual growth rate in new retail water and sewer connections/ERUs is approximately 0.18% and 0.21% per year, respectively. Relative to

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<sup>14</sup> Beginning in FY 2020, the Renewal & Replacement Contribution was calculated based upon available reserve balances and annual capital funding requirements, whereas, the FY 2019 Contribution was based upon the Proposed Budget.

<sup>15</sup> Schedule 4 in Appendices A and B.

retail water and sewer demands, each RSA reflects growth in billed volume that is equal in each year to the projected growth in new water and sewer connections/ERUs.

Each RSA also reflects conservative assumptions in wholesale water and sewer demand. Prior to any anticipated wholesale demand losses, it is assumed that wholesale water demand will increase at a growth rate equal to the projected growth in new retail connections in each year of the projection period and wholesale sewer volume will increase at a growth rate equal in each year to the projected growth in new retail sewer connections. Beginning in FY 2019, the water fund RSA reflects the losses of wholesale water demand from the City of Clearwater as they complete the expansion of their own water supply facilities.

The anticipated reduction of wholesale water demands reflected in the water fund RSA includes 3.7 million gallons per day (MGD) by the end of FY 2025 from the City of Clearwater: 0.7 MGD in FY 2019, 1.0 MGD in FY 2020, and 2.0 MGD in FY 2025.

It is important to note that the timing and extent of actual wholesale demand reductions may change and should be reviewed and updated on an annual basis. Nevertheless, as presently projected, total billed water demand (retail and wholesale) is expected to decline by 1.58% during the five-year planning period (FY 2019 – FY 2023) and billed sewer demand (retail and wholesale) is expected to increase 0.84% during the same period. The detailed annual projections of billed water and sewer demands are presented on Schedule 10 of Appendices A and B of this report.

### 2.3.2 Cost of Water Purchases from Tampa Bay Water (TBW)

Annual purchased water costs through FY 2024 were calculated based upon the County's projected billed water demands (reflecting an annual adjustment of 8.2% to account for line losses<sup>16</sup>) and the projected TBW unitary rate per thousand gallons, less annual credits received by PCU. The annual projected TBW unitary rates were calculated based upon the multi-year expense forecasts within the most recent TBW published budget,<sup>17</sup> which does not include the potential impacts of additional water quality improvements or alternative water supply projects and projected TBW member demands (as developed by Stantec for each of the TBW member governments). Beginning in FY 2025, annual purchased water costs were based upon projected FY 2024 expenditures, adjusted by applicable cost escalation assumptions. The calculation of annual purchased water costs through FY 2024 is presented on Schedule 11 of Appendix A of this Report.

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<sup>16</sup> Assumed line loss factor was based upon the average line losses for preceding fiscal years, FY 2013 – FY 2017. Water line losses are often related to leaks in pipe joints, undetected breaks, flushing for water quality, and draining for construction projects.

<sup>17</sup> Tampa Bay Water Proposed Operating Budget, Fiscal Year 2019, July 12, 2018.



### 2.3.3 Cost Escalation

Annual cost escalation factors were determined for each O&M line-item expense in consultation with County staff<sup>18</sup> and are reflective of historical experience and current expectations for future cost inflation. The specific cost escalation factors utilized in each RSA are presented on Schedule 2 of Appendices A and B of this report.

Regarding annual capital requirements, it is assumed that the capital programs provided by County staff already reflect future inflationary increases. As such, no additional cost escalation in capital requirements is assumed in any year of the projection period.

### 2.3.4 O&M Spending Execution

In FY 2018, each RSA reflects unaudited actual O&M expenditures, including personal services, TBW purchased water costs, and all other O&M. Each year thereafter, assumed annual spending execution versus budget/projection was based upon historical O&M spending versus budget, as well as input from County staff. Beginning in FY 2019, the water fund RSA and sewer fund RSA assume annual spending execution of 97% of budgeted/projected O&M expenditures.

### 2.3.5 CIP Spending Execution

Each RSA reflects 100% spending execution of annual capital (including infrastructure R&R) requirements in each year of the projection period.

### 2.3.6 Borrowing Assumptions

No new debt is required in any year of the projection period for the water system. However, it is anticipated that the sewer system will be required to incur new debt during the projection period. For new debt, the following parameters were assumed:

- Term: 30 Years
- Interest Rate: 5.00%<sup>19</sup> in each year of the projection period
- Structure: Level annual debt service, assuming interest-only payment in year of issuance
- Costs of Issuance: 2.50% of Par

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<sup>18</sup> County staff provided annual cost escalation factors that were consistent with those assumed in PCU's long-term strategic plan.

<sup>19</sup> Interest rate assumption is based upon discussions with County staff and consistent with recent local debt issuances.

- o Debt Service Reserve: Equal to one year of annual debt service expense

### 2.3.7 Interest Earnings on Invested Funds

In FY 2018, actual interest earnings were reflected within each RSA. The projected annual interest earnings rate is 2.00% in FY 2019, 3.20% in FY 2020, 3.40% in FY 2021 through FY 2023, 3.20% in FY 2024 and 2.90% each year thereafter.<sup>20</sup>

### 2.3.8 Minimum Reserve Balances

Reserve balances for utility systems are funds set aside for a specific cash flow requirement, financial need, projects or legal covenant. These balances are maintained to meet short-term cash flow requirements, and at the same time, minimize the risk associated with meeting the financial obligations and continued operational and capital needs under adverse financial conditions. The level of reserves maintained by a utility is an important component and consideration of developing a utility system multi-year financial management plan. Many utilities, rating agencies, and the investment community place a significant emphasis on having sufficient reserves available for potentially adverse conditions. The rationale related to the maintenance of adequate reserves is twofold. First, it helps to assure a utility that it will have adequate funds available to meet its financial obligations during unusual periods (i.e. when revenues are unusually low and/or expenditures are unusually high). Second, it provides funds that can be used for emergency repairs or replacements to the system that can occur because of natural disasters or unanticipated system failures.

The target ranges utilized for this Rate Study for each fund are discussed herein.

- o Minimum Operating Reserve:

The County's internal policy for minimum reserve levels is that each fund maintains a minimum operating reserve equal to at least 2.5 months of annual O&M expenses. It is important to note that this reserve amount represents a minimum balance level, and like debt service coverage requirements, it is prudent for utility systems to maintain annual operating reserves above minimum balance policies to ensure available funds to address future unplanned costs and/or substantial changes in demand.

- o Minimum R&R Reserve:

Each fund maintains a minimum R&R reserve equal to 5% of prior year gross revenues in each year of the projection period. Often as part of utility revenue bond issues, there is a requirement to set aside an annual amount of revenue for R&R and/or to maintain a specific R&R reserve at a defined dollar amount or at a level determined to be sufficient by an independent engineering

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<sup>20</sup> Interest earnings assumption reflects the County's Water and Sewer Forecast document as provided by County staff on December 7, 2018.

consultant. Even in the absence of such a requirement from a bond issue, many utility systems attempt to maintain an R&R reserve in the event of unanticipated emergencies or system failures.

- Combined Working Capital Reserve:

While not directed by internal policy, days of working capital indicate a utility's financial flexibility to pay near-term obligations.<sup>21</sup> Published guidance from Fitch Ratings, the municipal utility rating agency, states that utility systems with *Stronger* financial profiles maintain working capital equal to at least one year of operating expenditures, while those with *Midrange* financial profiles maintain working capital equal to at least six months of operating expenditures. Based upon each fund's combined end of year operating reserve fund balance and R&R fund balance, the water fund is projected to maintain working capital above the six month target of annual operating expenditures, while the sewer fund is projected to maintain working capital ranging from above six months in FY 2019 to approximately one year of annual operating expenditures by FY 2028.<sup>22</sup> Therefore, the level of annual working capital projected for the water fund, which does not carry any outstanding debt, is consistent with the *Midrange* financial profile, and the level of annual working capital projected for the sewer fund, which does carry outstanding debt, is consistent with a *Midrange* to *Stronger* financial profile. In addition, any reserves above these targets are designated for future capital needs. Moreover, these levels of working capital reserves are consistent with the results of recent studies by industry groups, such as the AWWA, and our experience with other financially healthy utility systems.

### 2.3.9 Rate Covenant/Debt Service Coverage

The sewer fund must maintain net revenues (gross revenues minus O&M expenses) that are at least 1.15 times greater than the annual debt service requirement (i.e. the annual principal and interest payments) on its outstanding debt, or 1.25 times greater if sewer connection or impact fee revenues are included. This coverage requirement is a minimum requirement. To the extent that the sewer fund is unable to meet these requirements, it could be found in technical default and PCU would likely have its credit rating downgraded, which would affect the interest rates and terms of future financing initiatives.

As a policy decision, utilities often measure revenue sufficiency and set rates based upon a higher coverage requirement to ensure compliance with these covenants in the event future projections of

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<sup>21</sup> Per published guidance from Fitch Ratings (November 2017), Days of Working Capital is defined as "Current unrestricted assets plus any restricted cash and investments (if available for general system purposes) minus current liabilities payable from unrestricted assets, divided by operating expenditures minus depreciation, divided by 365."

<sup>22</sup> Operating expenditures include projected annual O&M spending (personal services plus operating expenses), debt service requirements, transfers out (excluding transfers to the R&R Fund), and other below the line expenditures.

revenues and expenses do not occur as predicted. It is projected that the sewer fund will achieve and maintain a minimum debt service coverage ratio of 1.50 of net revenues throughout the projection period, which is consistent with the *Midrange* financial profile.

The water fund does not currently have any outstanding debt obligations. However, to the extent any debt was to be issued in the future it is assumed that the water fund would target a debt service coverage ratio of 1.50 on net revenues, which is consistent with the *Midrange* financial profile.

## 2.4 REVENUE SUFFICIENCY RESULTS

To evaluate the sufficiency of existing rates, fees and charges to fund PCU's water and sewer revenue requirements over the planning period, a projection of system revenue requirements and revenues at current rates was developed as described herein. Fundamentally, the objectives of each RSA were to determine if the approved plans of rate adjustments for FY 2019 are sufficient to fund the requirements of each utility system beginning in FY 2020, and to identify the level of projected future rate increase requirements that would be necessary for the remainder of a ten-year projection period extending through FY 2028. The supporting financial schedules for the water fund RSA are presented in Appendix A of this report, while the supporting financial schedules for the sewer fund RSA are presented in Appendix B of this report.

### 2.4.1 Water Fund

Based upon the results of the water fund RSA, it was determined that the approved plan of rate adjustments is sufficient to fund the identified financial requirements of the water system through FY 2019. However, annual rate adjustments of 1.00% were determined necessary to fund the projected financial requirements of the water fund through FY 2028.

**Table 2-2: Recommended Water Rate Revenue Adjustments by Fiscal Year<sup>23</sup>**

Description	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>Water System</b>	1.75%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%

### 2.4.2 Sewer Fund

Based upon the results of the sewer fund RSA, it was determined that the approved plan of rate adjustments is sufficient to fund the identified financial requirements of the sewer system through FY 2019. However, annual rate adjustments of 9.50% beginning in FY 2020 through FY 2024, and 3.00% thereafter were determined necessary to fund the projected financial requirements of the sewer fund

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<sup>23</sup> FY 2019 water rates were adopted by the BOCC on May 19, 2015.

through FY 2028, specifically increased CIP spending which is more than two times higher than PCU’s prior rate study.

**Table 2-3: Recommended Sewer Rate Revenue Adjustments by Fiscal Year<sup>24</sup>**

Customer Type	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>Sewer System</b>	1.00%	9.50%	9.50%	9.50%	9.50%	9.50%	3.00%	3.00%	3.00%	3.00%

Beginning in FY 2020, per the results of the Rate Design Analysis (described in Section 4 of this report), Stantec recommends several reclaimed water rate adjustments that over the four-year rate plan results in the overall rate adjustments shown in Table 2-4. Thereafter, it is recommended that PCU continue with a plan of future adjustments which align with the sewer system increases beginning in FY 2025. This rate plan for reclaimed water service will increase the portion of the cost of service that is recovered by the users of the system, while preserving comparable rates to other neighboring communities.

**Table 2-4: Recommended Reclaimed Water Rate Revenue Adjustments by Fiscal Year<sup>25</sup>**

Customer Type	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>Reclaimed Water</b>	4.55%	11.63%	6.25%	5.90%	5.58%	5.00%	3.00%	3.00%	3.00%	3.00%

### 2.4.3 Recommended Rate Revenue Adjustments

The level of annual water, sewer, and reclaimed water rate adjustments identified herein for FY 2020 through FY 2028 are very consistent with national trends and our industry experience. The U.S. Consumer Price Index (CPI) Water & Sewerage Maintenance Series, which specifically measures the average national change in the cost of water and sewer service to households, has risen at an average annual rate of 5.2% during the past ten years as described in Section 5 of this report. Moreover, many of our clients in the area and throughout the State of Florida are presently experiencing similar annual rate increases.

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<sup>24</sup> FY 2019 sewer rates were adopted by the BOCC on May 19, 2015.

<sup>25</sup> FY 2019 reclaimed water rates were adopted by the BOCC on May 19, 2015 and included a 4.55% adjustment for retail customers and 5.00% for wholesale customers. FY 2020 through FY 2028 reflect combined retail and wholesale rate adjustments. FY 2020 through FY 2028 represent combined (retail and wholesale) rate adjustments.

## 3. COST OF SERVICE

### 3.1 INTRODUCTION

To determine the cost of service-based allocation between retail and wholesale customer or service classes, Stantec conducted separate Cost of Service Analyses (COSA) for PCU's water, sewer, and reclaimed water utility systems. The following sub-sections present the procedures and results of each COSA. Appendices C, D, and E of this report present the supporting schedules for the water system COSA, sewer system COSA, and reclaimed water system COSA respectively.

### 3.2 DESCRIPTION

Stantec conducted a cost allocation analysis to isolate the costs of the water, sewer, and reclaimed water systems and then determine the portion of those costs allocable to each respective system function. Stantec then identified the system functions and corresponding costs that would be utilized to determine the costs to provide both retail and wholesale service for each utility system. In addition, an analysis of fixed and variable costs allocated to retail service for the water and sewer systems was performed.

#### 3.2.1 Water and Sewer

##### **Allocation of Costs between Retail & Wholesale Customers**

To initialize each COSA, the FY 2019 Proposed Budget requirements, net of projected off-setting revenues, were identified and allocated by function to the water and sewer utility systems. The water system requirements were allocated between supply and distribution functions, while the sewer system requirements were allocated between treatment and disposal (T&D) and collection and transmission (C&T) functions. Upon allocating the net requirements of each system by function, the projected FY 2019 flows by customer class (i.e. retail and wholesale customers) were used to allocate the net requirements between customer classes.

The components of budgeted requirements allocable by function include 1) debt service costs, 2) operating and maintenance (O&M) expenses, 3) general and administrative (G&A) expenses, 4) renewal, replacement, and improvement (R&R) project expenses, 5) in-house cost center expenses, and 6) capital equipment expenses, less 7) off-setting revenues (i.e., all non-rate revenues). Debt service costs were allocated by function based upon the direct benefit received from the proceeds of each issuance. Cost centers identified as O&M costs were allocated by function based upon the direct benefit received by those cost centers based upon our industry experience and discussions with County staff. Cost centers identified as G&A costs were allocated by function based upon the 3-year average allocation of O&M and in-house cost center expenses. Capital costs identified as R&R project expenses were allocated by function based upon the direct benefit received by those costs. Capital costs identified as in-house cost center expenses include administrative and business support cost centers allocated by function consistent with G&A costs, water and sewer cost centers allocated by function based upon direct benefit

received, and engineering and technical support cost centers allocated by function based upon the 3-year average allocation of R&R project expenses. Minor capital outlay costs identified as capital equipment expenses included administrative and business support cost centers - allocated by function consistent with G&A costs, water and sewer cost centers - allocated by function based upon direct benefit received, and engineering and technical support cost centers - allocated by function based upon the 3-year average allocation of R&R project expenses. Off-setting revenues consist of interest income - allocated by function based upon the 3-year average of total system costs, and all other off-setting revenues - (allocated by function based upon the nature of system costs recovered by each respective revenue-type).

Upon determining the total budgeted requirements of each utility system by function, a portion of the distribution (water system) and C&T (sewer system) requirements were allocated to the wholesale customer class based upon a reasonable approximation of the minimum below-ground assets (represented by an inch-feet analysis of pipe) that would be required to serve the wholesale customer class (37.0% for the water system and 19.5% for the sewer system). These additional requirements, plus the requirements already allocated to the supply (water system) and T&D functions (sewer system), were then allocated to the wholesale customer classes based upon the ratio of projected FY 2019 wholesale flows to projected FY 2019 total flows. The remaining requirements were then allocated to the retail customer class.

#### **Allocation of Retail Costs between Fixed and Variable**

Once the total retail costs of service were identified, each cost center and budget requirement were assigned as either fixed or variable. Budget requirements were allocated directly as fixed if the water or sewer system would incur the cost even though the volume of water or sewer flows may fluctuate. Budget requirements were allocated as variable if the cost would fluctuate as water or sewer flows either increased or decreased. Some costs were allocated between fixed and variable if the nature of the department or cost center had both fixed and variable components such as laboratories for water quality sampling or pump station costs.

#### **3.2.2 Reclaimed Water**

The cost of providing reclaimed water service is comprised of three cost components: O&M expenses, new capital requirements (as identified within the capital improvement program), and historical capital investment (net of contributed or grant-funded<sup>26</sup> capital).

The O&M expenses associated with the provision of reclaimed water service were based upon a detailed allocation of the sewer fund FY 2019 Proposed Budget requirements<sup>27</sup>. With the assistance of County

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<sup>26</sup> Represents reimbursements from Southwest Florida Water Management District, Indian Rocks Beach, Bay Pines, and estimated contributed capital.

<sup>27</sup> As well as OPEB contributions not reflected within the FY 2019 Proposed Budget.

staff, each sewer fund cost center was allocated by service (i.e. between sewer and reclaimed water) based upon specific criteria, such as rate revenue, estimated flows, customer count, historical and projected capital spending, staff estimates, or on an indirect basis (reflecting the overall allocation of all O&M expenses by service). The allocation of the sewer fund FY 2019 Proposed Budget requirements is presented by cost center on Schedule 1 of Appendix E of this report, while the criteria legend utilized in determining the allocation of each cost center is presented on Schedule 2 of Appendix E.

The new capital requirements associated with the provision of reclaimed water service were based upon a detailed allocation of the sewer fund capital improvement program. With the assistance of County staff, each capital project was allocated by service, while the R&R from Various Cost Centers was allocated based upon the overall allocation of all sewer fund FY 2019 Proposed Budget O&M expenses between the sewer and reclaimed water systems. The allocation of the new capital requirements of the sewer fund is presented in project-level detail on Schedule 3 of Appendix E of this report.

The historical capital investment requirements associated with the provision of reclaimed water service were based upon the estimated annual amortization of historical capital investment in the reclaimed water system, net of contributed or grant funded capital, through FY 2017<sup>28</sup>. Per past input from County staff, it was assumed that 80% of net historical capital investment was funded with bonds and the remaining 20% with cash. The imputed debt service requirement for the bond funded portion of net historical investment was based upon an assumed 3.00% annual cost of borrowing and 30-year term, whereas the annual depreciation for the cash funded portion was based upon an assumed 50-year useful life. The calculation of annual historical capital investment requirement is presented on Schedule 4 of Appendix E of this report.

The identified costs of providing reclaimed water service were then allocated, by cost component<sup>29</sup>, to the reclaimed water system's various functions<sup>30</sup> and then to the retail<sup>31</sup> and wholesale<sup>32</sup> customer classes based upon the units of service that each customer represents. Costs designated as treatment,

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<sup>28</sup> Historical capital investment in the reclaimed water system, as well as the portion funded from grants, was provided by County staff.

<sup>29</sup> The allocation of the O&M cost component to the retail and wholesale customer classes occurred at the cost center level.

<sup>30</sup> Includes customer related costs, treatment & production, transmission, distribution, and high-service pumping & storage.

<sup>31</sup> Includes users not defined as wholesale customers, including all retail customers and those customers that may be charged via the terms of special service agreements (i.e. golf courses).

<sup>32</sup> Includes the four municipalities provided wholesale reclaimed water service, including Belleair, Pinellas Park, South Pasadena, and St. Pete Beach.



transmission, and customer were allocated between the retail and wholesale customer class in proportion to their FY 2017 reclaimed water flows and number of bills, respectively, while distribution and high-service pumping & storage costs were allocated to retail only. The allocation of reclaimed water costs, by cost center and component, to functional components and to the retail and wholesale customer classes is presented on Schedule 5 of Appendix E of this report.

### 3.3 RESULTS

For each utility system, the resulting FY 2019 net cost requirements by customer class were then compared to projected FY 2019 rate revenue by customer class to determine if the current retail and wholesale rate structures are recovering the appropriate share of revenue as defined by each COSA. The results of each COSA are as follows:

#### 3.3.1 Water

Per the allocation process described, approximately \$14.4 million, or 16.59%, of FY 2019 net water system requirements were allocated to the wholesale water customer class. The remaining requirements of approximately \$72.3 million, or 83.41%, of FY 2019 net water system requirements were allocated to the retail water customer class.

However, per the water fund RSA (described in Section 2 of this report), projected FY 2019 wholesale water rate revenues account for 17.64% of total water rate revenue (versus costs of 16.59%). Projected FY 2019 retail water rate revenues account for 82.36% of total water rate revenue (versus costs of 83.41%).

Based upon the allocation of the water system's retail costs between fixed and variable, approximately \$62.8 million, or 86.87%, are fixed costs. In comparison, only \$9.5 million, or 13.13% of retail revenue is recovered from fixed charges. Based upon our industry experience and rating agency guidelines, a reasonable target of revenue to be recovered from fixed charges is at least 30%.

The results of the COSA demonstrate a generally strong correlation between costs and revenues for each customer class with wholesale customers slightly over-recovering their costs. As such, and in conjunction with PCU's rate design objectives it is recommended that that the County adjust both its retail and wholesale water rates as described herein. In addition, future consideration should be given for the expected reductions in future Clearwater wholesale demands as such reductions may substantially impact the allocation of costs by customer class reliant upon the allocation of metered demands.

The supporting schedules for the water system COSA are presented in Appendix C of this report.

### 3.3.2 Sewer

Per the allocation process described, approximately \$7.7 million, or 10.87%, of FY 2019 net sewer system requirements were allocated to the wholesale sewer customer class. The remaining requirements of approximately \$63.5 million, or 89.13%, of FY 2019 net sewer system requirements were allocated to the retail sewer customer class.

However, per the sewer fund RSA (described in Section 2 of this report), projected FY 2019 wholesale sewer rate revenues account for 12.26% of total sewer rate revenue (versus costs of 10.87%). Projected FY 2019 retail sewer rate revenues account for 87.74% of total sewer rate revenue (versus costs of 89.13%).

Based upon the allocation of the sewer system's retail costs between fixed and variable, approximately \$52.8 million, or 83.12%, are fixed. In comparison, \$28.6 million, or 45.76% of retail revenue is recovered from fixed charges. Based upon our industry experience and rating agency guidelines, a reasonable target of revenue to be recovered from fixed charges is at least 30%.

The variance between the COSA results and revenue distribution provided by the current rates is well within acceptable tolerances recognizing the changes in cost allocations that can occur from year to year. As such, it is our conclusion that the current rates reflect a fair and equitable allocation of cost between the retail and wholesale customers of the system. In addition, revenues recovered from fixed charges are at levels in-line with industry best practices.

The supporting schedules for the sewer system COSA are presented in Appendix D of this report.

### 3.3.3 Reclaimed Water

Per the allocation process described for the sewer system COSA, approximately \$18.4 million of FY 2019 net sewer system requirements were allocated to the reclaimed water system. The FY 2019 allocated reclaimed water cost requirements by customer class were then compared to projected FY 2019 rate revenue by customer class to determine if the current retail and wholesale rates are recovering the appropriate share of revenue as defined by the reclaimed water cost of service-based allocation.

Based on the allocation process described, approximately \$4.0 million, or 21.52%, of identified FY 2019 reclaimed water system requirements were allocated to the wholesale customer class. The remaining requirements of approximately \$14.4 million, or 78.48%, of identified FY 2019 reclaimed water system requirements were allocated to the retail customer class.

However, based on the sewer fund RSA (described in Section 2 of this report), projected FY 2019 wholesale reclaimed water rate revenues account for 5.65% of total reclaimed water rate revenue (versus costs of 21.52%). Projected FY 2019 retail reclaimed water rate revenues account for 94.35% of total reclaimed water rate revenue (versus costs of 78.48%). In total, projected FY 2019 reclaimed water rate revenues recover 33.13% of the total identified cost of providing reclaimed water service.

The revenue generated by reclaimed water rates, especially those set by special service agreements with wholesale and large retail customers, is significantly less than the cost of providing reclaimed water service. Therefore, it is recommended that the County take any opportunity available to review its special service agreements and when possible adjust the reclaimed water rates charged to its wholesale and large retail customers, at a minimum by the increase in traditional retail reclaimed water rates, so that the level of cost recovery from these users is more consistent with that of the PCU's traditional retail customers, while keeping in mind any market price limitations. Furthermore, to enhance the level of cost recovery from the reclaimed water rates charged to traditional retail customers, Stantec recommends that the County adjust both its retail and wholesale rates during the four-year rate plan to improve the overall cost recovery for both retail and wholesale customers. This plan of annual reclaimed water rate adjustments will, over time, enhance the level of reclaimed water cost recovery, while moderating the impacts to users and maintaining comparable rates to those charged by other neighboring reclaimed water utility systems.

The evaluation of projected FY 2019 reclaimed water rate revenues to the FY 2019 cost of service allocation is presented on Schedule 6 of Appendix E of this report.

## 4. RATE DESIGN

The purpose of the financial plan was to identify required rate adjustments to meet the revenue requirements of the water and sewer systems. The purpose of the COSA was to identify the recovery of costs between systems, between retail and wholesale customer classes, and between fixed and variable components. The next component of the Study was to evaluate the PCU's existing rates and rate structure and to provide a recommended rate plan of annual rate adjustments for the four-year period FY 2020 through FY 2023. This section of the report summarizes the results of the rate structure and rate design analysis performed as part of this Study.

### 4.1 RATE STRUCTURE REVIEW

Stantec examined PCU's current water, sewer, and reclaimed water rates to address the following general objectives:

- More equitable recovery of PCU's cost of service between fixed and variable costs,
- Conformance to accepted national and local industry practices,
- Assurance of fiscal stability and increased recovery of fixed costs through base charges,
- Promotion of water conservation, and
- Minimization of the administrative burden during implementation while enhancing the ability to be easily understood.

#### 4.1.1 Water and Sewer

Common practice is a two-part rate structure comprised of both fixed and variable charges. Generally accepted practice in the water industry includes recovery of a portion of the costs of the system in a fixed readiness-to-serve charge. This practice recognizes that utilities have substantial investments in capital related costs and other fixed costs that are incurred year-round to maintain a state of readiness to meet peak demands of their customers when they occur.

The County presently has a fixed charge for water and sewer service regardless of whether there is any measured water use, which for water service is a base charge per account for all retail customers and for sewer service is a base charge per account for residential customers or per Equivalent Residential Unit (ERU) for commercial accounts, which is determined as 5,000 gallons of measured water use per month.

The County currently applies a uniform volumetric rate to all retail water use and a uniform volumetric rate to all retail sewer customers based upon metered water use, capped at 10,000 gallons per month for residential sewer customers, recognizing that water use above that threshold is typically related to outdoor usage that never enters the sewer collection system.

### 4.1.2 Reclaimed Water

PCU currently has several charges which apply to different reclaimed water customers depending on the type of service including;

- Flat rate user fee: fixed rate for un-metered customers and varies between unfunded and funded customers,
- Billing charge: flat charge that varies for un-metered and metered customers without water or sewer service in recognition that PCU incurs an additional cost to provide billing and customer service to these customers not already included in the cost of water and sewer service,
- Availability charge: fixed rate only for unfunded customers in recognition that the County incurred costs for distribution infrastructure to provide reclaimed water to these customers, and
- Volumetric rate user fee: uniform volumetric rate per 1,000 gallons for metered service and is consistent between unfunded and funded customers.

## 4.2 RATE STRUCTURE MODIFICATIONS

Upon review of PCU's existing rate structure, Stantec identified several rate structure modifications to be considered for implementation.

### 4.2.1 Water and Sewer

#### Base Charges

Based upon the results of the COSA, our industry experience, and rating agency guidelines, PCU's existing base charge structure for water service does not adequately recover readiness-to-serve costs in total or proportionately between customers with meters of different sizes. As identified in the COSA, less than 13% of water revenues are recovered from fixed charges. This could lead to revenue instability if water demands decreased and demonstrates a disconnect between the relatively fixed costs of the water system and the fixed revenues it receives from customers. In addition, the current rate structure does not conform to local practices and address equity concerns that exist as customers with larger meters pay the same base charge or readiness-to-serve charge as those with smaller meters. Larger meters place a higher potential for water demand that PCU must size its system to meet, which should be reflected in the readiness to serve or base charge portion of the rate structure.

Regarding the water base charges, several rate structure modifications are recommended including:

1. Scale the water base charges according to meter size in recognition that larger meters place a higher potential instantaneous demand on the system for the County to supply and has therefore invested in and sized the water system accordingly. Local and national industry practice is a scaled base charge based upon meter size or ERU basis.
2. Phase the scaled base charges in over the four-year rate plan so that by FY 2023 the base charge rate differential between meter sizes matches the standard maximum safe operating flow rates in

proportion to a 5/8" or 3/4" as published by the American Water Works Association (AWWA) and shown in Table 4-1.

**Table 4-1: Meter Equivalency Ratios** <sup>33</sup>

Meter Size	Meter Equivalency Ratio
5/8" or 3/4"	1
1"	2.5
1 1/2"	5
2"	8
3"	16
4"	25
6"	50
8"	80

A review of local utility water base charges indicates varying meter equivalency ratios while some systems, such as the City of St. Petersburg, utilize AWWA's meter equivalency ratios as shown in Table 4-1. The recommended phased-in approach to modifying the water base charges will maintain the FY 2019 base charge to customers with a 3/4" meter from FY 2020 through FY 2023. Table 4-2 summarizes the number of retail customers by meter size for PCU's water system and demonstrates that approximately 92% of customers have a 3/4" meter and therefore will not see an increase in their water bill over the four-year rate plan, assuming the same monthly usage.

**Table 4-2: Retail Water Meters by Size**<sup>34</sup>

Meter Size	% of Retail Accounts
3/4"	92.2%
1"	4.7%
1 1/2"	1.5%
2"	1.3%
3"	0.0%
4"	0.1%
6"	0.2%
8"	0.0%

<sup>33</sup> Meter equivalent ratios based upon the standard maximum rate safe operating flow rates per Table 6-1 of the AWWA Manual of Practice M22.

<sup>34</sup> Based upon a review of FY 2017 billing records as provided by County staff.

No modifications are recommended to the sewer base charges. As such, the recommended sewer rate revenue adjustments identified in the RSA portion of this Study should be applied across-the-board to the sewer system's base charges.

### **Volumetric Charges**

No structural modifications are recommended to the County's water volumetric rates. In addition, no changes to the actual retail water volumetric rates are recommended herein as the recommended modifications to the base charge structure are anticipated to recover the required retail rate revenue adjustments identified in the RSA portion of this Study. The County may in the future want to consider developing an inclining-tier or conservation-based volumetric rate structure for water service once AMI has been implemented and PCU switches from bi-monthly to monthly billing. It is recommended that PCU increase the wholesale volumetric rates by the 1.00% overall rate revenue adjustment identified herein.

No structural modification is recommended to the County's sewer volumetric rates. As such, the recommended sewer rate revenue adjustments identified in the RSA portion of this Study should be applied across-the-board to the sewer system's volumetric charges for both retail and wholesale customers.

Schedules of recommended water and sewer rates for FY 2020 through FY 2023 are included in Appendix F of this report.

### **4.2.2 Reclaimed Water**

PCU identified several objectives for reclaimed water rates including; 1) simplify where possible, 2) standardize between like classes of service, 3) develop a fixed and variable component for metered service, and 4) improve overall cost recovery. As such, and upon review of the existing rate structure, several rate structure modifications are recommended including:

1. Phase-in increases to the monthly user fee for unfunded unmetered customers to match that of funded unmetered customers by FY 2023. This modification will appropriately align the costs of metered service between funded and unfunded customers just as the volumetric rates are currently the same for these types of customers.
2. Add a base charge component to both funded and unfunded metered rate structure to include 15,000 gallons of usage per month, which represents a reasonable allowance of irrigation needs for the typical single-family residence. The volumetric charge will be applied only to usage above 15,000 gallons per month. Unmetered customers that are metered by PCU over the next several years will switch to this standardized metered rate structure.

No increases or structural modifications are recommended at this time to the bi-monthly billing charge or to the monthly availability charge for unfunded customers. However, Stantec does recommend retiring the availability charge after FY 2028 when the debt service for the localized and County funded distribution infrastructure is paid off. In addition, while no structural modifications are recommended for the wholesale

rates, increases are recommended to significantly improve the level of cost recovery for these customers. Overall (retail and wholesale) projected reclaimed water system cost recovery with the recommended rate structure modifications and rate adjustments is shown in Table 4-3.

**Table 4-3: Projected Reclaimed Water System Cost Recovery**

FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
33%	37%	39%	42%	44%

Schedules of recommended reclaimed water rates for FY 2020 through FY 2023 are included in Appendix F of this report.

### 4.3 CUSTOMER BILL IMPACTS

Table 4-4 presents the monthly impacts of the recommended rate structure for FY 2020 to a single-family residential customer with water and sewer service. The typical usage of a single-family residential customer is approximately 5,000 gallons per month. Additional customer bill impact tables for commercial customers with larger meters are provided in Appendix F.

**Table 4-4: Residential ¾" Meter Customer Water & Sewer Monthly Bill Impacts**

Monthly Use (Gal)	FY 2019 Rates	Proposed FY 2020 Rates	\$ Chg.	% Chg.
< 1,000	\$20.46	\$21.76	\$1.30	6.3%
1,000	\$30.58	\$32.35	\$1.77	5.8%
2,000	\$40.70	\$42.95	\$2.25	5.5%
3,000	\$50.82	\$53.54	\$2.72	5.4%
4,000	\$60.94	\$64.13	\$3.19	5.2%
<b>5,000</b>	<b>\$71.06</b>	<b>\$74.73</b>	<b>\$3.67</b>	<b>5.2%</b>
6,000	\$81.18	\$85.32	\$4.14	5.1%
7,000	\$91.30	\$95.92	\$4.62	5.1%
8,000	\$101.42	\$106.51	\$5.09	5.0%
9,000	\$111.54	\$117.10	\$5.56	5.0%
10,000	\$121.66	\$127.70	\$6.04	5.0%
11,000	\$126.79	\$132.83	\$6.04	4.8%
12,000	\$131.92	\$137.96	\$6.04	4.6%
13,000	\$137.05	\$143.09	\$6.04	4.4%
14,000	\$142.18	\$148.22	\$6.04	4.2%
15,000	\$147.31	\$153.35	\$6.04	4.1%
16,000	\$152.44	\$158.48	\$6.04	4.0%
17,000	\$157.57	\$163.61	\$6.04	3.8%
18,000	\$162.70	\$168.74	\$6.04	3.7%
19,000	\$167.83	\$173.87	\$6.04	3.6%
20,000	\$172.96	\$179.00	\$6.04	3.5%



Table 4-5 presents the monthly impacts of the recommended reclaimed water rate structure for FY 2020. Additional customer bill impact tables for FY 2021 through FY 2023 are provided in Appendix F.

**Table 4-5: Reclaimed Water Monthly Bill Impacts**

<b>Customer Type<sup>35</sup></b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>% Change</b>	<b>FY 2019 Projected Customers<sup>36</sup></b>	<b>% of Customers</b>
<b>Funded/Un-Metered</b>	\$22.00	\$22.00	0.00%	736	3.14%
<b>Unfunded/Un-Metered</b>	\$23.00	\$24.50	6.52%	22,233	94.74%
<b>Funded/Metered (20,000 gallons per month)</b>	\$23.20	\$29.35	26.51%	69	0.29%
<b>Unfunded/Metered (20,000 gallons per month)</b>	\$30.20	\$36.35	20.36%	429	1.83%

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<sup>35</sup> Currently, only commercial customers have metered service.

<sup>36</sup> Represents projected customers in FY 2019. Total reclaimed water customer accounts as of July 16, 2018 were approximately 23,000 as provided by County staff.

## 5. BENCHMARKING

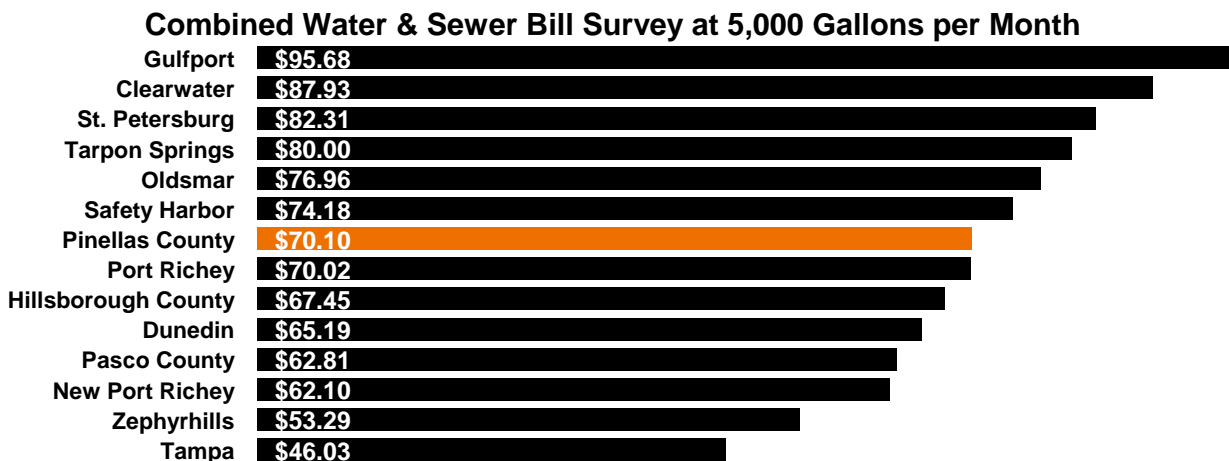
As part of this Rate Study, Stantec performed comparative surveys of residential water, sewer, and reclaimed water rates and resulting bills at various usage levels to provide perspective on how the existing and calculated water and sewer bills for the County compare with neighboring communities.

### 5.1 LOCAL BILL COMPARISONS

The surveys for water and sewer rates included the neighboring communities from the surrounding geographic area. Each survey presents the combined monthly residential water and sewer bills for each community based upon the rates in effect during FY 2018 for various amounts of monthly water use. Specifically, surveys were conducted for three different types of single family residential users: “Low-End” Users using 3,000 gallons of water per month, “Typical” Users using 5,000 gallons of water per month, and “High-End” Users using 12,000 gallons of water per month.

The results of each water and sewer rate survey demonstrate that at each level of consumption PCU’s effective monthly residential water and sewer bills are very comparable to the monthly cost of other neighboring utility systems. The combined water and sewer bill for 5,000 gallons for FY 2018 is provided in Figure 6.

**Figure 6: Local Water & Sewer Bill Comparison**

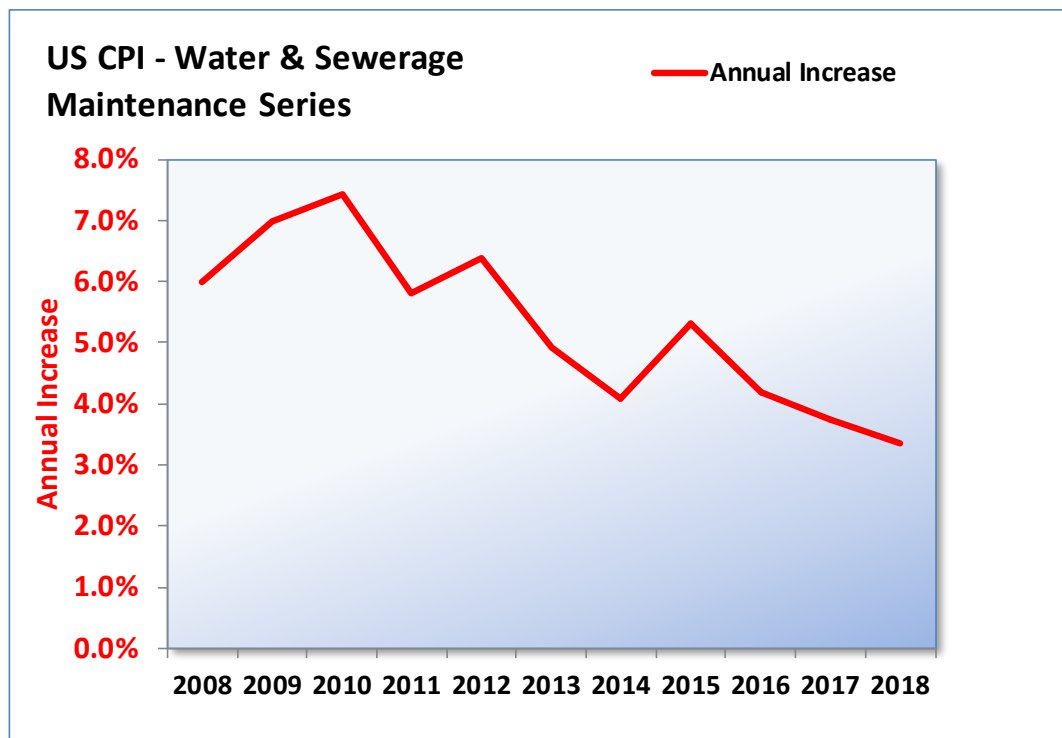


Furthermore, a separate survey of neighboring communities from the surrounding geographic area was conducted which compared the monthly cost for residential reclaimed water service assuming the FY 2019 rates for 1) unmetered residential customers and 2) metered residential customers using 20,000 gallons per month. The results of each survey demonstrate that the PCU’s monthly residential reclaimed water bills are within the range of other neighboring communities. The results of each survey are presented in Appendix G of this report.

## 5.2 NATIONAL INDUSTRY TRENDS

The recommended plan of annual rate adjustments is a response to increases in operating and capital costs for the Utility that the industry has also experienced. As demonstrated in Figure 7, the U.S. Consumer Price Index (CPI) Water & Sewerage Maintenance Series, which specifically measures the average national change in the cost of water and sewer service to households, has risen at an average annual rate of approximately 5.2% during the past ten years whereas the County has recently been able to implement rate adjustments less than these observed levels. Moreover, many of our clients across the country are presently experiencing similar rate increase requirements per year.

**Figure 7: National Industry Trends<sup>37</sup>**



## 5.3 AFFORDABILITY

The ability of customers to afford its water and sewer bills is an important consideration for PCU. The concept of “affordability” for utilities is most often thought of in relation to the United States Environmental Protection Agency (EPA) which established a guideline through the Clean Water Act (CWA) for average sewer bills as a percentage of median household income (MHI) for communities dealing with consent orders. According to these guidelines, communities where the average sewer bills per household exceed 2% of MHI are likely to experience economic difficulty to comply with federal regulations for clean water.

<sup>37</sup> U.S. CPI Water & Sewerage Maintenance Series from 2008 through 2018.

Relating to potable water, EPA has generally determined that water bills less than 2.5% of MHI for small communities would be “affordable”.

Rating agencies also assess affordability when evaluating the financial health of a utility system. Table 5-1 summarizes the affordability criteria as established by EPA and the three major rating agencies.

**Table 5-1: Summary of Affordability Criteria**

Agency	Affordability Criteria	
USEPA	<u>Utility Bills as a % of MHI</u>	<u>Affordable Range</u>
	Water	Less than 2.5% of MHI
	Wastewater	Less than 2.0% of MHI
	Total	Less than 4.5% of MHI
Fitch	<u>Financial Profile - Residential charges for individual or combined water/sewer utilities:</u>	
	Stronger - less than or equal to 0.6% or 1.2% of MHI, respectively	
	Midrange - about 0.8% or 1.5% of MHI, respectively	
	Weaker - in excess of 1.0% or 2.0% of MHI, respectively	
Moody's	Evaluates service area wealth measured in MFI as compared to the U.S. median. "Aa" Utility would be less than or equal to 150%, but greater than 90%, of the U.S. median.	
S&P	<u>Condition</u>	<u>Result</u>
	Strong (Score of 1)	Less than 10% in Poverty and Utility Bill less than 2.25% of MHEBI
	Weak (Score of 6)	More than 30% in Poverty and Utility Bill more than 4.50% of MHEBI

\*KEY: MHI = Median Household Income MHEBI = Median Household Effective Buying Income MFI = Median Family Income

For example, Fitch Ratings has identified that utility systems where bills for each service (7,500 gallons for water and 6,000 gallons sewer) are less than or equal to 0.6% of MHI receive their *Stronger* attribute while in systems where these costs are greater than 1.0% of MHI for each service are determined to be financially burdensome while also considering local comparisons. Likewise, Moody's and S&P have also established criteria for measuring affordability considering utility bills in terms of MHI and other measures of household income and poverty levels. Table 5-2 summarizes PCU's rate affordability as measured specifically by Fitch Ratings' criteria.

**Table 5-2: Fitch Ratings' Residential Rate Affordability**

Pinellas County Median Household Income <sup>38</sup>	FY 2019 Annual Water Bill @ 7,500 gals/Month	Water Bill as % of MHI	FY 2019 Annual Sewer Bill @ 6,000 gals/Month	Sewer Bill as % of MHI
<b>\$48,968</b>	<b>\$543.30</b>	<b>1.11%</b>	<b>\$523.20</b>	<b>1.07%</b>

<sup>38</sup> United State Census Bureau 2013-2017 American Community Survey 5-year Estimates.

Table 5-3 summarizes PCU's rate affordability by income ranges measured as a percentage of annual income and a combined water and sewer bill assuming 5,000 gallons of monthly usage.

**Table 5-3: Residential Rate Affordability**

Income Ranges	# of Households	% of Households	Cumulative % of Households	Income Used for Calculation <sup>2</sup>	Annual Water & Sewer Bills as % of Income - FY 2019 Rates	Annual Water & Sewer Bills as % of Income - FY 2020 Rates
Less than \$5,000	17,147	4.2%	4.2%	\$5,000	17.1%	17.9%
\$5,000 to \$9,999	12,372	3.0%	7.2%	\$7,500	11.4%	12.0%
\$10,000 to \$14,999	21,917	5.4%	12.6%	\$12,500	6.8%	7.2%
\$15,000 to \$19,999	24,675	6.1%	18.7%	\$17,500	4.9%	5.1%
\$20,000 to \$24,999	24,586	6.0%	24.7%	\$22,500	3.8%	4.0%
\$25,000 to \$34,999	46,369	11.4%	36.1%	\$30,000	2.8%	3.0%
\$35,000 to \$49,999	59,757	14.7%	50.8%	\$42,500	2.0%	2.1%
<b>MHI - \$48,968 <sup>1</sup></b>			<b>50.0%</b>	<b>\$48,768</b>	<b>1.7%</b>	<b>1.8%</b>
\$50,000 to \$74,999	71,486	17.6%	68.3%	\$62,500	1.4%	1.4%
\$75,000 to \$99,999	46,333	11.4%	79.7%	\$87,500	1.0%	1.0%
\$100,000 to \$149,999	46,844	11.5%	91.2%	\$125,000	0.7%	0.7%
Over \$150,000	35,385	8.8%	100.0%	\$175,000	0.5%	0.5%

(1) \$48,968 represents the median household income for Pinellas County (in 2017 Inflation-Adjusted Dollars).

(2) Calculations based upon midpoint income within each range.

(3) This analysis assumes that County-wide MHI is representative of PCU's service area and reflects a typical monthly bill for residential customers with both water and sewer service and 5,000 gallons of consumption from Pinellas County Utilities per month and does not consider potential variances within MHI within the County or PCU's service area. In addition, some households in Pinellas County receive either water, sewer, or both services from other utilities.

Source: American Fact Finder, Pinellas County, Florida 2013-2017 American Community Survey 5-Year Estimates

Affordability guidelines that utilize MHI for an entire service area as the defining metric for evaluating affordability, such as those outlined by EPA or bond rating agencies, can be overly simplistic since they don't consider other relevant factors within a service area, such as poverty rates, unemployment, and rent and home ownership rates. As such, a more in-depth approach to evaluating affordability is recommended and should align with the direction and objectives of the Board in the context of utility rates or customer assistance programs.

## 6. CONCLUSIONS AND RECOMMENDATIONS

Based upon the analyses presented in this report, Stantec has reached the following conclusions and recommendations:

- Based upon the base data and assumptions presented herein, the approved FY 2019 water rate adjustments, followed by 1.00% annual water system rate revenue adjustments each year thereafter, have been determined sufficient to fund the financial requirements of the water fund through the immediate five-year planning and ten-year projection period.
- Through our review of PCU's water rate structure, several modifications are recommended including the scaling of retail base charges by meter size. These modifications result in the recovery of the required 1.00% annual water system retail rate revenue adjustments identified in the RSA. As such, it is recommended that the County consider adopting the recommended retail water base charge rate modifications and rates presented herein to achieve the annual retail rate adjustments of 1.00% from FY 2020 through FY 2023. In addition, PCU should adjust its wholesale water rates by 1.00% annually from FY 2020 through FY 2023.
- PCU has identified capital investment within the sewer fund needed over the immediate five-year planning period of approximately \$39 million per year, which represents an increase from prior rate studies. This Study developed a capital funding plan that included approximately \$68 million to be funded through the issuance of debt beginning in FY 2019.
- Based upon the base data and assumptions presented herein, the approved FY 2019 sewer and reclaimed water rate adjustments, followed by 9.50% annual sewer rate adjustments beginning in FY 2020 through FY 2024, followed by 3.00% annual rate adjustments from FY 2025 through FY 2028, and the reclaimed water rate increases to the retail and wholesale customers described herein have been determined sufficient to fund the financial requirements of the sewer fund through the immediate five-year planning and ten-year projection period.
- No structural modifications are recommended to the sewer rate structure. As such, it is recommended that the County consider adopting the annual rate adjustments proposed herein for FY 2020 through FY 2023 for the sewer fund and apply the increases across the sewer system rates for both retail and wholesale customers.
- Several modifications to the reclaimed water rate structure were identified to improve overall cost recovery, to achieve equity between the costs to customers with similar service and add a base charge component to metered customers. As such, it is recommended that the County consider adopting the rates proposed herein for FY 2020 through FY 2023 for reclaimed water service.

- The rate adjustments identified herein are comparable to those of neighboring utility systems, our industry experience locally and state-wide, as well as the annual changes in relevant national inflation-related indices.
- The variance between the water system COSA results and revenue distribution provided by the current water rates is well within acceptable tolerances recognizing the changes in cost allocations that can occur from year to year. In addition, based upon expected substantial demand reductions from the City of Clearwater, the results of this water system COSA may change substantially over the next several years as many system costs are allocated between the retail and wholesale customer classes based upon the metered flows of each respective class.
- The variance between the sewer system COSA results and revenue distribution provided by the current sewer rates is well within acceptable tolerances recognizing the changes in cost allocations that can occur from year to year. As such, it is our conclusion that the current sewer rates reflect a fair and equitable allocation of cost between the retail and wholesale customers of the system.
- It is recommended that the County take any opportunity available to review its special service agreements with wholesale and large retail reclaimed water customers and adjust as possible the reclaimed water rates charged to these customers as recommended herein, so that the level of cost recovery from these users is more consistent with that of the PCU's traditional retail customers, while keeping in mind any market price limitations.
- The recommended multi-year rate plan improves the overall cost recovery of the reclaimed water system. However, it is recommended that the BOCC establish a target level of future reclaimed water cost recovery based upon its goals and objectives for providing reclaimed and implement a plan to achieve this target over time that will moderate the impacts to users and maintain comparable rates to those charged by other neighboring reclaimed water utility systems.
- Finally, Stantec strongly recommends that PCU conducts annual or bi-annual water and sewer fund RSA updates as PCU continues to evaluate its infrastructure needs through its current master planning, flow monitoring, and condition assessment studies. Doing so will allow for the recognition of updated revenue and expense information as well as changes in demands and/or regulatory requirements so that any necessary adjustments can be made to the identified rate revenue adjustment plans to ensure that the water and sewer funds will continue to meet their respective cost requirements over time.

**Disclaimer**

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*In preparing this report, Stantec utilized information and data obtained from the County or public and/or industry sources. Stantec has relied on the information and data without independent verification, except only to the extent such verification is expressly described in this document. Any projections of future conditions presented in the document are not intended as predictions, as there may be differences between forecasted and actual results, and those differences may be material.*

*Additionally, the purpose of this document is to summarize Stantec’s analysis and findings related to this project, and it is not intended to address all aspects that may surround the subject area. Therefore, this document may have limitations, assumptions, or reliances on data that are not readily apparent on the face of it. Moreover, the reader should understand that Stantec was called on to provide judgments on a variety of critical factors which are incapable of precise measurement. As such, the use of this document and its findings by the County should only occur after consultation with Stantec, and any use of this document and findings by any other person is done so entirely at their own risk.*



## **APPENDIX A: SUPPORTING SCHEDULES FOR WATER RSA**

**Schedule 1 Financial Management Plan Summary**

**Schedule 2 Assumptions**

**Schedule 3 Beginning Fund Balances**

**Schedule 4 Projection of Cash Inflows: FY 2018 – FY 2028**

**Schedule 5 Projection of Cash Outflows: FY 2018 – FY 2028**

**Schedule 6 Capital Improvement Program**

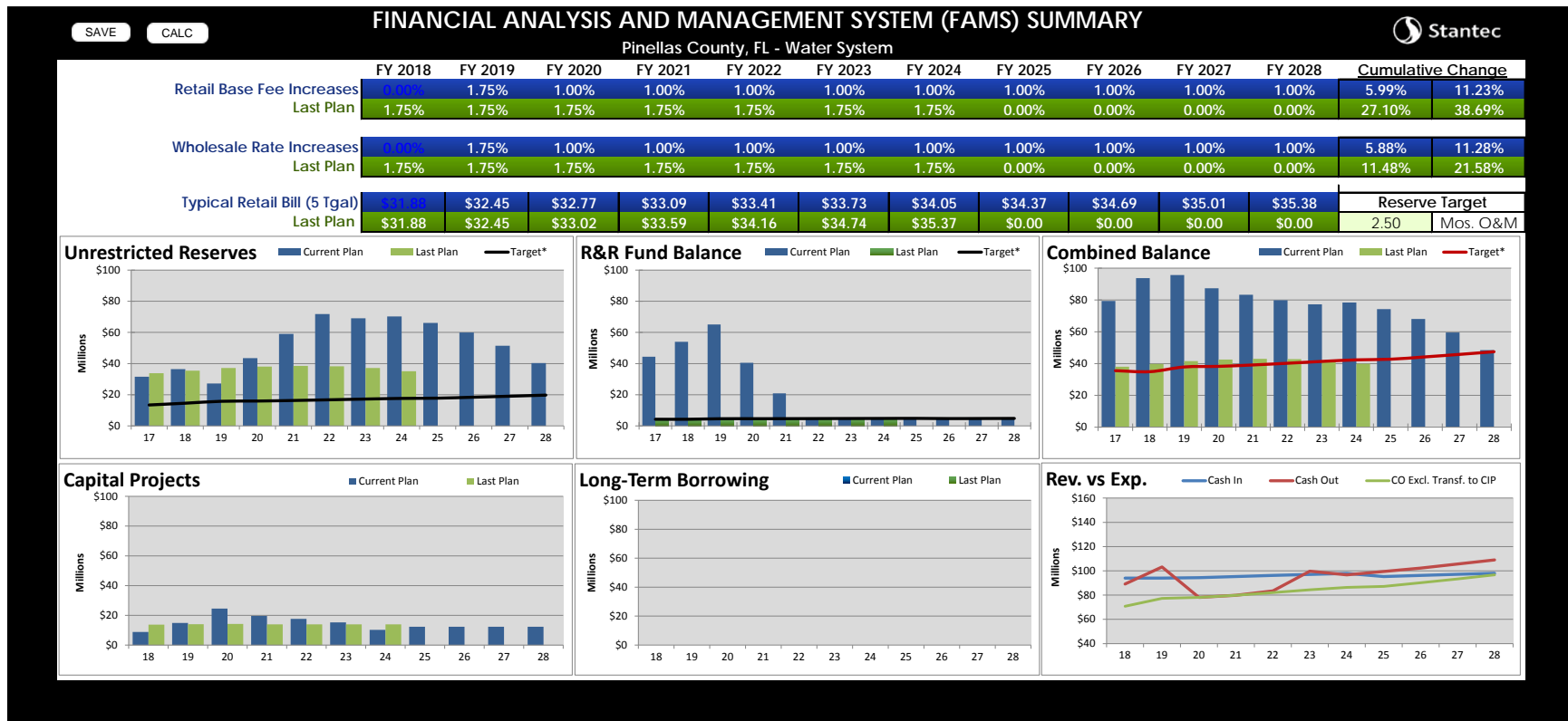
**Schedule 7 Pro Forma: Projection of Annual Cashflow & Debt Service Coverage**

**Schedule 8 Detailed Funding Summary**

**Schedule 9 Projection of Capital Improvement Program Funding Sources**

**Schedule 10 Projection of Retail and Wholesale Demands**

**Schedule 11 Projection of Purchased Water**



\*Last Plan (green bars) reflects the results of the FY 2014 Rate Study as reflected in the Final Report, dated May 27, 2015.

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>Annual Growth:</b>											
<b>Water Accounts - Retail</b>	113,212	113,412	113,612	113,812	114,012	114,212	114,412	114,612	114,812	115,012	115,212
Account Growth		200	200	200	200	200	200	200	200	200	200
% Change in Customer Count		0.18%	0.18%	0.18%	0.18%	0.18%	0.18%	0.17%	0.17%	0.17%	0.17%
Water Volume	12,324,339	12,346,111	12,367,883	12,389,655	12,411,428	12,433,200	12,454,972	12,476,744	12,498,516	12,520,288	12,542,060
% Change in Water Use		0.18%	0.18%	0.18%	0.18%	0.18%	0.18%	0.17%	0.17%	0.17%	0.17%
<b>Water Accounts - Wholesale</b>	4	4	4	4	4	4	4	4	4	4	4
Account Growth		0	0	0	0	0	0	0	0	0	0
% Change in Customer Count		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Water Volume	3,951,245	3,702,725	3,344,255	3,350,142	3,356,029	3,361,917	3,367,804	2,643,691	2,648,304	2,652,917	2,657,531
% Change in Water Use <sup>(1)</sup>		-6.29%	-9.68%	0.18%	0.18%	0.18%	0.18%	-21.50%	0.17%	0.17%	0.17%
<b>Annual Capital Spending Execution:</b>											
Annual Capital Budget <sup>(2)</sup>	\$ 8,793,300	14,882,480	24,557,780	19,608,780	17,653,280	15,268,780	10,268,780	12,268,780	12,268,780	12,268,780	12,268,780
Annual Percent Executed	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>Impact Fees:</b>											
Water (Per ERU)	\$ 352	352	352	352	352	352	352	352	352	352	352
<b>Average Annual Interest Earnings Rate: <sup>(3)</sup></b>											
Water System Enterprise Fund	N/A	2.00%	3.20%	3.40%	3.40%	3.20%	2.90%	2.50%	2.50%	2.50%	2.50%
<b>Annual Operating Expense Cost Escalation:</b>											
Personal Services	N/A	N/A	4.20%	4.20%	4.50%	4.30%	4.30%	4.40%	4.40%	4.40%	4.40%
Power	N/A	N/A	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Chemicals	N/A	N/A	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Regional Water (TBW) <sup>(4)</sup>	N/A	N/A	-0.73%	1.44%	1.72%	2.59%	1.33%	-1.73%	3.50%	3.49%	3.48%
All Other O&M Expenses	N/A	N/A	2.40%	2.20%	2.50%	2.40%	2.50%	2.50%	2.50%	2.50%	2.50%
<b>Reserve Targets (Number of Months):</b>											
Operating Fund Target	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Combined Balance Target <sup>(5) (6)</sup>	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
<b>Operating Budget Execution:</b>											
Personal Services	100%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%
O&M Expenses	100%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%

(1) Wholesale water use decline in FY 2019, FY 2020, and FY 2025 reflects projected demand loss of 0.7 MGD, 1.0 MGD, and 2.0 MGD, respectively, due to reductions in Clearwater demand.  
 (2) Inflation incorporated into Capital Improvement Program provided by County staff.  
 (3) Estimate provided by County staff.  
 (4) Estimate based on projected Tampa Bay Water expenses and changes in member water demands as projected by Stantec.  
 (5) Per Fitch Ratings mid-range attributes.  
 (6) Combined fund balance includes the Operating Fund target of 2.5 months as well as 5% of prior year's revenue as a minimum fund balance for the Renewal and Replacement Fund.

	Revenue Fund	Renewal & Replacement	Vehicle Replacement	Water Impact Fees	Restricted Reserves
<b>CURRENT ASSETS</b>					
Cash	\$ 9,214,308	6,255,830	3,332,000	62,350	964,736
Investments	8,539,087	36,647,654	-	734,737	7,244,132
Accounts and Notes Receivable	12,652,515	-	-	-	-
Accrued Interest Receivable	43,326	85,274	-	99	16,538
Due from Other Governments	4,117,476	4,789,434	-	-	-
Inventory	1,074,094	-	-	-	-
Prepaid Items	74,795	-	-	-	-
<b>TOTAL CURRENT ASSETS</b>	<b>\$ 35,715,601</b>	<b>47,778,192</b>	<b>3,332,000</b>	<b>797,186</b>	<b>8,225,407</b>
<b>CURRENT LIABILITIES</b>					
Less: Vouchers Payable	\$ (1,649,485)	(2,829,995)	-	-	-
Less: Contracts Payable	(14,940)	(489,030)	-	-	-
Less: Due to Other Governments	(1,083,178)	-	-	-	-
Less: Accrued Liabilities	(525,451)	(11,320)	-	-	-
Less: Compensated Absences	(843,302)	(16,040)	-	-	-
Less: Unearned Revenue	(40)	-	-	-	-
Less: Deposits and Other Current Liabilities	(1,867)	-	-	-	(8,225,407)
<b>NET FUND BALANCE</b>	<b>\$ 31,597,339</b>	<b>44,431,809</b>	<b>3,332,000</b>	<b>797,186</b>	<b>-</b>
<b>TOTAL AVAILABLE FUNDS</b>	<b>\$ 80,158,333</b>				

Source: FY 2017 CAFR, p. 28; Trial Balance by Fund files provided by Staff

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>1 Rate Revenue Growth Assumptions</b>											
2 % Change in Retail Customers	N/A	0.18%	0.18%	0.18%	0.18%	0.18%	0.18%	0.17%	0.17%	0.17%	0.17%
3 % Change in Retail Usage	N/A	0.18%	0.18%	0.18%	0.18%	0.18%	0.18%	0.17%	0.17%	0.17%	0.17%
4 % Change in Wholesale Customers	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
5 % Change in Wholesale Usage	N/A	-6.29%	-9.68%	0.18%	0.18%	0.18%	0.18%	-21.50%	0.17%	0.17%	0.17%
<b>6 Proposed System -Wide Rate Increase</b>	N/A	1.75%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
<b>7 Rate Revenue</b>											
8 Retail Rate Revenue	\$ 70,084,954	71,437,420	72,279,032	73,130,333	73,991,433	74,862,441	75,743,470	76,634,633	77,536,046	78,447,823	79,370,082
9 Wholesale Rate Revenue	16,045,670	15,299,590	13,956,582	14,120,962	14,287,234	14,455,420	14,625,541	11,595,706	11,732,100	11,870,063	12,009,611
<b>10 Total Water Rate Revenue</b>	<b>\$ 86,130,624</b>	<b>86,737,010</b>	<b>86,235,614</b>	<b>87,251,295</b>	<b>88,278,667</b>	<b>89,317,861</b>	<b>90,369,011</b>	<b>88,230,340</b>	<b>89,268,146</b>	<b>90,317,886</b>	<b>91,379,693</b>
<b>11 Other Operating Revenues <sup>(1)</sup></b>											
12 Service Charges	\$ 887,715	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000	850,000
13 Water - Late Payment Fee	758,118	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000	785,000
14 Wholesale Wtr Meter Svc Chg	19,272	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
15 Backflow Maint Fee-Sap	691,778	710,000	710,000	710,000	710,000	710,000	710,000	710,000	710,000	710,000	710,000
16 Fireline Payments	194,541	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
17 Contractual Billing Svc	402,602	420,000	420,000	420,000	420,000	420,000	420,000	420,000	420,000	420,000	420,000
18 Water Conservation <sup>(2)</sup>	462,909	500,000	500,882	501,763	502,645	503,527	504,409	505,290	506,172	507,054	507,936
19 Wellhead Protection	625	495	495	495	495	495	495	495	495	495	495
20 Overage & Shortage	14	-	-	-	-	-	-	-	-	-	-
21 Chg For Sv-Bad Dbt Ex(Dr)	(43,384)	-	-	-	-	-	-	-	-	-	-
22 Rents - Bldg/Space	314,495	323,400	323,400	323,400	323,400	323,400	323,400	323,400	323,400	323,400	323,400
23 Sale Of Surplus Equipment	181,182	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000
24 Ins Proceeds-Furn/Fxtr/Eq	34,702	10,495	10,495	10,495	10,495	10,495	10,495	10,495	10,495	10,495	10,495
25 Forestry Operations-Sales Scrap Sales	831,210 3,902	493,295 -	493,295 -	493,295 -	493,295 -	493,295 -	493,295 -	493,295 -	493,295 -	493,295 -	493,295 -
26 Bill2Pay Trans Revenue Sap	40,264	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
27 Inter-Sales Tax Commissions	11	-	-	-	-	-	-	-	-	-	-
28 Refund Of Prior Yrs Exp	484,806	-	-	-	-	-	-	-	-	-	-
29 Miscellaneous Revenue	67,065	28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,000	28,000
30 Overage & Shortage	(25)	-	-	-	-	-	-	-	-	-	-
<b>31 Total Other Operating Revenue</b>	<b>\$ 5,331,801</b>	<b>4,485,684</b>	<b>4,486,566</b>	<b>4,487,448</b>	<b>4,488,329</b>	<b>4,489,211</b>	<b>4,490,093</b>	<b>4,490,975</b>	<b>4,491,856</b>	<b>4,492,738</b>	<b>4,493,620</b>
<b>32 Non-Operating Revenues</b>											
33 Sale-Surplus County Land	\$ 605,800	-	-	-	-	-	-	-	-	-	-
34 Fed Grant-Public Safety	-	230,874	-	-	-	-	-	-	-	-	-
35 Interest Earned on Unrestricted Funds	1,351,201	1,893,873	2,928,418	2,900,792	2,772,371	2,512,584	2,256,342	1,907,947	1,778,355	1,594,430	1,349,813
<b>36 Total Non-Operating Revenues</b>	<b>\$ 1,957,001</b>	<b>2,124,747</b>	<b>2,928,418</b>	<b>2,900,792</b>	<b>2,772,371</b>	<b>2,512,584</b>	<b>2,256,342</b>	<b>1,907,947</b>	<b>1,778,355</b>	<b>1,594,430</b>	<b>1,349,813</b>
<b>37 Transfers In</b>											
38 Cap Con-Pvt-Wtr Back Flow	\$ 127,258	158,000	158,000	158,000	158,000	158,000	158,000	158,000	158,000	158,000	158,000
39 Cap Con-Pvt-Wtr Connectn	410,180	532,274	532,274	532,274	532,274	532,274	532,274	532,274	532,274	532,274	532,274
<b>40 Total Transfers In</b>	<b>\$ 537,438</b>	<b>690,274</b>	<b>690,274</b>	<b>690,274</b>	<b>690,274</b>	<b>690,274</b>	<b>690,274</b>	<b>690,274</b>	<b>690,274</b>	<b>690,274</b>	<b>690,274</b>
<b>41 Capital Project Funding Sources</b>											
42 Water Impact Fees <sup>(3)</sup>	\$ 169,641	142,500	70,400	70,400	70,400	70,400	70,400	70,400	70,400	70,400	70,400
43 Renewal & Replacement Contribution <sup>(4)</sup>	18,330,060	25,993,310	-	-	1,472,418	15,313,772	10,307,794	12,308,569	12,144,471	12,314,235	12,312,115
<b>44 Total Capital Project Funding Sources</b>	<b>\$ 18,499,701</b>	<b>26,135,810</b>	<b>70,400</b>	<b>70,400</b>	<b>1,542,818</b>	<b>15,384,172</b>	<b>10,378,194</b>	<b>12,378,969</b>	<b>12,214,871</b>	<b>12,384,635</b>	<b>12,382,515</b>
<b>45 Total Cash In</b>	<b>\$ 112,456,566</b>	<b>120,173,525</b>	<b>94,411,272</b>	<b>95,400,209</b>	<b>97,772,459</b>	<b>112,394,101</b>	<b>108,183,913</b>	<b>107,698,505</b>	<b>108,443,502</b>	<b>109,479,963</b>	<b>110,295,915</b>

(1) FY 2018 and FY 2019 Other Operating Revenues are based upon FY 2018 Actuals and the FY 2019 Budget Request, as provided by County staff. The FY 2019 Budget Request has been adjusted to account for the County's practice of budgeting at 95% of projected revenues.

(2) Water Conservation Revenues are escalated annually by the assumed growth in retail water usage.

(3) FY 2018 and FY 2019 water impact fees are based on FY 2018 Estimate and FY 2019 Budget Request, respectively, as provided by County staff. Each year thereafter, water impact fees are calculated based on the current impact fee and the assumed growth in customers.

(4) FY 2018 and FY 2019 Renewal & Replacement Contributions are based on FY 2018 Estimate and FY 2019 Budget Request, respectively, as provided by County staff. Each year thereafter, the Renewal & Replacement Contribution is calculated based on the funding requirements of the Capital Improvement Plan less any available bond proceeds and any excess fund balance in the R&R Fund above the minimum requirement.

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>FUND 4031 - WATER OPERATING</b>											
<b>431040 - Facility Maintenance</b>											
<b>Personal Services:</b>											
1											
2											
3	\$ 64,432	47,910	49,922	52,019	54,360	56,697	59,135	61,737	64,454	67,290	70,250
4	450,493	607,660	633,182	659,775	689,465	719,112	750,034	783,036	817,489	853,459	891,011
5	41,849	26,140	27,238	28,382	29,659	30,934	32,265	33,684	35,166	36,714	38,329
6	-	4,140	4,314	4,495	4,697	4,899	5,110	5,335	5,570	5,815	6,070
7	41,762	50,150	52,256	54,451	56,901	59,348	61,900	64,624	67,467	70,436	73,535
8	53,878	62,710	65,344	68,088	71,152	74,212	77,403	80,809	84,364	88,076	91,952
9	183,317	304,700	317,497	330,832	345,720	360,586	376,091	392,639	409,915	427,951	446,781
10	(353)	-	-	-	-	-	-	-	-	-	-
<b>Operating Expenses:</b>											
11											
12	\$ -	160	164	167	172	176	180	185	189	194	199
13	-	1,180	-	-	-	-	-	-	-	-	-
14	1,482	1,780	1,823	1,863	1,909	1,955	2,004	2,054	2,106	2,158	2,212
15	-	3,950	4,045	4,134	4,237	4,339	4,447	4,558	4,672	4,789	4,909
16	3,355	3,970	4,065	4,155	4,259	4,361	4,470	4,582	4,696	4,813	4,934
17	15	340	348	356	365	373	383	392	402	412	423
18	-	170	174	178	182	187	191	196	201	206	211
19	393	3,570	3,656	3,736	3,830	3,921	4,019	4,120	4,223	4,329	4,437
20	77	670	686	701	719	736	754	773	793	812	833
21	66	320	328	335	343	351	360	369	379	388	398
22	465	1,710	1,751	1,790	1,834	1,878	1,925	1,973	2,023	2,073	2,125
23	20	-	-	-	-	-	-	-	-	-	-
24	584	-	-	-	-	-	-	-	-	-	-
25	77	-	-	-	-	-	-	-	-	-	-
26	117	-	-	-	-	-	-	-	-	-	-
27	400	-	-	-	-	-	-	-	-	-	-
<b>431050 - Utilities Engineering</b>											
<b>Personal Services:</b>											
29											
30	\$ 846,234	1,154,140	1,202,614	1,253,124	1,309,514	1,365,823	1,424,554	1,487,234	1,552,672	1,620,990	1,692,314
31	456,282	493,700	514,435	536,042	560,164	584,251	609,373	636,186	664,178	693,402	723,911
32	361	210	219	228	238	249	259	271	283	295	308
33	-	40	42	43	45	47	49	52	54	56	59
34	95,047	124,320	129,541	134,982	141,056	147,122	153,448	160,200	167,249	174,607	182,290
35	110,249	140,890	146,807	152,973	159,857	166,731	173,900	181,552	189,540	197,880	206,587
36	301,234	428,310	446,299	465,044	485,971	506,867	528,663	551,924	576,208	601,562	628,030
37	(436,446)	(526,690)	(548,811)	(571,861)	(597,595)	(623,291)	(650,093)	(678,697)	(708,560)	(739,736)	(772,285)
38	(172,638)	(222,930)	(232,293)	(242,049)	(252,942)	(263,818)	(275,162)	(287,269)	(299,909)	(313,105)	(326,882)
39	(362,730)	(206,400)	(211,354)	(216,003)	(221,403)	(226,717)	(232,385)	(238,195)	(244,150)	(250,253)	(256,510)
<b>Operating Expenses:</b>											
40											
41	\$ 25,000	990,900	1,014,682	1,037,005	1,062,930	1,088,440	1,115,651	1,143,542	1,172,131	1,201,434	1,231,470
42	13,387	7,560	7,741	7,912	8,110	8,304	8,512	8,725	8,943	9,166	9,395
43	-	8,460	8,663	8,854	9,075	9,293	9,525	9,763	10,007	10,257	10,514
44	3,054	2,210	2,263	2,313	2,371	2,428	2,488	2,550	2,614	2,680	2,747
45	2,144	2,100	2,150	2,198	2,253	2,307	2,364	2,423	2,484	2,546	2,610
46	1,232	2,170	2,222	2,271	2,328	2,384	2,443	2,504	2,567	2,631	2,697
47	-	110	113	115	118	121	124	127	130	133	137
48	5,838	-	-	-	-	-	-	-	-	-	-
49	1,501	3,540	3,625	3,705	3,797	3,888	3,986	4,085	4,187	4,292	4,399
50	162	510	522	534	547	560	574	589	603	618	634
51	2,006	1,100	1,126	1,151	1,180	1,208	1,238	1,269	1,301	1,334	1,367
52	4,007	4,110	4,209	4,301	4,409	4,515	4,627	4,743	4,862	4,983	5,108
53	(250,370)	(301,580)	(308,818)	(315,612)	(323,502)	(331,266)	(339,548)	(348,037)	(356,738)	(365,656)	(374,797)
54	13	60	61	63	64	66	68	69	71	73	75
55	33	50	51	52	54	55	56	58	59	61	62
56	1,647	2,730	2,796	2,857	2,928	2,999	3,074	3,151	3,229	3,310	3,393
57	46	-	-	-	-	-	-	-	-	-	-

Appendix A: Supporting Schedules for Water RSA

Schedule 5: Projection of Cash Outflows FY 2018-FY 2028

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
58 5470001 Printing and Binding Exp	275	80	82	84	86	88	90	92	95	97	99
59 5490001 Othr Current Chgs&Obligat	3,277	580	594	607	622	637	653	669	686	703	721
60 5496901 Intgv Sv-Cost Allocate	224,380	324,370	332,155	339,462	347,949	356,300	365,207	374,337	383,696	393,288	403,120
61 5510001 Office Supplies Exp	5,813	2,940	3,011	3,077	3,154	3,229	3,310	3,393	3,478	3,565	3,654
62 5400100 Transportation Exp	2,721	-	-	-	-	-	-	-	-	-	-
63 5400105 Mileage-Local	72	-	-	-	-	-	-	-	-	-	-
64 5400110 Mileage-Out of Town	90	-	-	-	-	-	-	-	-	-	-
65 5400200 Meals/Per Diem	1,308	-	-	-	-	-	-	-	-	-	-
66 5400300 Hotels/Motels/Lodging	3,383	-	-	-	-	-	-	-	-	-	-
67 5400900 Travel-Other	256	-	-	-	-	-	-	-	-	-	-
68 5496501 Intgv Sv-Info Technology	173,720	270,620	277,115	283,211	290,292	297,259	304,690	312,307	320,115	328,118	336,321
69 5496551 Intgv Sv-Risk Financing	46,140	72,390	74,127	75,758	77,652	79,516	81,504	83,541	85,630	87,771	89,965
70 5496706 Intgv Sv-Construction Management (431471)	2,900	5,740	5,878	6,007	6,157	6,305	6,463	6,624	6,790	6,960	7,134
71 5496707 Intgv Sv-Engineering Support (431572)	29,680	30,730	31,468	32,160	32,964	33,755	34,599	35,464	36,350	37,259	38,191
72 5496708 Intgv Sv-Survey and Mapping (431474)	3,830	5,680	5,816	5,944	6,093	6,239	6,395	6,555	6,719	6,887	7,059
73 5490060 Incentives & Awards	360	-	-	-	-	-	-	-	-	-	-
74 5340001 Other Contractual Svcs	63	-	-	-	-	-	-	-	-	-	-
75 <b>431070 - Field Services</b>											
76 <b>Personal Services:</b>											
77 5110001 Executive Salaries.	\$ 39,078	50,980	53,121	55,352	57,843	60,330	62,925	65,693	68,584	71,601	74,752
78 5120001 Regular Salaries & Wages	374,827	375,370	391,136	407,563	425,904	444,217	463,319	483,705	504,988	527,207	550,404
79 5140001 Overtime Pay	19,120	20,020	20,861	21,737	22,715	23,692	24,711	25,798	26,933	28,118	29,355
80 5200001 Employee Benefits-Overtime	-	3,170	3,303	3,442	3,597	3,751	3,913	4,085	4,265	4,452	4,648
81 5210001 FICA Taxes	31,724	32,620	33,990	35,418	37,011	38,603	40,263	42,034	43,884	45,815	47,831
82 5220001 Retirement Contributions	36,823	40,110	41,795	43,550	45,510	47,467	49,508	51,686	53,960	56,335	58,813
83 5230001 Hlth,Life,Dntl,Std,Ltd	191,332	231,680	241,411	251,550	262,870	274,173	285,962	298,545	311,681	325,395	339,712
84 5299991 Reg Salary&Wgs-Contra-Prj	42	-	-	-	-	-	-	-	-	-	-
85 5299992 Benefits-Contra-Projects	(112)	-	-	-	-	-	-	-	-	-	-
86 <b>Operating Expenses:</b>											
87 5349000 Contract Services-Other	\$ 9,368	10,140	10,383	10,612	10,877	11,138	11,417	11,702	11,995	12,294	12,602
88 5400001 Travel and Per Diem	-	6,220	6,369	6,509	6,672	6,832	7,003	7,178	7,358	7,542	7,730
89 5410001 Communication Services	3,968	6,060	6,205	6,342	6,501	6,657	6,823	6,994	7,168	7,348	7,531
90 5464000 Repair&Maint-Equipment	8,257	7,800	7,987	8,163	8,367	8,568	8,782	9,002	9,227	9,457	9,694
91 5496521 Intgv Sv-Fleet-Op & Maint	43,665	42,590	43,612	44,572	45,686	46,782	47,952	49,151	50,380	51,639	52,930
92 5520005 Small Tools,Supp&Allow.	376	1,300	1,331	1,360	1,394	1,428	1,464	1,500	1,538	1,576	1,616
93 5520099 PC Purchases under \$1000	2,273	3,140	3,215	3,286	3,368	3,449	3,535	3,624	3,714	3,807	3,902
94 5529000 Oper. Supplies-Misc	3,433	6,520	6,676	6,823	6,994	7,162	7,341	7,524	7,712	7,905	8,103
95 5540001 Bks,Pub,Subscrp&Membrshps	78	-	-	-	-	-	-	-	-	-	-
96 5550001 Training&Education Costs	1,674	7,800	7,987	8,163	8,367	8,568	8,782	9,002	9,227	9,457	9,694
97 5420001 Freight	96	110	113	115	118	121	124	127	130	133	137
98 5420002 Postage	22	4,940	5,059	5,170	5,299	5,426	5,562	5,701	5,844	5,990	6,139
99 5470001 Printing and Binding Exp	2,192	1,990	2,038	2,083	2,135	2,186	2,241	2,297	2,354	2,413	2,473
100 5510001 Office Supplies Exp	5,217	500	512	523	536	549	563	577	591	606	621
101 5400100 Transportation Exp	754	-	-	-	-	-	-	-	-	-	-
102 5400200 Meals/Per Diem	394	-	-	-	-	-	-	-	-	-	-
103 5400300 Hotels/Motels/Lodging	2,534	-	-	-	-	-	-	-	-	-	-
104 5400900 Travel-Other	139	-	-	-	-	-	-	-	-	-	-
105 5433000 Util Svc-County Water&Swr	153	-	-	-	-	-	-	-	-	-	-
106 5520006 Oper. Supplies-Clothing	1,604	2,240	2,294	2,344	2,403	2,460	2,522	2,585	2,650	2,716	2,784
107 5461000 Repair&Maint-Grounds	5,323	-	-	-	-	-	-	-	-	-	-
108 <b>431085 - Customer Service</b>											
109 <b>Personal Services:</b>											
110 5110001 Executive Salaries.	\$ 134,748	126,470	131,782	137,317	143,496	149,666	156,102	162,970	170,141	177,627	185,443
111 5120001 Regular Salaries & Wages	1,173,491	1,264,130	1,317,223	1,372,547	1,434,311	1,495,987	1,560,314	1,628,968	1,700,643	1,775,471	1,853,592
112 5140001 Overtime Pay	10,031	27,670	28,832	30,043	31,395	32,745	34,153	35,656	37,225	38,863	40,572
113 5200001 Employee Benefits-Overtime	-	4,380	4,564	4,756	4,970	5,183	5,406	5,644	5,892	6,152	6,422
114 5210001 FICA Taxes	95,562	106,390	110,858	115,514	120,713	125,903	131,317	137,095	143,127	149,425	155,999
115 5220001 Retirement Contributions	106,403	116,880	121,789	126,904	132,615	138,317	144,265	150,613	157,239	164,158	171,381
116 5230001 Hlth,Life,Dntl,Std,Ltd	540,003	649,970	677,269	705,714	737,471	769,182	802,257	837,557	874,409	912,883	953,050



Appendix A: Supporting Schedules for Water RSA

Schedule 5: Projection of Cash Outflows FY 2018-FY 2028

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
117 5299991 Reg Salary&Wgs-Contra-Pj	(425)	-	-	-	-	-	-	-	-	-	-
118 5299992 Benefits-Contra-Projects	(776)	-	-	-	-	-	-	-	-	-	-
119 <b>Operating Expenses:</b>											
120 5310033 General Consulting	\$ 18,384	-	-	-	-	-	-	-	-	-	-
121 5349000 Contract Services-Other	711,846	777,650	796,314	813,832	834,178	854,199	875,554	897,442	919,878	942,875	966,447
122 5400001 Travel and Per Diem	-	12,240	12,534	12,810	13,130	13,445	13,781	14,125	14,479	14,841	15,212
123 5410001 Communication Services	708	3,190	3,267	3,338	3,422	3,504	3,592	3,681	3,773	3,868	3,964
124 5464000 Repair&Maint-Equipment	106,284	112,610	115,313	117,850	120,796	123,695	126,787	129,957	133,206	136,536	139,949
125 5520009 Oper. Supplies-Computer	1,741	1,560	1,597	1,633	1,673	1,714	1,756	1,800	1,845	1,891	1,939
126 5520099 PC Purchases under \$1000	4,426	12,230	12,524	12,799	13,119	13,434	13,770	14,114	14,467	14,828	15,199
127 5529000 Oper. Supplies-Misc	14,725	2,200	2,253	2,302	2,360	2,417	2,477	2,539	2,602	2,667	2,734
128 5540001 Bks, Pub, Subscrp&Membrshps	1,204	19,140	19,599	20,031	20,531	21,024	21,550	22,088	22,641	23,207	23,787
129 5550001 Training&Education Costs	19,608	15,600	15,974	16,326	16,734	17,136	17,564	18,003	18,453	18,914	19,387
130 5420001 Freight	1,081	2,510	2,570	2,627	2,692	2,757	2,826	2,897	2,969	3,043	3,119
131 5420002 Postage	140,111	179,870	184,187	188,239	192,945	197,576	202,515	207,578	212,767	218,087	223,539
132 5440001 Rentals and Leases	1,676	1,850	1,936	1,984	2,032	2,083	2,135	2,188	2,243	2,299	2,357
133 5470001 Printing and Binding Exp	34,450	48,990	50,166	51,269	52,551	53,812	55,158	56,537	57,950	59,399	60,884
134 5490001 Othr Current Chgs&Obligat	98	320	328	335	343	351	360	369	379	388	398
135 5510001 Office Supplies Exp	7,882	5,490	5,622	5,745	5,889	6,030	6,181	6,336	6,494	6,656	6,823
136 5400100 Transportation Exp	2,249	-	-	-	-	-	-	-	-	-	-
137 5400105 Mileage-Local	254	-	-	-	-	-	-	-	-	-	-
138 5400110 Mileage-Out of Town	314	-	-	-	-	-	-	-	-	-	-
139 5400200 Meals/Per Diem	1,064	-	-	-	-	-	-	-	-	-	-
140 5400300 Hotels/Motels/Lodging	4,086	-	-	-	-	-	-	-	-	-	-
141 5400900 Travel-Other	271	-	-	-	-	-	-	-	-	-	-
142 5400205 Meals-Taxable	7	-	-	-	-	-	-	-	-	-	-
143 5480001 Promotional Activities Exp	336	15,600	15,974	16,326	16,734	17,136	17,564	18,003	18,453	18,914	19,387
144 5720001 Interest Exp	28,795	95,000	97,280	99,420	101,906	104,351	106,960	109,634	112,375	115,184	118,064
145 <b>431130 - Water &amp; Sewer Administration</b>											
146 <b>Personal Services:</b>											
147 5110001 Executive Salaries.	\$ 479,480	577,820	602,088	627,376	655,608	683,799	713,203	744,584	777,345	811,548	847,257
148 5120001 Regular Salaries & Wages	30,019	31,320	32,635	34,006	35,536	37,064	38,658	40,359	42,135	43,989	45,924
149 5140001 Overtime Pay	341	340	354	369	386	402	420	438	457	478	499
150 5200001 Employee Benefits-Overtime	-	60	63	65	68	71	74	77	81	84	88
151 5210001 FICA Taxes	37,217	46,130	48,067	50,086	52,340	54,591	56,938	59,443	62,059	64,790	67,640
152 5220001 Retirement Contributions	42,467	50,560	52,684	54,896	57,367	59,833	62,406	65,152	68,019	71,012	74,136
153 5230001 Hlth, Life, Dntl, Std, Ltd	87,159	132,280	137,836	143,625	150,088	156,542	163,273	170,457	177,957	185,787	193,962
154 5299991 Reg Salary&Wgs-Contra-Pj	(22,020)	(95,760)	(99,782)	(103,973)	(108,652)	(113,324)	(118,196)	(123,397)	(128,827)	(134,495)	(140,413)
155 5299992 Benefits-Contra-Projects	2,767	(22,050)	(22,976)	(23,941)	(25,018)	(26,094)	(27,216)	(28,414)	(29,664)	(30,969)	(32,332)
156 <b>Operating Expenses:</b>											
157 5310033 General Consulting	\$ 55,341	22,750	23,296	23,809	24,404	24,989	25,614	26,255	26,911	27,584	28,273
158 5349000 Contract Services-Other	103,056	156,570	160,328	163,855	167,951	171,982	176,282	180,689	185,206	189,836	194,582
159 5400001 Travel and Per Diem	-	22,950	23,501	24,018	24,618	25,209	25,839	26,485	27,147	27,826	28,522
160 5410001 Communication Services	5,780	7,590	7,772	7,943	8,142	8,337	8,546	8,759	8,978	9,203	9,433
161 5464000 Repair&Maint-Equipment	1,910	5,200	5,325	5,442	5,578	5,712	5,855	6,001	6,151	6,305	6,462
162 5496521 Intgv Sv-Fleet-Op & Maint	2,176	4,790	4,905	5,013	5,138	5,262	5,393	5,528	5,666	5,808	5,953
163 5520099 PC Purchases under \$1000	1,630	4,920	5,038	5,149	5,278	5,404	5,539	5,678	5,820	5,965	6,114
164 5529000 Oper. Supplies-Misc	5,848	3,380	3,461	3,537	3,626	3,713	3,806	3,901	3,998	4,098	4,201
165 5540001 Bks, Pub, Subscrp&Membrshps	33,285	30,740	31,478	32,170	32,975	33,766	34,610	35,475	36,362	37,271	38,203
166 5550001 Training&Education Costs	8,785	20,900	21,402	21,872	22,419	22,957	23,531	24,120	24,723	25,341	25,974
167 5420001 Freight	-	130	133	136	139	143	146	150	154	158	162
168 5420002 Postage	28	650	666	680	697	714	732	750	769	788	808
169 5440001 Rentals and Leases	213	650	666	680	697	714	732	750	769	788	808
170 5470001 Printing and Binding Exp	10,777	1,300	1,331	1,360	1,394	1,428	1,464	1,500	1,538	1,576	1,616
171 5490001 Othr Current Chgs&Obligat	2,726	980	1,004	1,026	1,051	1,076	1,103	1,131	1,159	1,188	1,218
172 5496901 Intgv Sv-Cost Allocate	2,981,000	3,726,950	3,816,397	3,900,358	3,997,866	4,093,815	4,196,161	4,301,065	4,408,591	4,518,806	4,631,776
173 5510001 Office Supplies Exp	891	2,590	2,652	2,711	2,778	2,845	2,916	2,989	3,064	3,140	3,219
174 5400100 Transportation Exp	4,374	-	-	-	-	-	-	-	-	-	-
175 5400105 Mileage-Local	72	-	-	-	-	-	-	-	-	-	-

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
176 5400200 Meals/Per Diem	1,723	-	-	-	-	-	-	-	-	-	-
177 5400300 Hotels/Motels/Lodging	8,978	-	-	-	-	-	-	-	-	-	-
178 5400900 Travel-Other	116	-	-	-	-	-	-	-	-	-	-
179 5496501 Intgv Sv-Info Technology	2,177,030	3,112,170	3,186,862	3,256,973	3,338,397	3,418,519	3,503,982	3,591,581	3,681,371	3,773,405	3,867,740
180 5496551 Intgv Sv-Risk Financing	613,000	832,480	852,460	871,214	892,994	914,426	937,286	960,719	984,737	1,009,355	1,034,589
181 5496706 Intgv Sv-Construction Management (431471)	38,540	66,090	67,676	69,165	70,894	72,596	74,411	76,271	78,178	80,132	82,135
182 5496707 Intgv Sv-Engineering Support (431572)	394,280	353,400	361,882	369,843	379,089	388,187	397,892	407,839	418,035	428,486	439,198
183 5496708 Intgv Sv-Survey and Mapping (431474)	50,870	65,410	66,980	68,453	70,165	71,849	73,645	75,486	77,373	79,308	81,290
184 5433000 Util Svc-County Water&Swr	100	-	-	-	-	-	-	-	-	-	-
185 5480001 Promotional Activities Exp	-	8,130	8,325	8,508	8,721	8,930	9,154	9,382	9,617	9,857	10,104
186 5311031 Legal (Other Than Court)	-	40,000	40,960	41,861	42,908	43,937	45,036	46,162	47,316	48,499	49,711
187 5320001 Accounting & Auditing	8,674	13,000	13,312	13,605	13,945	14,280	14,637	15,003	15,378	15,762	16,156
188 5410006 Comm Svcs-Repair & Maint	11,163	15,600	15,974	16,326	16,734	17,136	17,564	18,003	18,453	18,914	19,387
189 5431100 Util Svc-Elec-Generl-Power	556	-	-	-	-	-	-	-	-	-	-
190 5461000 Repair&Maint-Grounds	4,760	-	-	-	-	-	-	-	-	-	-
191 5462000 Repair&Maint-Buildings	4,427	331,500	339,456	346,924	355,597	364,131	373,235	382,566	392,130	401,933	411,981
192 5490060 Incentives & Awards	49	330	338	345	354	362	372	381	390	400	410
193 5340001 Other Contractual Svcs	8,886	-	-	-	-	-	-	-	-	-	-
194 <b>431240 - Technical Services</b>											
195 <b>Personal Services:</b>											
196 5110001 Executive Salaries.	\$ 108,657	111,550	116,235	121,117	126,567	132,010	137,686	143,744	150,069	156,672	163,566
197 5120001 Regular Salaries & Wages	1,108,162	1,317,950	1,373,304	1,430,983	1,495,377	1,559,678	1,626,744	1,698,321	1,773,047	1,851,061	1,932,508
198 5140001 Overtime Pay	13,784	42,020	43,785	45,624	47,677	49,727	51,865	54,147	56,530	59,017	61,614
199 5200001 Employee Benefits-Overtime	-	6,650	6,929	7,220	7,545	7,870	8,208	8,569	8,946	9,340	9,751
200 5210001 FICA Taxes	91,183	109,360	113,953	118,739	124,082	129,418	134,983	140,922	147,123	153,596	160,354
201 5220001 Retirement Contributions	107,286	134,830	140,493	146,394	152,981	159,559	166,421	173,743	181,388	189,369	197,701
202 5230001 Hlth,Life,Dntl,Std,Ltd	509,997	647,530	674,726	703,065	734,703	766,295	799,246	834,412	871,127	909,456	949,472
5299992 Benefits-Contra-Projects											
203 <b>Operating Expenses:</b>											
204 5349000 Contract Services-Other	\$ 143,856	50,290	51,497	52,630	53,946	55,240	56,621	58,037	59,488	60,975	62,499
205 5400001 Travel and Per Diem	-	5,100	5,222	5,337	5,471	5,602	5,742	5,886	6,033	6,184	6,338
206 5410001 Communication Services	6,037	8,180	8,376	8,561	8,775	8,985	9,210	9,440	9,676	9,918	10,166
207 5464000 Repair&Maint-Equipment	21,474	18,550	18,995	19,413	19,898	20,376	20,885	21,408	21,943	22,491	23,054
208 5496521 Intgv Sv-Fleet-Op. & Maint	73,955	77,110	78,961	80,698	82,715	84,700	86,818	88,988	91,213	93,493	95,831
209 5520005 Small Tools,Supp&Allow.	600	3,930	4,024	4,113	4,216	4,317	4,425	4,535	4,649	4,765	4,884
210 5520009 Oper. Supplies-Computer	1,500	-	-	-	-	-	-	-	-	-	-
211 5520099 PC Purchases under \$1000	4,096	5,260	5,386	5,505	5,642	5,778	5,922	6,070	6,222	6,378	6,537
212 5529000 Oper. Supplies-Misc	292,381	857,030	877,599	896,906	919,329	941,392	964,927	989,050	1,013,777	1,039,121	1,065,099
213 5540001 Bks,Pub,Subscrp&Memberships	305	300	307	314	322	330	338	346	355	364	373
214 5550001 Training&Education Costs	13,620	7,000	7,168	7,326	7,509	7,689	7,881	8,078	8,280	8,487	8,699
215 5420001 Freight	-	200	205	209	215	220	225	231	237	242	249
216 5420002 Postage	3	750	768	785	805	824	844	866	887	909	932
217 5440001 Rentals and Leases	(90,597)	-	(102,400)	(104,653)	(4,769)	(107,284)	(109,966)	(10,215)	(112,970)	(115,794)	(16,189)
218 5470001 Printing and Binding Exp	20	500	512	523	536	549	563	577	591	606	621
219 5490001 Othr Current Chgs&Obligat	-	400	410	419	429	439	450	462	473	485	497
220 5510001 Office Supplies Exp	2,597	3,570	3,656	3,736	3,830	3,921	4,019	4,120	4,223	4,329	4,437
221 5400110 Mileage-Out of Town	907	-	-	-	-	-	-	-	-	-	-
222 5400200 Meals/Per Diem	767	-	-	-	-	-	-	-	-	-	-
223 5400300 Hotels/Motels/Lodging	1,979	-	-	-	-	-	-	-	-	-	-
224 5400900 Travel-Other	494	-	-	-	-	-	-	-	-	-	-
225 <b>431250 - Maintenance Nort &amp; South</b>											
226 <b>Personal Services:</b>											
227 5110001 Executive Salaries.	\$ 41,074	121,220	126,311	131,616	137,539	143,453	149,622	156,205	163,078	170,254	177,745
228 5120001 Regular Salaries & Wages	1,692,471	2,120,320	2,209,373	2,302,167	2,405,765	2,509,213	2,617,109	2,732,261	2,852,481	2,977,990	3,109,022
229 5140001 Overtime Pay	128,298	122,500	127,645	133,006	138,991	144,968	151,202	157,854	164,800	172,051	179,622
230 5200001 Employee Benefits-Overtime	-	19,380	20,194	21,042	21,989	22,935	23,921	24,973	26,072	27,219	28,417
231 5210001 FICA Taxes	147,811	171,480	178,682	186,187	194,565	202,932	211,658	220,971	230,693	240,844	251,441
232 5220001 Retirement Contributions	176,587	205,070	213,683	222,658	232,677	242,682	253,118	264,255	275,882	288,021	300,694
233 5230001 Hlth,Life,Dntl,Std,Ltd	798,036	1,074,130	1,119,243	1,166,252	1,218,733	1,271,139	1,325,797	1,384,133	1,445,034	1,508,616	1,574,995

Appendix A: Supporting Schedules for Water RSA

Schedule 5: Projection of Cash Outflows FY 2018-FY 2028

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
234 5299991 Reg Salary&Wgs-Contra-Prj	12,319	-	-	-	-	-	-	-	-	-	-
235 5299992 Benefits-Contra-Projects	12,181	-	-	-	-	-	-	-	-	-	-
<b>236 Operating Expenses:</b>											
237 5310033 General Consulting	\$ 344	4,340	4,444	4,542	4,655	4,767	4,886	5,009	5,134	5,262	5,394
238 5349000 Contract Services-Other	791,598	484,950	496,589	507,514	520,202	532,686	546,004	559,654	573,645	587,986	602,686
239 5400001 Travel and Per Diem	-	1,960	2,007	2,051	2,102	2,153	2,207	2,262	2,318	2,376	2,436
240 5410001 Communication Services	15,849	17,900	18,330	18,733	19,201	19,662	20,154	20,657	21,174	21,703	22,246
241 5464000 Repair&Maint-Equipment	46,593	78,380	80,261	82,027	84,078	86,095	88,248	90,454	92,715	95,033	97,409
242 5496521 Intgv Sv-Fleet-Op & Maint	388,080	442,210	452,823	462,785	474,355	485,739	497,883	510,330	523,088	536,165	549,569
243 5520005 Small Tools,Supp&Allow.	2,780	31,060	31,805	32,505	33,318	34,117	34,970	35,845	36,741	37,659	38,601
244 5520009 Oper. Supplies-Computer	1,806	980	1,004	1,026	1,051	1,076	1,103	1,131	1,159	1,188	1,218
245 5520099 PC Purchases under \$1000	11,769	2,770	2,836	2,899	2,971	3,043	3,119	3,197	3,277	3,359	3,442
246 5529000 Oper. Supplies-Misc	628,719	690,660	707,236	722,795	740,865	758,646	777,612	797,052	816,978	837,403	858,338
247 5540001 Bks, Pub. Subscrp&Memberships	457	1,010	1,034	1,057	1,083	1,109	1,137	1,166	1,195	1,225	1,255
248 5550001 Training&Education Costs	11,419	11,020	11,284	11,533	11,821	12,105	12,407	12,718	13,036	13,361	13,695
249 5420001 Freight	419	490	502	513	526	538	552	565	580	594	609
250 5420002 Postage	182	210	215	220	225	231	236	242	248	255	261
251 5440001 Rentals and Leases	(150,261)	5,000	5,120	5,233	5,363	5,492	5,629	5,770	5,914	6,062	6,214
252 5470001 Printing and Binding Exp	734	1,740	1,782	1,821	1,866	1,911	1,959	2,008	2,058	2,110	2,162
253 5490001 Othr Current Chgs&Obligat	334	1,660	1,700	1,737	1,781	1,823	1,869	1,916	1,964	2,013	2,063
254 5510001 Office Supplies Exp	6,283	13,160	13,476	13,772	14,117	14,455	14,817	15,187	15,567	15,956	16,355
255 5400100 Transportation Exp	655	-	-	-	-	-	-	-	-	-	-
256 5400110 Mileage-Out of Town	107	-	-	-	-	-	-	-	-	-	-
257 5400200 Meals/Per Diem	439	-	-	-	-	-	-	-	-	-	-
258 5400300 Hotels/Motels/Lodging	1,962	-	-	-	-	-	-	-	-	-	-
259 5400900 Travel-Other	224	-	-	-	-	-	-	-	-	-	-
260 5520001 Operating Supplies Exp	116	-	-	-	-	-	-	-	-	-	-
261 5400205 Meals-Taxable	15	-	-	-	-	-	-	-	-	-	-
262 5433000 Util Svc-County Water&Swr	4,419	4,900	5,018	5,128	5,256	5,382	5,517	5,655	5,796	5,941	6,090
263 5520006 Oper. Supplies-Clothing	10,675	14,700	15,053	15,384	15,769	16,147	16,551	16,964	17,389	17,823	18,269
264 5340003 Contract Svcs-Janitorial	13,923	17,130	17,541	17,927	18,375	18,816	19,287	19,769	20,263	20,770	21,289
265 5431100 Util Svc-Elec-Generl-Power	30,867	31,850	33,443	35,115	36,870	38,714	40,650	42,682	44,816	47,057	49,410
266 5461000 Repair&Maint-Grounds	12,954	14,030	14,367	14,683	15,050	15,411	15,796	16,191	16,596	17,011	17,436
267 5462000 Repair&Maint-Buildings	10,165	13,920	14,254	14,568	14,932	15,290	15,672	16,064	16,466	16,878	17,299
268 5490060 Incentives & Awards	-	490	502	513	526	538	552	565	580	594	609
269 5340004 Contract Svcs-Fire Protec	-	740	758	774	794	813	833	854	875	897	920
270 5439000 Utility Svc-Miscellaneous	9,597	12,800	13,107	13,396	13,730	14,060	14,411	14,772	15,141	15,520	15,908
271 5463000 Repair&Maint-Wtr/Swr Line	136,927	261,600	267,878	273,772	280,616	287,351	294,535	301,898	309,445	317,182	325,111
<b>272 431320 - Water Supply &amp; Transmission</b>											
<b>273 Personal Services:</b>											
274 5110001 Executive Salaries.	\$ 39,635	92,940	96,843	100,911	105,452	109,986	114,716	119,763	125,033	130,534	136,278
275 5120001 Regular Salaries & Wages	908,230	1,003,550	1,045,699	1,089,618	1,138,651	1,187,613	1,238,681	1,293,183	1,350,083	1,409,486	1,471,504
276 5140001 Overtime Pay	109,293	76,000	79,192	82,518	86,231	89,939	93,807	97,934	102,243	106,742	111,439
277 5200001 Employee Benefits-Overtime	-	12,030	12,535	13,062	13,650	14,236	14,849	15,502	16,184	16,896	17,640
278 5210001 FICA Taxes	76,173	83,890	87,413	91,085	95,184	99,276	103,545	108,101	112,858	117,824	123,008
279 5220001 Retirement Contributions	91,618	100,770	105,002	109,412	114,336	119,252	124,380	129,853	135,567	141,531	147,759
280 5230001 Hlth, Life, Dntl, Std, Ltd	327,660	425,280	443,142	461,754	482,533	503,282	524,923	548,019	572,132	597,306	623,587
281 5299991 Reg Salary&Wgs-Contra-Prj	6,467	-	-	-	-	-	-	-	-	-	-
282 5299992 Benefits-Contra-Projects	3,128	-	-	-	-	-	-	-	-	-	-
<b>283 Operating Expenses:</b>											
284 5310033 General Consulting	\$ 166,220	80,530	82,463	84,277	86,384	88,457	90,668	92,935	95,259	97,640	100,081
285 5349000 Contract Services-Other	122,575	141,400	144,794	147,979	151,679	155,319	159,202	163,182	167,261	171,443	175,729
286 5400001 Travel and Per Diem	-	10,100	10,342	10,570	10,834	11,094	11,372	11,656	11,947	12,246	12,552
287 5410001 Communication Services	8,228	10,320	10,568	10,800	11,070	11,336	11,619	11,910	12,207	12,513	12,825
288 5464000 Repair&Maint-Equipment	119,741	193,500	198,144	202,503	207,566	212,547	217,861	223,308	228,890	234,612	240,478
289 5496521 Intgv Sv-Fleet-Op & Maint	101,604	120,930	123,832	126,557	129,721	132,834	136,155	139,559	143,048	146,624	150,289
290 5520005 Small Tools,Supp&Allow.	-	1,200	1,229	1,256	1,287	1,318	1,351	1,385	1,419	1,455	1,491
291 5520099 PC Purchases under \$1000	8,883	7,330	7,506	7,671	7,863	8,052	8,253	8,459	8,671	8,887	9,110
292 5529000 Oper. Supplies-Misc	203,419	213,000	218,112	222,910	228,483	233,967	239,816	245,811	251,957	258,256	264,712

Appendix A: Supporting Schedules for Water RSA

Schedule 5: Projection of Cash Outflows FY 2018-FY 2028

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
293 5540001 Bks, Pub. Subscrp & Membrshps	1,595	1,260	1,290	1,319	1,352	1,384	1,419	1,454	1,490	1,528	1,566
294 5550001 Training & Education Costs	16,021	17,400	17,818	18,210	18,665	19,113	19,591	20,080	20,582	21,097	21,624
295 5420001 Freight	426	800	819	837	858	879	901	923	946	970	994
296 5420002 Postage	13	40	41	42	43	44	45	46	47	48	50
297 5440001 Rentals and Leases	15,300	5,300	5,427	5,547	5,685	5,822	5,967	6,116	6,269	6,426	6,587
298 5470001 Printing and Binding Exp	20	300	307	314	322	330	338	346	355	364	373
299 5490001 Othr Current Chgs & Obligat	4,355	17,500	17,920	18,314	18,772	19,223	19,703	20,196	20,701	21,218	21,749
300 5510001 Office Supplies Exp	2,323	5,000	5,120	5,233	5,363	5,492	5,629	5,770	5,914	6,062	6,214
301 5400100 Transportation Exp	1,528	-	-	-	-	-	-	-	-	-	-
302 5400200 Meals/Per Diem	1,424	-	-	-	-	-	-	-	-	-	-
303 5400300 Hotels/Motels/Lodging	3,740	-	-	-	-	-	-	-	-	-	-
304 5400900 Travel-Other	298	-	-	-	-	-	-	-	-	-	-
305 5433000 Util Svc-County Water & Swr	16,551	16,700	17,101	17,477	17,914	18,344	18,802	19,273	19,754	20,248	20,754
306 5520006 Oper. Supplies-Clothing	4,461	4,500	4,608	4,709	4,827	4,943	5,067	5,193	5,323	5,456	5,593
307 5340003 Contract Svcs-Janitorial	37,549	42,000	43,008	43,954	45,053	46,134	47,288	48,470	49,682	50,924	52,197
308 5431100 Util Svc-Elec-Generl-Power	546,054	800,000	840,000	882,000	926,100	972,405	1,021,025	1,072,077	1,125,680	1,181,964	1,241,063
309 5461000 Repair & Maint-Grounds	89,982	136,500	139,776	142,851	146,422	149,936	153,685	157,527	161,465	165,502	169,639
310 5462000 Repair & Maint-Buildings	146,183	105,600	108,134	110,513	113,276	115,995	118,895	121,867	124,914	128,037	131,237
311 5432000 Util Svc-Municipal Wtr & Swr	-	1,000	1,024	1,047	1,073	1,098	1,126	1,154	1,183	1,212	1,243
312 5439000 Utility Svc-Miscellaneous	886	1,800	1,843	1,884	1,931	1,977	2,027	2,077	2,129	2,182	2,237
313 5432010 Util Svc-Municipl Wtr-Rclmd	1,831	6,000	6,144	6,279	6,436	6,591	6,755	6,924	7,097	7,275	7,457
314 5520003 Oper. Supplies-Chemicals	598,602	797,800	853,646	913,401	977,339	1,045,753	1,118,956	1,197,283	1,281,092	1,370,769	1,466,723
315 <b>431330 - SCADA</b>											
316 <b>Personal Services:</b>											
317 5110001 Executive Salaries.	\$ 49,975	52,020	54,205	56,481	59,023	61,561	64,208	67,033	69,983	73,062	76,277
318 5120001 Regular Salaries & Wages	62,424	40,160	41,847	43,604	45,566	47,526	49,569	51,750	54,028	56,405	58,887
319 5140001 Overtime Pay	1,885	2,400	2,501	2,606	2,723	2,840	2,962	3,093	3,229	3,371	3,519
320 5200001 Employee Benefits-Overtime	-	380	396	413	431	450	469	490	511	534	557
321 5210001 FICA Taxes	8,485	7,060	7,357	7,665	8,010	8,355	8,714	9,098	9,498	9,916	10,352
322 5220001 Retirement Contributions	9,118	7,640	7,961	8,295	8,669	9,041	9,430	9,845	10,278	10,730	11,203
323 5230001 Hlth, Life, Dnti, Std, Ltd	27,526	27,020	28,155	29,337	30,658	31,976	33,351	34,818	36,350	37,950	39,619
324 <b>Operating Expenses:</b>											
325 5310033 General Consulting	\$ 747	30,000	30,720	31,396	32,181	32,953	33,777	34,621	35,487	36,374	37,283
326 5349000 Contract Services-Other	6,651	4,000	4,096	4,186	4,291	4,394	4,504	4,616	4,732	4,850	4,971
327 5400001 Travel and Per Diem	-	1,200	1,229	1,256	1,287	1,318	1,351	1,385	1,419	1,455	1,491
328 5410001 Communication Services	3,155	9,080	9,298	9,502	9,740	9,974	10,223	10,479	10,741	11,009	11,284
329 5464000 Repair & Maint-Equipment	57,884	69,860	71,537	73,110	74,938	76,737	78,655	80,622	82,637	84,703	86,821
330 5496521 Intgv Sv-Fleet-Op & Maint	817	1,540	1,577	1,612	1,652	1,692	1,734	1,777	1,822	1,867	1,914
331 5520009 Oper. Supplies-Computer	226	200	205	209	215	220	225	231	237	242	249
332 5520099 PC Purchases under \$1000	232	2,650	2,714	2,773	2,843	2,911	2,984	3,058	3,135	3,213	3,293
333 5529000 Oper. Supplies-Misc	1,462	920	942	963	987	1,011	1,036	1,062	1,088	1,115	1,143
334 5540001 Bks, Pub. Subscrp & Membrshps	42	130	133	136	139	143	146	150	154	158	162
335 5550001 Training & Education Costs	21	1,900	1,946	1,988	2,038	2,087	2,139	2,193	2,248	2,304	2,361
336 5420001 Freight	4	20	20	21	21	22	23	23	24	24	25
337 5420002 Postage	-	10	10	10	11	11	11	12	12	12	12
338 5470001 Printing and Binding Exp	-	20	20	21	21	22	23	23	24	24	25
339 5510001 Office Supplies Exp	844	20	20	21	21	22	23	23	24	24	25
340 5400100 Transportation Exp	124	-	-	-	-	-	-	-	-	-	-
341 5400105 Mileage-Local	9	-	-	-	-	-	-	-	-	-	-
342 5400200 Meals/Per Diem	30	-	-	-	-	-	-	-	-	-	-
343 5400300 Hotels/Motels/Lodging	120	-	-	-	-	-	-	-	-	-	-
344 5400900 Travel-Other	2	-	-	-	-	-	-	-	-	-	-
345 5400205 Meals-Taxable	11	-	-	-	-	-	-	-	-	-	-
346 5460001 Repair & Maintenance Svcs	7,209	-	-	-	-	-	-	-	-	-	-
347 <b>5434000 Util Svc-Regional Water</b>											
348 <b>Personal Services:</b>											
349 5110001 Executive Salaries.	\$ 50,391	50,870	53,007	55,233	57,718	60,200	62,789	65,551	68,436	71,447	74,591
350 5120001 Regular Salaries & Wages	160,755	162,850	169,690	176,817	184,773	192,719	201,006	209,850	219,083	228,723	238,787
351 5140001 Overtime Pay	2,524	3,600	3,751	3,909	4,085	4,261	4,443	4,630	4,843	5,056	5,279
352 5200001 Employee Benefits-Overtime	-	570	594	619	647	675	704	735	767	801	836

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
353 5210001 FICA Taxes	15,753	16,350	17,037	17,752	18,551	19,349	20,181	21,069	21,996	22,964	23,974
354 5220001 Retirement Contributions	18,115	18,870	19,663	20,488	21,410	22,331	23,291	24,316	25,386	26,503	27,669
355 5230001 Hlth,Life,Dntl,Std,Ltd	62,876	72,700	75,753	78,935	82,487	86,034	89,734	93,682	97,804	102,107	106,600
<b>Operating Expenses:</b>											
357 5310033 General Consulting	\$ -	9,060	9,277	9,482	9,719	9,952	10,201	10,456	10,717	10,985	11,260
358 5349000 Contract Services-Other	1,109	12,730	13,036	13,322	13,655	13,983	14,333	14,691	15,058	15,435	15,821
359 5400001 Travel and Per Diem	-	2,790	2,857	2,920	2,993	3,065	3,141	3,220	3,300	3,383	3,467
360 5410001 Communication Services	9	180	184	188	193	198	203	208	213	218	224
361 5464000 Repair&Maint-Equipment	23,300	33,420	34,222	34,975	35,849	36,710	37,627	38,568	39,532	40,521	41,534
362 5496521 Intgv Sv-Fleet-Op & Maint	1,229	840	860	879	901	923	946	969	994	1,018	1,044
363 5520009 Oper. Supplies-Computer	538	-	-	-	-	-	-	-	-	-	-
364 5520099 PC Purchases under \$1000	485	560	573	586	601	615	631	646	662	679	696
365 5529000 Oper. Supplies-Misc	35,499	41,400	42,394	43,326	44,409	45,475	46,612	47,777	48,972	50,196	51,451
366 5540001 Bks, Pub, Subscrp & Membrshps	97	160	164	167	172	176	180	185	189	194	199
367 5550001 Training&Education Costs	1,378	2,360	2,417	2,470	2,532	2,592	2,657	2,724	2,792	2,861	2,933
368 5420001 Freight	35	180	184	188	193	198	203	208	213	218	224
369 5420002 Postage	6	30	31	31	32	33	34	35	35	36	37
370 5440001 Rentals and Leases	1,070	1,010	1,034	1,057	1,083	1,109	1,137	1,166	1,195	1,225	1,255
371 5470001 Printing and Binding Exp	7	20	20	21	21	22	23	23	24	24	25
372 5490001 Othr Current Chgs&Obligat	666	2,110	2,161	2,208	2,263	2,318	2,376	2,435	2,496	2,558	2,622
373 5510001 Office Supplies Exp	660	810	829	848	869	890	912	935	958	982	1,007
374 5400100 Transportation Exp	336	-	-	-	-	-	-	-	-	-	-
375 5400105 Mileage-Local	13	-	-	-	-	-	-	-	-	-	-
376 5400200 Meals/Per Diem	255	-	-	-	-	-	-	-	-	-	-
377 5400300 Hotels/Motels/Lodging	542	-	-	-	-	-	-	-	-	-	-
378 5400900 Travel-Other	24	-	-	-	-	-	-	-	-	-	-
379 5400205 Meals-Taxable	25	-	-	-	-	-	-	-	-	-	-
380 5433000 Util Svc-County Water&Swr	332	400	410	419	429	439	450	462	473	485	497
381 5340003 Contract Svcs-Janitorial	785	3,280	3,359	3,433	3,518	3,603	3,693	3,785	3,880	3,977	4,076
382 5431100 Util Svc-Elec-Generl-Power	49,874	30,280	31,794	33,384	35,053	36,806	38,646	40,578	42,607	44,737	46,974
383 5462000 Repair&Maint-Buildings	90	2,070	2,120	2,166	2,220	2,274	2,331	2,389	2,449	2,510	2,573
<b>431350 - Water Quality - Monitoring</b>											
<b>Personal Services:</b>											
386 5110001 Executive Salaries.	\$ 99,048	103,600	107,951	112,485	117,547	122,602	127,873	133,500	139,374	145,506	151,909
387 5120001 Regular Salaries & Wages	738,177	789,290	822,440	856,983	895,547	934,055	974,220	1,017,085	1,061,837	1,108,558	1,157,335
388 5140001 Overtime Pay	14,578	18,980	19,777	20,608	21,535	22,461	23,427	24,458	25,534	26,657	27,830
389 5200001 Employee Benefits-Overtime	-	3,010	3,136	3,268	3,415	3,562	3,715	3,879	4,049	4,228	4,414
390 5210001 FICA Taxes	62,548	68,310	71,179	74,169	77,506	80,839	84,315	88,025	91,898	95,941	100,163
391 5220001 Retirement Contributions	74,826	82,060	85,507	89,098	93,107	97,111	101,287	105,743	110,396	115,253	120,324
392 5230001 Hlth,Life,Dntl,Std,Ltd	287,164	350,480	365,200	380,539	397,663	414,762	432,597	451,631	471,503	492,249	513,908
393 5699991 Reg Salaries&Wages-Projects	-	-	-	-	-	-	-	-	-	-	-
394 5299991 Reg Salary&Wgs-Contra-Pj	(5,568)	-	-	-	-	-	-	-	-	-	-
395 5299992 Benefits-Contra-Projects	(2,516)	-	-	-	-	-	-	-	-	-	-
<b>Operating Expenses:</b>											
397 5310033 General Consulting	\$ 52	880	901	921	944	967	991	1,016	1,041	1,067	1,094
398 5349000 Contract Services-Other	1,298	19,390	19,855	20,292	20,799	21,299	21,831	22,377	22,936	23,510	24,097
399 5400001 Travel and Per Diem	-	9,980	10,220	10,444	10,705	10,962	11,236	11,517	11,805	12,100	12,403
400 5410001 Communication Services	5,701	8,120	8,315	8,498	8,710	8,919	9,142	9,371	9,605	9,845	10,091
401 5464000 Repair&Maint-Equipment	22,459	29,290	29,993	30,653	31,419	32,173	32,978	33,802	34,647	35,513	36,401
402 5496521 Intgv Sv-Fleet-Op & Maint	37,277	42,810	43,837	44,802	45,922	47,024	48,200	49,405	50,640	51,906	53,203
403 5520005 Small Tools,Supp&Allow.	972	1,580	1,618	1,654	1,695	1,736	1,779	1,823	1,869	1,916	1,964
404 5520009 Oper. Supplies-Computer	242	-	-	-	-	-	-	-	-	-	-
405 5520099 PC Purchases under \$1000	142	7,800	7,987	8,163	8,367	8,568	8,782	9,002	9,227	9,457	9,694
406 5529000 Oper. Supplies-Misc	23,501	20,300	20,787	21,245	21,776	22,298	22,856	23,427	24,013	24,613	25,228
407 5540001 Bks, Pub, Subscrp & Membrshps	373	280	287	293	300	308	315	323	331	339	348
408 5550001 Training&Education Costs	2,725	4,010	4,106	4,197	4,301	4,405	4,515	4,628	4,743	4,862	4,984
409 5420001 Freight	498	240	246	251	257	264	270	277	284	291	298
410 5420002 Postage	250	990	1,014	1,036	1,062	1,087	1,115	1,143	1,171	1,200	1,230
411 5440001 Rentals and Leases	2,202	45,310	46,397	47,418	48,604	49,770	51,014	52,290	53,997	54,937	56,310
412 5470001 Printing and Binding Exp	166	1,570	1,608	1,643	1,684	1,725	1,768	1,812	1,857	1,904	1,951

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
413 5490001 Othr Current Chgs&Obligat	26	240	246	251	257	264	270	277	284	291	298
414 5510001 Office Supplies Exp	11,045	2,910	2,980	3,045	3,122	3,196	3,276	3,358	3,442	3,528	3,616
415 5400100 Transportation Exp	436	-	-	-	-	-	-	-	-	-	-
416 5400105 Mileage-Local	13	-	-	-	-	-	-	-	-	-	-
417 5400200 Meals/Per Diem	1,031	-	-	-	-	-	-	-	-	-	-
418 5400300 Hotels/Motels/Lodging	2,123	-	-	-	-	-	-	-	-	-	-
419 5400900 Travel-Other	240	-	-	-	-	-	-	-	-	-	-
420 5400205 Meals-Taxable	161	-	-	-	-	-	-	-	-	-	-
421 5433000 Util Svc-County Water&Swr	-	160	164	167	172	176	180	185	189	194	199
422 5520006 Oper. Supplies-Clothing	3,079	2,610	2,673	2,731	2,800	2,867	2,939	3,012	3,087	3,165	3,244
423 5340003 Contract Svcs-Janitorial	3,490	3,820	3,912	3,998	4,098	4,196	4,301	4,408	4,519	4,632	4,747
424 5461000 Repair&Maint-Grounds	18,737	36,020	36,884	37,696	38,638	39,566	40,555	41,569	42,608	43,673	44,765
425 5462000 Repair&Maint-Buildings	6,255	12,760	13,066	13,354	13,688	14,016	14,366	14,726	15,094	15,471	15,858
426 5490060 Incentives & Awards	77	-	-	-	-	-	-	-	-	-	-
427 <b>431370 - Water &amp; Sewer Code Enforcement</b>											
428 <b>Personal Services:</b>											
429 5120001 Regular Salaries & Wages	\$ 73,133	78,330	81,620	85,048	88,875	92,697	96,683	100,937	105,378	110,015	114,855
430 5140001 Overtime Pay	6,873	2,490	2,595	2,704	2,825	2,947	3,073	3,209	3,350	3,497	3,651
431 5200001 Employee Benefits-Overtime	-	400	417	434	454	473	494	515	538	562	587
432 5210001 FICA Taxes	5,830	6,000	6,252	6,515	6,808	7,100	7,406	7,732	8,072	8,427	8,798
433 5220001 Retirement Contributions	6,399	6,510	6,783	7,068	7,386	7,704	8,035	8,389	8,758	9,143	9,546
434 5230001 Hlth,Life,Dntl,Std,Ltd	31,784	37,050	38,606	40,228	42,038	43,845	45,731	47,743	49,844	52,037	54,326
435 <b>Operating Expenses:</b>											
436 5349000 Contract Services-Other	631	36,170	37,038	37,853	38,799	39,730	40,724	41,742	42,785	43,855	44,951
437 5400001 Travel and Per Diem	-	170	174	178	182	187	191	196	201	206	211
438 5410001 Communication Services	1,800	800	819	837	858	879	901	923	946	970	994
439 5496521 Intgv Sv-Fleet-Op & Maint	4,294	3,360	3,441	3,516	3,604	3,691	3,783	3,878	3,975	4,074	4,176
440 5520099 PC Purchases under \$1000	932	-	-	-	-	-	-	-	-	-	-
441 5529000 Oper. Supplies-Misc	364	880	901	921	944	967	991	1,016	1,041	1,067	1,094
442 5550001 Training&Education Costs	388	1,250	1,280	1,308	1,341	1,373	1,407	1,443	1,479	1,516	1,553
443 5420002 Postage	181	21,580	22,098	22,584	23,149	23,704	24,297	24,904	25,527	26,165	26,819
444 5470001 Printing and Binding Exp	5,369	6,480	6,636	6,782	6,951	7,118	7,296	7,478	7,665	7,857	8,053
445 5510001 Office Supplies Exp	128	620	635	649	665	681	698	716	733	752	771
446 5400900 Travel-Other	13	-	-	-	-	-	-	-	-	-	-
447 5520006 Oper. Supplies-Clothing	65	330	338	345	354	362	372	381	390	400	410
448 5480001 Promotional Activities Exp	6,577	49,800	50,995	52,117	53,420	54,702	56,070	57,471	58,908	60,381	61,890
449 <b>431415 - Land, Forestry, &amp; Wildlife</b>											
450 <b>Personal Services:</b>											
451 <b>Operating Expenses:</b>											
452 5310033 General Consulting	\$ -	20,000	20,480	20,931	21,454	21,969	22,518	23,081	23,658	24,249	24,856
453 5349000 Contract Services-Other	510,501	587,470	601,569	614,804	630,174	645,298	661,431	677,966	694,915	712,288	730,096
454 5410001 Communication Services	1,918	2,500	2,560	2,616	2,682	2,746	2,815	2,885	2,957	3,031	3,107
455 5464000 Repair&Maint-Equipment	7,316	25,000	25,600	26,163	26,817	27,461	28,147	28,851	29,572	30,312	31,069
456 5496521 Intgv Sv-Fleet-Op & Maint	900	930	952	973	998	1,022	1,047	1,073	1,100	1,128	1,156
457 5529000 Oper. Supplies-Misc	847	10,000	10,240	10,465	10,727	10,984	11,259	11,540	11,829	12,125	12,428
458 5440001 Rentals and Leases	6,856	6,000	6,144	6,279	6,436	6,591	6,755	6,924	7,097	7,275	7,457
459 5490001 Othr Current Chgs&Obligat	1,236	1,150	1,178	1,204	1,234	1,263	1,295	1,327	1,360	1,394	1,429
460 5400900 Travel-Other	25	-	-	-	-	-	-	-	-	-	-
461 5431100 Util Svc-Elec-Gener-Power	12,181	18,500	19,425	20,396	21,416	22,487	23,611	24,792	26,031	27,333	28,700
462 5461000 Repair&Maint-Grounds	-	1,000	1,024	1,047	1,073	1,098	1,126	1,154	1,183	1,212	1,243
463 5462000 Repair&Maint-Buildings	2,900	8,000	8,192	8,372	8,582	8,787	9,007	9,232	9,463	9,700	9,942
464 5490012 Commissions-Cross Bar	72,747	80,000	81,920	83,722	85,815	87,875	90,072	92,324	94,632	96,997	99,422
465 <b>Irma</b>											
466 <b>Personal Services:</b>											
467 5299991 Reg Salary&Wgs-Contra-Prj	\$ 1,718	-	-	-	-	-	-	-	-	-	-
468 5299992 Benefits-Contra-Projects	(34)	-	-	-	-	-	-	-	-	-	-
469 <b>Operating Expenses:</b>											
470 5340001 Other Contractual Svcs	\$ 84,200	-	-	-	-	-	-	-	-	-	-

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
471 5400900 Travel-Other	135	-	-	-	-	-	-	-	-	-	-
472 5460001 Repair&Maintenance Svcs	7,392	-	-	-	-	-	-	-	-	-	-
473 5490060 Incentives & Awards	208	-	-	-	-	-	-	-	-	-	-
474 <b>433110 - Tampa Bay Water (TBW)</b>											
475 5434000 Util Svc-Regional Water <sup>(1)</sup>	\$ 41,760,867	41,971,967	41,665,079	42,264,341	42,990,208	44,104,380	44,688,775	43,917,459	45,453,140	47,037,496	48,672,065
476 <b>Other O&amp;M</b>											
477 OPEB Contribution <sup>(2)</sup>	\$ 791,759	791,759	791,759	791,759	791,759	791,759	791,759	791,759	791,759	791,759	791,759
478 <b>Sub-Total O&amp;M Expenses</b>	\$ 69,814,492	78,080,186	78,873,401	80,683,999	82,876,162	85,252,789	87,270,826	88,111,547	91,116,495	94,332,341	97,765,800
479 Personal Services Execution Percentage	100%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%
480 O&M Execution Percentage	100%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%
481 <b>Total O&amp;M Expenses</b>	\$ 69,814,492	75,737,781	76,507,199	78,263,479	80,389,878	82,695,205	84,652,702	85,468,201	88,383,000	91,502,371	94,832,826
482 <b>Total Capital Outlay</b>	\$ 970,697	1,509,160	1,545,380	1,579,378	1,618,863	1,657,715	1,699,158	1,741,637	1,785,178	1,829,808	1,875,553
483 <b>Long-Term Debt Service Payments:</b>											
484 Existing Debt Service	\$ -	-	-	-	-	-	-	-	-	-	-
485 Cumulative New Debt Service (Calc)	-	-	-	-	-	-	-	-	-	-	-
486 <b>Total Long-Term Debt Service Payments</b>	\$ -	-	-	-	-	-	-	-	-	-	-
487 <b>Transfers Out</b>											
488 Renewal & Replacement Contribution <sup>(3)</sup>	\$ 18,330,060	25,993,310	-	-	1,472,418	15,313,772	10,307,794	12,308,569	12,144,471	12,314,235	12,312,115
489 <b>Total Transfers Out</b>	\$ 18,330,060	25,993,310	-	-	1,472,418	15,313,772	10,307,794	12,308,569	12,144,471	12,314,235	12,312,115
490 <b>TOTAL CASH OUTFLOWS (Excludes Cash Funding of CIP)</b>	\$ 89,115,249	103,240,251	78,052,579	79,842,857	83,481,158	99,666,692	96,659,654	99,518,408	102,312,649	105,646,414	109,020,494

(1) Tampa Bay Water (TBW) expense estimates are based on projections of annual demand and the Tampa Bay Water rate.

(2) FY 2018 expense provided by County staff and held constant going forward.

(3) FY 2018 and FY 2019 Renewal & Replacement Contributions are based on FY 2018 Estimate and FY 2019 Budget Request, respectively, as provided by County staff. Each year thereafter, the Renewal & Replacement Contribution is calculated based on the funding requirements of the Capital Improvement Plan less any available bond proceeds and any excess fund balance in the R&R Fund above the minimum requirement.

Appendix A: Supporting Schedules for Water RSA

Schedule 6: Capital Improvement Program

Project Description	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1 000657A - Bulk Sodium Hypochlorite Conversion Project	\$ 50,000	-	-	-	-	-	-	-	-	-	-
2 000700B - Westwinds Dr. Bridge Replacement	-	-	50,000	-	-	-	-	-	-	-	-
3 000702B - Crosswinds Dr. Bridge Replacement	-	-	50,000	-	-	-	-	-	-	-	-
4 000740A - Logan Station Booster Pump Mods	60,000	-	-	-	-	-	-	-	-	-	-
5 000744A - Miscellaneous Improvements	640,000	522,700	195,000	195,000	195,000	195,000	195,000	195,000	195,000	195,000	195,000
6 000760A - Fdot Sr 688 - Bypass Canal/ Wild Acres	-	-	-	-	-	-	-	-	-	-	-
7 000791A - Fdot Relocation Projects Miscellaneous	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000
8 000815A - Keller Plant Decommissioning & Operations Faciliti	75,000	-	-	-	-	-	-	-	-	-	-
9 000831A - Water, Sewer And Reclaimed Water Relocation F	170,000	370,000	210,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000
10 001023B - 131St St And 86Th Ave Water Main Relocation	20,000	1,200,000	500,000	-	-	-	-	-	-	-	-
11 001035B - Oakwood Dr. Bridge Replacement	-	-	50,000	-	-	-	-	-	-	-	-
12 001039B - Park St/Starkey Rd. 84Th Lane To N. Of 82Nd Ave	100,000	-	-	-	-	-	-	-	-	-	-
13 001057A - General Upgrades To Supervisory Control And De	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
14 001280B - High Bluff Drainage Improvements	-	-	30,000	-	-	-	-	-	-	-	-
15 001283A - Replanting Of Pine Seedlings @ Cross Bar Ranch	200,000	228,000	151,000	151,000	151,000	57,000	57,000	57,000	57,000	57,000	57,000
16 001334B - Tarpon Woods Water Line Relocation	65,000	-	-	-	-	-	-	-	-	-	-
17 001443A - Fdot Ulmerton Road (Sr 688) From E. Of 49Th St. Tc	30,000	-	-	-	-	-	-	-	-	-	-
18 001521A - Water Distribution System High Lines Program	-	-	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
19 001522A - Fdot Us 19 Main To Northside	120,000	370,000	2,850,000	2,000,000	-	-	-	-	-	-	-
20 001523A - Fdot Us19 Northside To Cr95	70,000	370,000	2,850,000	2,000,000	-	-	-	-	-	-	-
21 001525A - Future Supply & Treatment Projects	-	-	-	2,000,000	2,000,000	3,000,000	3,000,000	-	-	-	-
22 001528A - Future Relocations And System Upgrades	-	-	-	2,000,000	2,000,000	3,000,000	3,000,000	-	-	-	-
23 001589A - Pass A Grille Improvements	800,000	-	-	-	-	-	-	-	-	-	-
24 001589B - Pass A Grille Water Transmission And Distribution N	660,000	800,000	-	-	-	-	-	-	-	-	-
25 001589C - Pass A Grille Way Water Main Improvements	200,000	1,000,000	-	-	-	-	-	-	-	-	-
26 001601A - Water Meter Replacement	1,000,000	1,500,000	6,500,000	6,500,000	6,500,000	6,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
27 001607A - Subaqueous Evaluation	-	-	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
28 002086B - Huston Lane / Pinecrest Dr. Roadway And Draina	-	-	90,000	-	-	-	-	-	-	-	-
29 002102C - Haines Bayshore Sidewalk	10,000	10,000	-	-	-	-	-	-	-	-	-
30 002109B - Whitney Rd- Wolford Rd Intersection Water Imp	30,000	100,000	-	-	-	-	-	-	-	-	-
31 002149A - Water & Sewer Operations Center	-	200,000	200,000	836,000	1,590,500	-	-	-	-	-	-
32 002150A - Gulf Beach Pump Station Upgrades	5,000	-	300,000	500,000	2,400,000	-	-	-	-	-	-
33 002151A - Capri Isle Pump Station Upgrades	330,000	800,000	2,700,000	600,000	-	-	-	-	-	-	-
34 002227B - Rena Dr. Drainage	15,000	15,000	-	-	-	-	-	-	-	-	-
35 002246A - Annual Water / Reclaimed Installation And Repai	220,000	226,000	222,000	222,000	212,000	212,000	212,000	212,000	212,000	212,000	212,000
36 002292A - Adrian @ Gladys - Largo Sidewalk Water Main Re	-	-	-	-	-	-	-	-	-	-	-



Project Description	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
37 002627A - Fdot- Gateway Projects Utility Relocation	1,285,000	1,900,000	1,065,000	-	-	-	-	-	-	-	-
38 002783A - Utilities Relocations Mitchell'S Beach , Boca Ciega	300,000	-	-	-	-	-	-	-	-	-	-
39 002785A - Blind Pass Road From Gulf Blvd To 75Th Ave- Jpa \	500,000	1,200,000	-	-	-	-	-	-	-	-	-
40 002789B - City Of Treasure Island Sunset Beach Watershed F	15,000	10,000	-	-	-	-	-	-	-	-	-
41 003137B - Valenia Ln/Tangerine Terrace Drainage Improver	15,000	15,000	-	-	-	-	-	-	-	-	-
42 003226A - Mcmullen Booth And Sr580 Water Main Improven	532,000	1,400,000	100,000	-	-	-	-	-	-	-	-
43 003362A - Trotter Road Utility Relocation Jpa - City Of Largo	400,000	100,000	-	-	-	-	-	-	-	-	-
44 003493A - Clearwater Largo District Relocation	20,000	-	-	-	-	-	-	-	-	-	-
45 003562A - Myrtle Ave Water Main Replacement	30,000	20,000	-	-	-	-	-	-	-	-	-
46 003604A - North Booster Pump Station, Sw Tank Repair	96,300	-	-	-	-	-	-	-	-	-	-
47 003748A - Gulf Blvd . Relocations @ The Narrows	100,000	500,000	1,000,000	-	-	-	-	-	-	-	-
48 003754A - Logan Laboratory Chiller Yard Replacement	-	520,000	-	-	-	-	-	-	-	-	-
49 003763A - Utilities Facilities Security	-	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
50 003764A - Water Ground Storage Tank Rehabilitation	-	300,000	300,000	300,000	300,000	-	-	-	-	-	-
51 003767A - Water Facilities Annual Improvements	-	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
52 003768A - Potable Water Meter Vault Rehabilitation	-	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
53 003770A - Belcher Road 12" Water Main From Innisbrook Dri	200,000	-	-	-	-	-	-	-	-	-	-
54 003783A - Keller Security Guard Building Upgrades	5,000	61,000	-	-	-	-	-	-	-	-	-
55 R&R From Various Cost Centers	-	429,780	429,780	429,780	429,780	429,780	429,780	429,780	429,780	429,780	429,780
56 New Customer Information System	-	-	3,000,000	-	-	-	-	-	-	-	-
57 Unspecified Future Capital	-	-	-	-	-	-	-	8,000,000	8,000,000	8,000,000	8,000,000
<b>58 Total CIP Budget (in current dollars)</b>	<b>\$ 8,793,300</b>	<b>14,882,480</b>	<b>24,557,780</b>	<b>19,608,780</b>	<b>17,653,280</b>	<b>15,268,780</b>	<b>10,268,780</b>	<b>12,268,780</b>	<b>12,268,780</b>	<b>12,268,780</b>	<b>12,268,780</b>
59 Cumulative Projected Cost Escalation <sup>(1)</sup>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>60 Resulting CIP Funding Level</b>	<b>\$ 8,793,300</b>	<b>14,882,480</b>	<b>24,557,780</b>	<b>19,608,780</b>	<b>17,653,280</b>	<b>15,268,780</b>	<b>10,268,780</b>	<b>12,268,780</b>	<b>12,268,780</b>	<b>12,268,780</b>	<b>12,268,780</b>
61 Annual CIP Execution Percentage	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>62 Final CIP Funding Level</b>	<b>\$ 8,793,300</b>	<b>14,882,480</b>	<b>24,557,780</b>	<b>19,608,780</b>	<b>17,653,280</b>	<b>15,268,780</b>	<b>10,268,780</b>	<b>12,268,780</b>	<b>12,268,780</b>	<b>12,268,780</b>	<b>12,268,780</b>

(1) The 10-year Capital Improvement Program provided by County staff already accounts for future cost inflation. As such, no additional cost escalation is assumed.

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>1 Total Rate Revenue</b>											
2 Retail & Wholesale Water Rate Revenue	\$ 86,130,624	86,130,624	86,737,010	86,235,614	87,251,295	88,278,667	89,317,861	90,369,011	88,230,340	89,268,146	90,317,886
3 Additional Rate Revenue from Growth	-	(885,406)	(1,355,214)	151,807	153,325	154,859	156,407	(3,012,239)	153,964	155,503	157,058
4 Subtotal	\$ 86,130,624	85,245,219	85,381,796	86,387,421	87,404,621	88,433,526	89,474,268	87,356,772	88,384,303	89,423,649	90,474,944
5 Weighted Average Rate Increase	0.00%	1.75%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
6 Additional Rate Revenue From Rate Increase	\$ -	1,491,791	853,818	863,874	874,046	884,335	894,743	873,568	883,843	894,236	904,749
7 Price Elasticity Adjustment	-	-	-	-	-	-	-	-	-	-	-
8 Total Rate Revenue	\$ 86,130,624	86,737,010	86,235,614	87,251,295	88,278,667	89,317,861	90,369,011	88,230,340	89,268,146	90,317,886	91,379,693
9 Plus: Other Operating Revenue	5,331,801	4,485,684	4,486,566	4,487,448	4,488,329	4,489,211	4,490,093	4,490,975	4,491,856	4,492,738	4,493,620
10 <b>Equals: Total Operating Revenue</b>	<b>\$ 91,462,426</b>	<b>91,222,694</b>	<b>90,722,180</b>	<b>91,738,743</b>	<b>92,766,996</b>	<b>93,807,072</b>	<b>94,859,103</b>	<b>92,721,314</b>	<b>93,760,003</b>	<b>94,810,624</b>	<b>95,873,313</b>
<b>11 Less: Operating Expenses</b>											
12 Personal Services	\$ (14,247,866)	(16,546,987)	(17,213,308)	(17,908,110)	(18,683,606)	(19,458,057)	(20,265,687)	(21,127,868)	(22,028,092)	(22,968,036)	(23,949,449)
13 TBW & Variable Expenses	(41,760,867)	(40,712,808)	(40,415,126)	(40,996,411)	(41,700,502)	(42,781,248)	(43,348,112)	(42,599,935)	(44,089,546)	(45,626,371)	(47,211,903)
14 O&M Expenses	(13,805,760)	(18,477,986)	(18,878,765)	(19,358,957)	(20,005,770)	(20,455,900)	(21,038,902)	(21,740,397)	(22,265,362)	(22,907,965)	(23,671,474)
15 <b>Equals: Net Operating Income</b>	<b>\$ 21,647,933</b>	<b>15,484,913</b>	<b>14,214,981</b>	<b>13,475,264</b>	<b>12,377,119</b>	<b>11,111,867</b>	<b>10,206,402</b>	<b>7,253,113</b>	<b>5,377,003</b>	<b>3,308,253</b>	<b>1,040,487</b>
<b>16 Plus: Non-Operating Income/(Expense)</b>											
17 Non-Operating Revenue <sup>(1)</sup>	\$ 605,800	230,873.68	-	-	-	-	-	-	-	-	-
18 Interest Earned On Fund Balances	1,351,201	1,893,873	2,928,418	2,900,792	2,772,371	2,512,584	2,256,342	1,907,947	1,778,355	1,594,430	1,349,813
19 Impact Fees	169,641	142,500	70,400	70,400	70,400	70,400	70,400	70,400	70,400	70,400	70,400
20 Transfers In	537,438	690,274	690,274	690,274	690,274	690,274	690,274	690,274	690,274	690,274	690,274
21 <b>Equals: Net Income</b>	<b>\$ 24,312,014</b>	<b>18,442,434</b>	<b>17,904,073</b>	<b>17,136,730</b>	<b>15,910,163</b>	<b>14,385,124</b>	<b>13,223,417</b>	<b>9,921,734</b>	<b>7,916,031</b>	<b>5,663,356</b>	<b>3,150,974</b>
<b>22 Less: Revenues Excluded From Coverage Test</b>											
23 Impact Fees	\$ (169,641)	(142,500)	(70,400)	(70,400)	(70,400)	(70,400)	(70,400)	(70,400)	(70,400)	(70,400)	(70,400)
24 Transfers In	(537,438)	(690,274)	(690,274)	(690,274)	(690,274)	(690,274)	(690,274)	(690,274)	(690,274)	(690,274)	(690,274)
25 <b>Equals: Net Income Available For Debt Service</b>	<b>\$ 23,604,934</b>	<b>17,609,661</b>	<b>17,143,400</b>	<b>16,376,056</b>	<b>15,149,490</b>	<b>13,624,450</b>	<b>12,462,744</b>	<b>9,161,060</b>	<b>7,155,357</b>	<b>4,902,683</b>	<b>2,390,300</b>
<b>26 Cash Flow Test</b>											
27 Net Income Available For Debt Service	\$ 23,604,934	17,609,661	17,143,400	16,376,056	15,149,490	13,624,450	12,462,744	9,161,060	7,155,357	4,902,683	2,390,300
28 Less: Non-Operating Expenditures											
29 Net Interfund Transfers (In - Out)	\$ 537,438	690,274	690,274	690,274	690,274	690,274	690,274	690,274	690,274	690,274	690,274
30 Capital Outlay	(970,697)	(1,509,160)	(1,545,380)	(1,579,378)	(1,618,863)	(1,657,715)	(1,699,158)	(1,741,637)	(1,785,178)	(1,829,808)	(1,875,553)
31 Renewal & Replacement Transfer	(18,330,060)	(25,993,310)	-	-	(1,472,418)	(15,313,772)	(10,307,794)	(12,308,569)	(12,144,471)	(12,314,235)	(12,312,115)
32 <b>Net Cash Flow</b>	<b>\$ 4,841,616</b>	<b>(9,202,536)</b>	<b>16,288,293</b>	<b>15,486,952</b>	<b>12,748,483</b>	<b>(2,656,763)</b>	<b>1,146,065</b>	<b>(4,198,873)</b>	<b>(6,084,018)</b>	<b>(8,551,086)</b>	<b>(11,107,094)</b>
<b>33 Unrestricted Reserve Fund Test</b>											
34 Balance At Beginning Of Fiscal Year	\$ 31,597,339	36,438,954	27,236,418	43,524,712	59,011,664	71,760,146	69,103,383	70,249,448	66,050,576	59,966,558	51,415,472
35 Cash Flow Surplus/(Deficit)	4,841,616	-	16,288,293	15,486,952	12,748,483	-	1,146,065	-	-	-	-
36 Reserve Fund Balance Used For Cash Flow Deficit	-	(9,202,536)	-	-	-	(2,656,763)	-	(4,198,873)	(6,084,018)	(8,551,086)	(11,107,094)
37 <b>Balance At End Of Fiscal Year</b>	<b>\$ 36,438,954</b>	<b>27,236,418</b>	<b>43,524,712</b>	<b>59,011,664</b>	<b>71,760,146</b>	<b>69,103,383</b>	<b>70,249,448</b>	<b>66,050,576</b>	<b>59,966,558</b>	<b>51,415,472</b>	<b>40,308,378</b>
38 Minimum Working Capital Reserve Target (2.5 Mo. O&M)	14,544,686	15,778,704	15,939,000	16,304,891	16,747,891	17,228,168	17,635,979	17,805,875	18,413,125	19,062,994	19,756,839
39 <b>Excess/(Deficiency) Of Working Capital To Target</b>	<b>\$ 21,894,268</b>	<b>11,457,714</b>	<b>27,585,712</b>	<b>42,706,772</b>	<b>55,012,255</b>	<b>51,875,216</b>	<b>52,613,469</b>	<b>48,244,700</b>	<b>41,553,433</b>	<b>32,352,478</b>	<b>20,551,539</b>

(1) Includes Sale-Surplus County Land and Fed-Grant Public Safety.

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>1 Water Impact Fees</b>											
2 Balance At Beginning Of Fiscal Year	\$ 797,186	980,596	1,144,133	1,252,272	1,366,446	1,484,502	1,603,532	1,721,456	1,835,772	1,952,946	2,073,050
3 Plus: Annual Revenues	169,641	142,500	70,400	70,400	70,400	70,400	70,400	70,400	70,400	70,400	70,400
3 Less: Payment Of Debt Service	-	-	-	-	-	-	-	-	-	-	-
3 Subtotal	\$ 966,827	1,123,096	1,214,533	1,322,672	1,436,846	1,554,902	1,673,932	1,791,856	1,906,172	2,023,346	2,143,450
4 Less: Restricted Funds	-	-	-	-	-	-	-	-	-	-	-
4 Total Amount Available For Projects	966,827	1,123,096	1,214,533	1,322,672	1,436,846	1,554,902	1,673,932	1,791,856	1,906,172	2,023,346	2,143,450
5 Amount Paid For Projects	-	-	-	-	-	-	-	-	-	-	-
6 Subtotal	\$ 966,827	1,123,096	1,214,533	1,322,672	1,436,846	1,554,902	1,673,932	1,791,856	1,906,172	2,023,346	2,143,450
7 Add Back: Restricted Funds	-	-	-	-	-	-	-	-	-	-	-
8 Plus: Interest Earnings	13,770	21,037	37,739	43,774	47,656	48,630	47,523	43,916	46,774	49,704	52,706
9 Less: Interest Allocated To Cash Flow	-	-	-	-	-	-	-	-	-	-	-
10 Balance At End Of Fiscal Year	\$ 980,596	1,144,133	1,252,272	1,366,446	1,484,502	1,603,532	1,721,456	1,835,772	1,952,946	2,073,050	2,196,156
<b>11 Renewal &amp; Replacement</b>											
12 Balance At Beginning Of Fiscal Year	\$ 44,431,809	53,968,569	65,079,399	40,521,619	20,912,839	4,731,977	4,776,968	4,815,983	4,855,772	4,731,463	4,776,918
13 Plus: Annual Revenues	18,330,060	25,993,310	-	-	1,472,418	15,313,772	10,307,794	12,308,569	12,144,471	12,314,235	12,312,115
14 Less: Payment Of Debt Service	-	-	-	-	-	-	-	-	-	-	-
15 Subtotal	\$ 62,761,869	79,961,879	65,079,399	40,521,619	22,385,257	20,045,748	15,084,763	17,124,552	17,000,243	17,045,698	17,089,033
16 Less: Restricted Funds	(4,303,855)	(4,640,681)	(4,655,828)	(4,682,530)	(4,731,977)	(4,776,968)	(4,815,983)	(4,855,772)	(4,731,463)	(4,776,918)	(4,820,253)
17 Total Amount Available For Projects	58,458,014	75,321,197	60,423,570	35,839,089	17,653,280	15,268,780	10,268,780	12,268,780	12,268,780	12,268,780	12,268,780
18 Amount Paid For Projects	(8,793,300)	(14,882,480)	(24,557,780)	(19,608,780)	(17,653,280)	(15,268,780)	(10,268,780)	(12,268,780)	(12,268,780)	(12,268,780)	(12,268,780)
19 Subtotal	\$ 49,664,714	60,438,717	35,865,790	16,230,309	-	-	-	-	-	-	-
20 Add Back: Restricted Funds	4,303,855	4,640,681	4,655,828	4,682,530	4,731,977	4,776,968	4,815,983	4,855,772	4,731,463	4,776,918	4,820,253
21 Plus: Interest Earnings	768,101	1,190,480	1,689,616	1,044,386	435,962	152,143	139,098	120,897	119,840	118,855	119,965
22 Less: Interest Allocated To Cash Flow	(768,101)	(1,190,480)	(1,689,616)	(1,044,386)	(435,962)	(152,143)	(139,098)	(120,897)	(119,840)	(118,855)	(119,965)
23 Balance At End Of Fiscal Year	\$ 53,968,569	65,079,399	40,521,619	20,912,839	4,731,977	4,776,968	4,815,983	4,855,772	4,731,463	4,776,918	4,820,253
<b>24 Vehicle Replacement</b>											
25 Balance At Beginning Of Fiscal Year	\$ 3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000
26 Plus: Annual Revenues	-	-	-	-	-	-	-	-	-	-	-
27 Less: Payment Of Debt Service	-	-	-	-	-	-	-	-	-	-	-
28 Subtotal	\$ 3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000
29 Less: Restricted Funds	(3,332,000)	(3,332,000)	(3,332,000)	(3,332,000)	(3,332,000)	(3,332,000)	(3,332,000)	(3,332,000)	(3,332,000)	(3,332,000)	(3,332,000)
30 Total Amount Available For Projects	-	-	-	-	-	-	-	-	-	-	-
31 Amount Paid For Projects	-	-	-	-	-	-	-	-	-	-	-
32 Subtotal	\$ -	-	-	-	-	-	-	-	-	-	-
33 Add Back: Restricted Funds	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000
34 Plus: Interest Earnings	52,018	66,640	106,624	113,288	113,288	106,624	96,628	83,300	83,300	83,300	83,300
35 Less: Interest Allocated To Cash Flow	(52,018)	(66,640)	(106,624)	(113,288)	(113,288)	(106,624)	(96,628)	(83,300)	(83,300)	(83,300)	(83,300)
36 Balance At End Of Fiscal Year	\$ 3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000	3,332,000
<b>37 Revenue Fund</b>											
38 Balance At Beginning Of Fiscal Year	\$ 31,597,339	36,438,954	27,236,418	43,524,712	59,011,664	71,760,146	69,103,383	70,249,448	66,050,576	59,966,558	51,415,472
39 Plus: Annual Revenues	4,841,616	(9,202,536)	16,288,293	15,486,952	12,748,483	(2,656,763)	1,146,065	(4,198,873)	(6,084,018)	(8,551,086)	(11,107,094)
40 Less: Payment Of Debt Service	-	-	-	-	-	-	-	-	-	-	-
41 Subtotal	\$ 36,438,954	27,236,418	43,524,712	59,011,664	71,760,146	69,103,383	70,249,448	66,050,576	59,966,558	51,415,472	40,308,378
42 Less: Restricted Funds	(14,544,686)	(15,778,704)	(15,939,000)	(16,304,891)	(16,747,891)	(17,228,168)	(17,635,979)	(17,805,875)	(18,413,125)	(19,062,994)	(19,756,839)
43 Total Amount Available For Projects	21,894,268	11,457,714	27,585,712	42,706,772	55,012,255	51,875,216	52,613,469	48,244,700	41,553,433	32,352,478	20,551,539
44 Amount Paid For Projects	-	-	-	-	-	-	-	-	-	-	-
45 Subtotal	\$ 21,894,268	11,457,714	27,585,712	42,706,772	55,012,255	51,875,216	52,613,469	48,244,700	41,553,433	32,352,478	20,551,539
46 Add Back: Restricted Funds	14,544,686	15,778,704	15,939,000	16,304,891	16,747,891	17,228,168	17,635,979	17,805,875	18,413,125	19,062,994	19,756,839
47 Plus: Interest Earnings	531,082	636,754	1,132,178	1,743,118	2,223,121	2,253,816	2,020,616	1,703,750	1,575,214	1,392,275	1,146,548
48 Less: Interest Allocated To Cash Flow	(531,082)	(636,754)	(1,132,178)	(1,743,118)	(2,223,121)	(2,253,816)	(2,020,616)	(1,703,750)	(1,575,214)	(1,392,275)	(1,146,548)
49 Balance At End Of Fiscal Year	\$ 36,438,954	27,236,418	43,524,712	59,011,664	71,760,146	69,103,383	70,249,448	66,050,576	59,966,558	51,415,472	40,308,378

FINAL CAPITAL PROJECTS FUNDING SOURCES	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Renewal & Replacement Debt Proceeds	\$ 8,793,300	14,882,480	24,557,780	19,608,780	17,653,280	15,268,780	10,268,780	12,268,780	12,268,780	12,268,780	12,268,780
<b>TOTAL PROJECTS PAID</b>	<b>\$ 8,793,300</b>	<b>14,882,480</b>	<b>24,557,780</b>	<b>19,608,780</b>	<b>17,653,280</b>	<b>15,268,780</b>	<b>10,268,780</b>	<b>12,268,780</b>	<b>12,268,780</b>	<b>12,268,780</b>	<b>12,268,780</b>

Projected Water Sales (In 1,000 Gallons)	FY 2014 <sup>(1)</sup>	FY 2015 <sup>(1)</sup>	FY 2016 <sup>(1)</sup>	FY 2017 <sup>(1)</sup>	FY 2018 <sup>(1)</sup>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Projected Annual Growth:	-3.0%	-0.3%	1.8%	3.1%	-3.4%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Projected Retail Water Sales:	12,178,698	12,146,558	12,366,610	12,755,757	12,324,339	12,346,111	12,367,883	12,389,655	12,411,428	12,433,200	12,454,972	12,476,744	12,498,516	12,520,288	12,542,060
In MGD	33.37	33.28	33.88	34.95	33.77	33.82	33.88	33.94	34.00	34.06	34.12	34.18	34.24	34.30	34.36
Projected Wholesale Water Sales:															
Initial Projection	5,618,486	4,668,935	3,483,374	4,121,354	3,951,245	3,958,225	3,709,255	3,350,142	3,356,029	3,361,917	3,367,804	3,373,691	2,648,304	2,652,917	2,657,531
Adjustment - Clearwater (2)	-	-	-	-	-	(255,500)	(365,000)	-	-	-	-	(730,000)	-	-	-
<b>Projected Wholesale Water Sales:</b>	5,618,486	4,668,935	3,483,374	4,121,354	3,951,245	3,702,725	3,344,255	3,350,142	3,356,029	3,361,917	3,367,804	2,643,691	2,648,304	2,652,917	2,657,531
In MGD	15.39	12.79	9.54	11.29	10.83	10.14	9.16	9.18	9.19	9.21	9.23	7.24	7.26	7.27	7.28
<b>Total Projected Water Sales</b>	<b>17,797,184</b>	<b>16,815,493</b>	<b>15,849,984</b>	<b>16,877,111</b>	<b>16,275,584</b>	<b>16,048,837</b>	<b>15,712,138</b>	<b>15,739,798</b>	<b>15,767,457</b>	<b>15,795,116</b>	<b>15,822,776</b>	<b>15,120,435</b>	<b>15,146,820</b>	<b>15,173,206</b>	<b>15,199,591</b>
<b>Projected Water Sales in MGD</b>	<b>48.76</b>	<b>46.07</b>	<b>43.42</b>	<b>46.24</b>	<b>44.59</b>	<b>43.97</b>	<b>43.05</b>	<b>43.12</b>	<b>43.20</b>	<b>43.27</b>	<b>43.35</b>	<b>41.43</b>	<b>41.50</b>	<b>41.57</b>	<b>41.64</b>
Estimated Line Losses from TBW Purchases <sup>(3)</sup>	795,646	1,168,537	1,803,076	1,704,659	1,528,593	1,318,313	1,290,655	1,292,927	1,295,199	1,297,471	1,299,743	1,242,050	1,244,218	1,246,385	1,248,553
Total Estimated TBW Water Purchase Req	18,592,830	17,984,030	17,653,060	18,581,770	17,804,177	17,367,149	17,002,794	17,032,725	17,062,656	17,092,588	17,122,519	16,362,485	16,391,038	16,419,591	16,448,144
Total TBW Water Purchase Req in MGD	50.94	49.27	48.23	50.91	48.78	47.58	46.58	46.66	46.75	46.83	46.91	44.83	44.91	44.99	45.06

(1) Retail and wholesale water sales are based upon actual sales as provided by County staff.  
 (2) Wholesale water use decline in FY 2019, FY 2020, and FY 2025 reflects projected demand loss of 0.7 MGD, 1.0 MGD, and 2.0 MGD, respectively, due to reductions in Clearwater demand.  
 (3) Estimated line losses from TBW purchases after FY 2017 are calculated annually based upon a 5-year average of line loss factors as a percent of total sales (FY 2013 - FY 2017).

	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>
Variable \$	\$ 30,764,513	26,857,193	24,213,697	23,357,146	24,246,917	25,980,306	26,548,776	27,198,971	28,753,495	30,363,378	31,659,850
All Other \$	126,622,740	129,684,125	129,388,436	130,760,704	136,597,000	140,742,097	143,468,877	145,659,553	148,031,712	151,809,698	154,443,208
Annual \$	\$ 157,387,253	156,541,318	153,602,133	154,117,850	160,843,917	166,722,403	170,017,653	172,858,524	176,785,207	182,173,076	186,103,058
<b>Bdgt/Forecast MGD</b>	<b>168.50</b>	<b>167.60</b>	<b>164.00</b>	<b>165.00</b>	<b>172.20</b>	<b>178.50</b>	<b>180.30</b>	<b>181.50</b>	<b>183.60</b>	<b>185.40</b>	<b>187.50</b>
V Portion (\$ / TGAL)	\$0.5002	0.4390	0.4034	0.3878	0.3858	0.3988	0.4034	0.4106	0.4291	0.4487	0.4626
AO (\$ / TGAL)	\$2.0588	2.1199	2.1556	2.1712	2.1733	2.1602	2.1801	2.1987	2.2090	2.2433	2.2567
<b>TBW Unitary Rate (\$ / TGAL)</b>	<b>\$2.5590</b>	<b>\$2.5590</b>	<b>\$2.5590</b>	<b>\$2.5590</b>	<b>\$2.5590</b>	<b>\$2.5590</b>	<b>\$2.5764</b>	<b>\$2.6093</b>	<b>\$2.6380</b>	<b>\$2.6920</b>	<b>\$2.7119</b>
<b>DEMAND FORECAST</b>	<b>Actual</b>	<b>Actual</b>	<b>Actual</b>	<b>Actual</b>	<b>Estimated</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>
PCU <sup>(1)</sup>	50.94	49.27	48.23	50.91	48.78	47.58	46.58	46.66	46.75	46.83	46.91
St. Pete	27.70	28.19	28.50	29.25	28.50	28.64	28.64	28.64	28.64	28.64	28.64
Hillsborough	50.98	51.89	55.03	59.74	60.40	61.61	62.84	64.10	65.38	66.69	68.02
Pasco	24.53	23.79	25.92	30.12	29.11	29.15	29.15	29.15	29.15	29.15	29.15
New Port Richey	2.87	2.93	3.10	3.00	2.88	2.88	2.88	2.88	2.88	2.88	2.88
Tampa (Morris Br)	0.00	0.00	0.00	6.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total MGD</b>	<b>157.03</b>	<b>156.07</b>	<b>160.78</b>	<b>179.26</b>	<b>169.67</b>	<b>169.86</b>	<b>170.09</b>	<b>171.43</b>	<b>172.80</b>	<b>174.19</b>	<b>175.60</b>
<b>Revised Unitary Rate (\$ / TGAL) <sup>(2)</sup></b>	<b>\$2.7095</b>	<b>2.7156</b>	<b>2.6022</b>	<b>2.3863</b>	<b>2.5915</b>	<b>2.6689</b>	<b>2.7080</b>	<b>2.7384</b>	<b>2.7762</b>	<b>2.8365</b>	<b>2.8657</b>
Var from TBW Rate	5.9%	6.1%	1.7%	-6.8%	1.3%	4.3%	5.1%	4.9%	5.2%	5.4%	5.7%
TBW Expenses - Revised Unitary Rate	\$ 50,380,399	48,836,539	45,810,572	44,340,975	46,139,263	46,350,363	46,043,474	46,642,737	47,368,604	48,482,775	49,067,171
Less: Credits	(4,378,396)	(4,378,396)	(4,378,396)	(4,378,396)	(4,378,396)	(4,378,396)	(4,378,396)	(4,378,396)	(4,378,396)	(4,378,396)	(4,378,396)
<b>Net PCU PW Expense - Revised</b>	<b>\$ 46,002,003</b>	<b>44,458,143</b>	<b>41,432,176</b>	<b>39,962,579</b>	<b>41,760,867</b>	<b>41,971,967</b>	<b>41,665,079</b>	<b>42,264,341</b>	<b>42,990,208</b>	<b>44,104,380</b>	<b>44,688,775</b>

(1) Demand projections based on historical trends and input from County staff.  
 (2) Unit rate projected to increase at 3% beyond TBW Expense Projection period.

Source: TBW FY 2019 Proposed Budget - June 2018

## **APPENDIX B: SUPPORTING SCHEDULES FOR SEWER RSA**

**Schedule 1 Financial Management Plan Summary**

**Schedule 2 Assumptions**

**Schedule 3 Beginning Fund Balances**

**Schedule 4 Projection of Cash Inflows: FY 2018 – FY 2028**

**Schedule 5 Projection of Cash Outflows: FY 2018 – FY 2028**

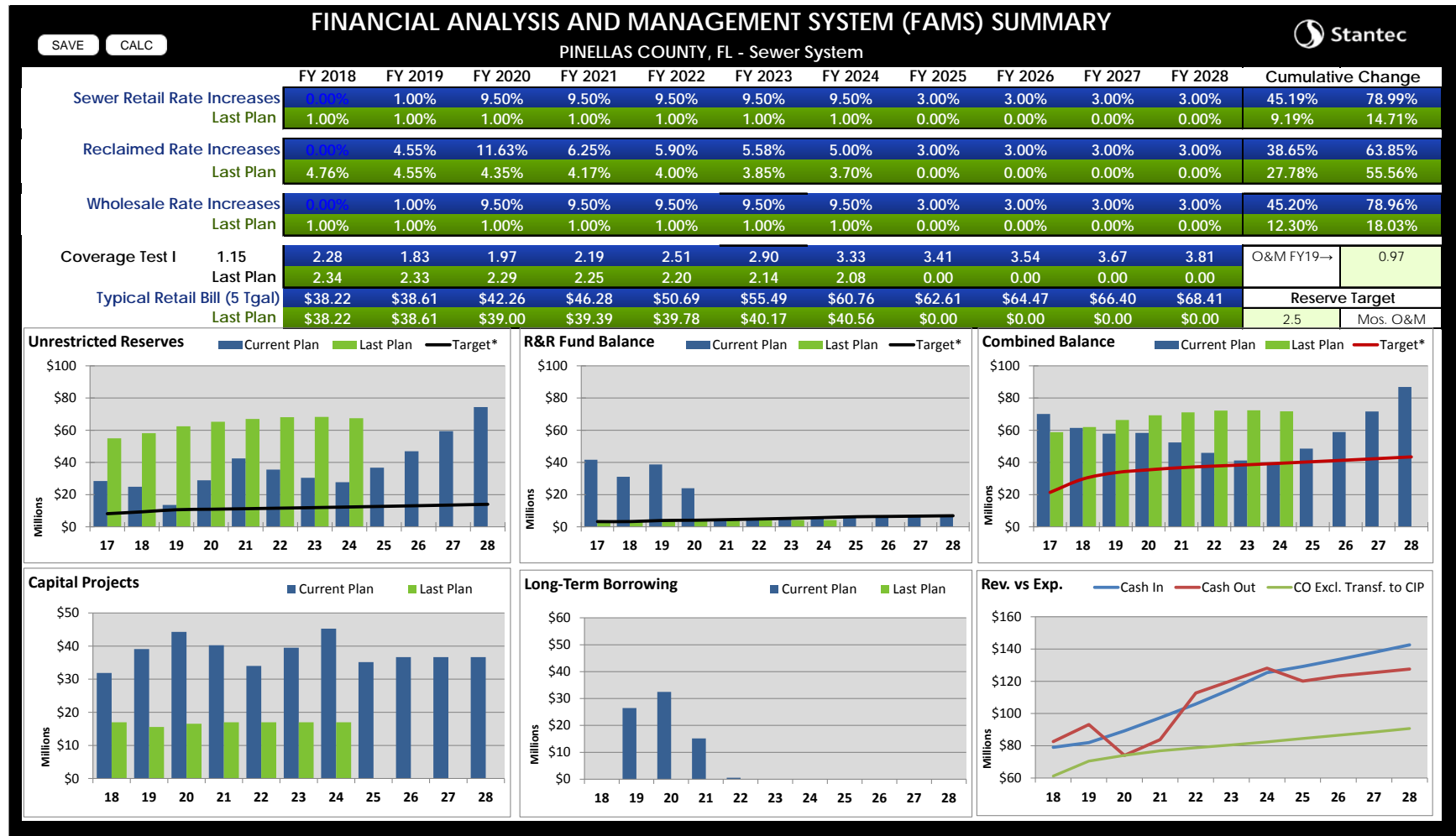
**Schedule 6 Capital Improvement Program**

**Schedule 7 Pro Forma: Projection of Annual Cashflow & Debt Service Coverage**

**Schedule 8 Detailed Funding Summary**

**Schedule 9 Projection of Capital Improvement Program Funding Sources**

**Schedule 10 Projection of Retail and Wholesale Demands**





	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>Annual Growth:</b>											
<b>Sewer Billing Units - Retail</b>	143,159	143,459	143,759	144,059	144,359	144,659	144,959	145,259	145,559	145,859	146,159
Unit Growth		300	300	300	300	300	300	300	300	300	300
% Change in Units		0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%
Sewer Volume	7,809,039	7,825,403	7,841,768	7,858,132	7,874,497	7,890,861	7,907,225	7,923,590	7,939,954	7,956,319	7,972,683
% Change in Sewer Use		0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%
<b>Sewer Billing Units - Wholesale</b>	3	3	3	3	3	3	3	3	3	3	3
Unit Growth		0	0	0	0	0	0	0	0	0	0
% Change in Units		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sewer Volume	2,023,435	2,027,675	2,031,915	2,036,155	2,040,396	2,044,636	2,048,876	2,053,116	2,057,357	2,061,597	2,065,837
% Change in Sewer Use		0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%
<b>Reclaimed Water Accounts</b>											
Metered Accounts	513	513	513	513	513	513	513	513	513	513	513
Unmetered Accounts	22,412	22,412	22,412	22,412	22,412	22,412	22,412	22,412	22,412	22,412	22,412
Account Growth		0	0	0	0	0	0	0	0	0	0
% Change in Customer Count		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Annual Capital Spending Execution:</b>											
Annual Capital Budget	\$ 31,897,624	39,123,300	44,304,000	40,249,000	34,013,500	39,484,000	45,249,000	35,169,000	36,669,000	36,669,000	36,669,000
Annual Percent Executed	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>Average Annual Interest Earnings Rate: <sup>(1)</sup></b>											
Sewer System Enterprise Fund	N/A	2.00%	3.20%	3.40%	3.40%	3.40%	3.20%	2.90%	2.90%	2.90%	2.90%
<b>Annual O&amp;M Expense Cost Escalation:</b>											
Personal Services	N/A	N/A	4.20%	4.20%	4.20%	4.50%	4.30%	4.30%	4.30%	4.30%	4.30%
Power	N/A	N/A	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Chemicals	N/A	N/A	2.20%	2.40%	2.20%	2.50%	2.40%	2.50%	2.50%	2.50%	2.50%
All Other O&M Expenses	N/A	N/A	2.20%	2.40%	2.20%	2.50%	2.40%	2.50%	2.50%	2.50%	2.50%
<b>Reserve Targets (Numbers of Months):</b>											
Operating Fund Target	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Combined Balance Target <sup>(2) (3)</sup>	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
<b>Operating Budget Execution:</b>											
Personal Services	100%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%
All Other O&M Expenses	100%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%

(1) Estimate provided by County staff.

(2) Per Fitch Ratings mid-range attributes.

(3) Combined fund balance includes the Operating Fund target of 2.5 months as well as 5% of prior year's revenue as a minimum fund balance for the Renewal and Replacement Fund.

	Revenue Fund	Renewal & Replacement	Vehicle Replacement	Sewer Interest & Sinking	Restricted Reserves
<b>CURRENT ASSETS</b>					
Cash	\$ 3,004,732	5,433,960	5,519,370	1,035,221	-
Cash with Fiscal Agent	-	-	-	3,774,319	-
Investments	18,532,978	39,797,628	-	1,364,013	-
Accounts and Notes Receivable	8,295,702	-	-	-	-
Assessments Receivable	660	-	-	-	-
Accrued Interest Receivable	46,201	92,534	-	1,439	-
Due from Other Governments	3,304,797	12,495	-	-	-
Inventory	160,636	-	-	-	-
Prepaid Items	104,791	-	-	-	-
<b>TOTAL CURRENT ASSETS</b>	<b>\$ 33,450,496</b>	<b>45,336,617</b>	<b>5,519,370</b>	<b>6,174,992</b>	<b>-</b>
<b>CURRENT LIABILITIES</b>					
Less: Vouchers Payable	\$ (3,229,478)	(3,372,514)	-	-	-
Less: Contracts Payable	-	(253,361)	-	-	-
Less: Due to Other Governments	(152,314)	(63,124)	-	-	-
Less: Accrued Liabilities	(647,237)	-	-	-	-
Less: Compensated Absences	(993,082)	-	-	-	-
Less: Matured Bonds and Interest Payable	-	-	-	(3,774,319)	-
<b>CALCULATED FUND BALANCE (ASSETS - LIABILITIES)</b>	<b>\$ 28,428,386</b>	<b>41,647,618</b>	<b>5,519,370</b>	<b>2,400,673</b>	<b>-</b>
Plus/(Less): Losses on Debt Refunding	-	-	-	-	-
Plus/(Less): Restricted for Debt Service	-	-	-	(1,153,635)	1,153,635
<b>NET FUND BALANCE</b>	<b>\$ 28,428,386</b>	<b>41,647,618</b>	<b>5,519,370</b>	<b>1,247,038</b>	<b>1,153,635</b>
<b>TOTAL AVAILABLE FUNDS</b>	<b>\$ 77,996,047</b>				

Sources: 2017 CAFR and Trial Balances provided by County Staff

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>1 Rate Revenue Growth Assumptions</b>											
2 % Change in Retail Customers	N/A	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%
3 % Change in Retail Usage	N/A	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%
4 % Change in Wholesale Customers	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
5 % Change in Wholesale Usage	N/A	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%	0.21%
<b>6 Proposed Rate Increases</b>											
7 Proposed Sewer Retail Rate Increase	N/A	1.00%	9.50%	9.50%	9.50%	9.50%	9.50%	3.00%	3.00%	3.00%	3.00%
8 Proposed Sewer Wholesale Rate Increase	N/A	1.00%	9.50%	9.50%	9.50%	9.50%	9.50%	3.00%	3.00%	3.00%	3.00%
9 Proposed Reclaimed Rate Increase	N/A	4.55%	11.63%	6.25%	5.90%	5.58%	5.00%	3.00%	3.00%	3.00%	3.00%
<b>10 Rate Revenue</b>											
11 Retail Sewer Base Rate Revenue	\$ 19,031,105	19,261,696	21,135,663	23,191,848	25,447,958	27,923,423	30,639,558	31,624,057	32,640,051	33,688,542	34,770,567
12 Retail Sewer Usage Rate Revenue	31,247,733	31,626,347	34,703,269	38,079,379	41,783,753	45,848,292	50,307,995	51,924,473	53,592,663	55,314,212	57,090,821
13 Wholesale Sewer Rate Revenue	8,633,097	8,737,700	9,587,790	10,520,538	11,543,980	12,666,927	13,899,050	14,345,649	14,806,535	15,282,163	15,773,003
<b>14 Total Sewer Rate Revenue</b>	<b>\$ 58,911,934</b>	<b>59,625,742</b>	<b>65,426,722</b>	<b>71,791,766</b>	<b>78,775,691</b>	<b>86,438,642</b>	<b>94,846,603</b>	<b>97,894,180</b>	<b>101,039,249</b>	<b>104,284,918</b>	<b>107,634,391</b>
<b>15 Other Operating Revenues <sup>(1)</sup></b>											
16 Grease Permitting Fee	\$ 112,260	105,295	105,295	105,295	105,295	105,295	105,295	105,295	105,295	105,295	105,295
17 Tapping Fees	83,285	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
18 Connection Fees-Interest	470	495	495	495	495	495	495	495	495	495	495
19 Reclaimed Water Svc Chrg (2)	5,319,339	5,750,000	6,418,871	6,820,176	7,222,340	7,625,493	8,006,768	8,246,971	8,494,380	8,749,212	9,011,688
20 Ws Reclaimed Meter Sv Chr (2)	3,024	3,179	3,549	3,771	3,993	4,216	4,427	4,559	4,696	4,837	4,982
21 Reclaim Water-St Pete Bch (2)	106,097	122,021	136,215	144,731	153,266	161,821	169,912	175,009	180,260	185,667	191,238
22 Reclaim Water-So Pasadena (2)	23,351	26,895	30,023	31,900	33,781	35,667	37,450	38,574	39,731	40,923	42,151
23 Reclaim Wtr-Pinellas Park (2)	190,559	190,516	212,678	225,974	239,299	252,657	265,290	273,248	281,446	289,889	298,586
24 Reclaim Wtr-Belleair (2)	10,330	5,032	5,617	5,968	6,320	6,673	7,006	7,217	7,433	7,656	7,886
25 Swr Billings Fr Belleair (3)	1,131,363	1,360,000	1,489,200	1,630,674	1,785,588	1,955,219	2,140,965	2,205,194	2,271,349	2,339,490	2,409,675
26 Swr Billings Fr Gulfport (3)	805,060	851,800	932,721	1,021,329	1,118,356	1,224,600	1,340,937	1,381,165	1,422,600	1,465,278	1,509,236
27 Swr Billings Fr Pinellas Prk (3)	572,455	576,800	631,596	691,598	757,299	829,243	908,021	935,262	963,319	992,219	1,021,986
28 Swr Billings Fr St Pete (3)	8,528,002	8,750,000	9,581,250	10,491,469	11,488,158	12,579,533	13,774,589	14,187,827	14,613,461	15,051,865	15,503,421
29 Swr Billings Fr Utilities Inc (3)	150,403	113,695	124,496	136,323	149,274	163,454	178,983	184,352	189,883	195,579	201,447
30 Laboratory Services	205,997	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
31 Miscellaneous Revenue	44,174	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000
32 Fat / Oil / Grease Tip Fees	226,263	238,168	238,168	238,168	238,168	238,168	238,168	238,168	238,168	238,168	238,168
33 Pelletized Sludge Sales	191,634	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
34 Sale Of Surplus Equipment	53,615	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
35 Ins Proceeds-Furn/Fxtr/Eq	24,025	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
36 Scrap Sales	17,599	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
37 Inter-Reimb-External-Other	113,616	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000
38 Cap Con-Pvt-Swr Connectn	601,400	900,000	440,000	440,000	440,000	440,000	440,000	440,000	440,000	440,000	440,000
39 Ind Wastwtr Dschrg Permts	27,150	15,800	15,800	15,800	15,800	15,800	15,800	15,800	15,800	15,800	15,800
40 Rents - Bldg/Space	169,344	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000
41 Fed Grant-Public Safety	-	593,330	-	-	-	-	-	-	-	-	-
42 Sewer-Late Payment Fee	516,715	589,474	589,474	589,474	589,474	589,474	589,474	589,474	589,474	589,474	589,474
<b>43 Total Other Operating Revenue</b>	<b>\$ 18,999,279</b>	<b>21,068,498</b>	<b>21,831,447</b>	<b>23,469,144</b>	<b>25,222,906</b>	<b>27,103,808</b>	<b>29,099,579</b>	<b>29,904,609</b>	<b>30,733,790</b>	<b>31,587,847</b>	<b>32,467,526</b>

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>44 Non-Operating Revenues</b>											
45 Interest Earned on Unrestricted Funds	\$ 1,079,661	1,193,573	1,860,074	1,883,224	1,672,738	1,482,441	1,282,935	1,268,962	1,558,129	1,892,540	2,297,376
46 Interest Earned on Restricted Funds	18,175	40,294	125,809	186,338	203,717	204,324	192,305	174,276	174,276	174,276	174,276
<b>47 Total Non-Operating Revenues</b>	<b>\$ 1,097,836</b>	<b>1,233,867</b>	<b>1,985,882</b>	<b>2,069,561</b>	<b>1,876,454</b>	<b>1,686,765</b>	<b>1,475,240</b>	<b>1,443,239</b>	<b>1,732,406</b>	<b>2,066,817</b>	<b>2,471,653</b>
<b>48 Capital Project Funding Sources</b>											
49 Renewal & Replacement Contribution <sup>(4)</sup>	\$ 21,322,120	22,701,760	-	6,939,628	33,917,821	39,911,229	45,716,708	35,678,610	36,860,030	36,882,171	36,890,707
<b>50 Total Capital Project Funding Sources</b>	<b>\$ 21,322,120</b>	<b>22,701,760</b>	<b>-</b>	<b>6,939,628</b>	<b>33,917,821</b>	<b>39,911,229</b>	<b>45,716,708</b>	<b>35,678,610</b>	<b>36,860,030</b>	<b>36,882,171</b>	<b>36,890,707</b>
<b>51 Total Cash In</b>	<b>\$ 100,331,170</b>	<b>104,629,868</b>	<b>89,244,051</b>	<b>104,270,099</b>	<b>139,792,873</b>	<b>155,140,444</b>	<b>171,138,130</b>	<b>164,920,638</b>	<b>170,365,475</b>	<b>174,821,753</b>	<b>179,464,276</b>

(1) FY 2018 and FY 2019 Other Operating Revenues are based upon FY 2018 Estimate and the FY 2019 Budget Request, as provided by County staff. The FY 2019 Budget Request has been adjusted to account for the County's practice of budgeting at 95% of projected revenues.

(2) Reclaimed rates projected to increase by rate adjustments shown in line 9.

(3) Wholesale rates projected to increase by rates shown in line 8.

(4) FY 2018 and FY 2019 Renewal & Replacement Contributions are based on FY 2018 Estimate and FY 2019 Budget Request, respectively, as provided by County staff. Each year thereafter, the Renewal & Replacement Contribution is calculated based on the funding requirements of the Capital Improvement Plan less any available bond proceeds and any excess fund balance in the R&R Fund above the minimum requirement.

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	
<b>FUND 4051 - SEWER OPERATING</b>												
<b>431040 - Facility Maintenance</b>												
<b>Personal Services:</b>												
1	5120001 Regular Salaries & Wages	\$ 245,712	327,210	340,953	355,273	370,194	385,742	403,101	420,434	438,513	457,369	477,036
2	5140001 Overtime Pay	22,661	14,080	14,671	15,288	15,930	16,599	17,346	18,091	18,869	19,681	20,527
3	5200001 Employee Benefits-Overtime	-	2,230	2,324	2,421	2,523	2,629	2,747	2,865	2,989	3,117	3,251
4	5210001 FICA Taxes	22,711	27,010	28,144	29,326	30,558	31,842	33,275	34,705	36,198	37,754	39,378
5	5220001 Retirement Contributions	29,250	33,770	35,188	36,666	38,206	39,811	41,602	43,391	45,257	47,203	49,233
6	5230001 Hlth,Life,Dntl,Std,Ltd	98,714	164,070	170,961	178,141	185,623	193,419	202,123	210,815	219,880	229,334	239,196
7	5110001 Executive Salaries	34,693	25,800	26,290	26,869	27,513	28,119	28,822	29,513	30,251	31,008	31,783
8	5299992 Benefits-Contra-Projects	638	-	-	-	-	-	-	-	-	-	-
<b>O&amp;M Expenses:</b>												
9	5310033 General Consulting	\$ -	90	92	94	96	98	101	103	106	108	111
10	5400001 Travel and Per Diem	-	640	654	668	685	700	717	734	753	771	791
11	5400001 Travel and Per Diem	41	-	-	-	-	-	-	-	-	-	-
12	5400001 Travel and Per Diem	63	-	-	-	-	-	-	-	-	-	-
13	5400001 Travel and Per Diem	215	-	-	-	-	-	-	-	-	-	-
14	5410001 Communication Services	798	960	981	1,003	1,027	1,049	1,076	1,101	1,129	1,157	1,186
15	5464000 Repair&Maint-Equipment	-	2,130	2,177	2,225	2,278	2,328	2,386	2,444	2,505	2,567	2,632
16	5496521 Intgv Sv-Fleet-Op & Maint	3,162	2,130	2,177	2,225	2,278	2,328	2,386	2,444	2,505	2,567	2,632
17	5520005 Small Tools,Supp&Allow.	8	190	194	198	203	208	213	218	223	229	235
18	5529000 Oper. Supplies-Misc	42	360	368	376	385	394	403	413	423	434	445
19	5540001 Bks,Pub,Subscrp&Membrshps	35	170	174	178	182	186	190	195	200	205	210
20	5470001 Printing and Binding Exp	11	-	-	-	-	-	-	-	-	-	-
21	5550001 Training&Education Costs	250	920	940	961	984	1,006	1,031	1,056	1,082	1,109	1,137
22	5520009 Oper. Supplies-Computer	-	100	102	104	107	109	112	115	118	121	124
23	5520099 PC Purchases under \$1000	615	1,930	1,972	2,016	2,064	2,110	2,162	2,214	2,270	2,326	2,385
<b>431070 - Field Services</b>												
<b>Personal Services:</b>												
24	5110001 Executive Salaries.	\$ 36,071	47,060	49,037	51,096	53,242	55,478	57,975	60,468	63,068	65,780	68,608
25	5120001 Regular Salaries & Wages	345,450	346,490	361,043	376,206	392,007	408,471	426,853	445,207	464,351	484,318	505,144
26	5140001 Overtime Pay	17,648	18,480	19,256	20,065	20,908	21,786	22,766	23,745	24,766	25,831	26,942
27	5200001 Employee Benefits-Overtime	-	2,930	3,053	3,181	3,315	3,454	3,610	3,765	3,927	4,096	4,272
28	5210001 FICA Taxes	29,284	30,110	31,375	32,692	34,065	35,496	37,094	38,689	40,352	42,087	43,897
29	5220001 Retirement Contributions	33,990	37,030	38,585	40,206	41,894	43,654	45,618	47,580	49,626	51,760	53,986
30	5230001 Hlth,Life,Dntl,Std,Ltd	176,619	213,860	222,842	232,201	241,954	252,116	263,461	274,790	286,606	298,930	311,784
<b>O&amp;M Expenses:</b>												
31	5349000 Contract Services-Other	8,647	9,360	9,566	9,776	10,011	10,231	10,487	10,739	11,007	11,282	11,564
32	5400001 Travel and Per Diem	-	5,740	5,866	5,995	6,139	6,274	6,431	6,585	6,750	6,919	7,092
33	5400200 Meals/Per Diem	363	-	-	-	-	-	-	-	-	-	-
34	5400300 Hotels/Motels/Lodging	2,339	-	-	-	-	-	-	-	-	-	-
35	5400900 Travel-Other	128	-	-	-	-	-	-	-	-	-	-
36	5410001 Communication Services	3,663	5,590	5,713	5,839	5,979	6,110	6,263	6,413	6,574	6,738	6,907
37	5420001 Freight	88	100	102	104	107	109	112	115	118	121	124
38	5420002 Postage	20	4,560	4,660	4,763	4,877	4,984	5,109	5,232	5,362	5,497	5,634
39	5433000 Util Svc-County Water&Swr	202	-	-	-	-	-	-	-	-	-	-
40	5461000 Repair&Maint-Grounds	4,914	-	-	-	-	-	-	-	-	-	-
41	5464000 Repair&Maint-Equipment	7,622	7,200	7,358	7,520	7,701	7,870	8,067	8,261	8,467	8,679	8,896
42	5470001 Printing and Binding Exp	2,024	1,840	1,880	1,922	1,968	2,011	2,062	2,111	2,164	2,218	2,273
43	5496521 Intgv Sv-Fleet-Op & Maint	32,375	39,340	40,205	41,090	42,076	43,002	44,077	45,135	46,263	47,420	48,605
44	5510001 Office Supplies Exp	4,816	460	470	480	492	503	515	528	541	554	568
45	5520005 Small Tools,Supp&Allow.	347	1,200	1,226	1,253	1,283	1,312	1,344	1,377	1,411	1,446	1,483
46	5520006 Oper. Supplies-Clothing	1,481	2,060	2,105	2,152	2,203	2,252	2,308	2,363	2,423	2,483	2,545
47	5529000 Oper. Supplies-Misc	3,169	6,020	6,152	6,288	6,439	6,580	6,745	6,907	7,079	7,256	7,438
48	5550001 Training&Education Costs	1,546	7,200	7,358	7,520	7,701	7,870	8,067	8,261	8,467	8,679	8,896
49	5520099 PC Purchases under \$1000	2,098	2,900	2,955	3,020	3,093	3,161	3,240	3,317	3,400	3,485	3,572
50	5400100 Transportation Exp	696	-	-	-	-	-	-	-	-	-	-

**431130 - Water & Sewer Administration**

Personal Services:

51	5110001 Executive Salaries.	\$ 258,184	311,130	324,197	337,814	352,002	366,786	383,291	399,773	416,963	434,893	453,593
52	5120001 Regular Salaries & Wages	16,164	16,870	17,579	18,317	19,086	19,888	20,783	21,676	22,608	23,581	24,595
53	5140001 Overtime Pay	184	190	198	206	215	224	234	244	255	266	277
54	5200001 Employee Benefits-Overtime	-	30	31	33	34	35	37	39	40	42	44
55	5210001 FICA Taxes	20,040	24,840	25,883	26,970	28,103	29,283	30,601	31,917	33,290	34,721	36,214
56	5220001 Retirement Contributions	22,867	27,230	28,374	29,565	30,807	32,101	33,546	34,988	36,492	38,062	39,698
57	5230001 Hlth,Life,Dntl,Std,Ltd	46,934	71,230	74,222	77,339	80,587	83,972	87,751	91,524	95,459	99,564	103,845
58	5299991 Reg Salary&Wgs-Contra-Prj	(22,517)	(51,560)	(53,726)	(55,982)	(58,333)	(60,783)	(63,518)	(66,250)	(69,099)	(72,070)	(75,169)
59	5299992 Benefits-Contra-Projects	(4,500)	(11,870)	(12,369)	(12,888)	(13,429)	(13,993)	(14,623)	(15,252)	(15,908)	(16,592)	(17,305)

O&M Expenses:

60	5310033 General Consulting	\$ 68,523	150,250	153,556	156,934	160,700	164,236	168,341	172,382	176,691	181,108	185,636
61	5311031 Legal (Other Than Court)	2,889	40,000	40,880	41,779	42,782	43,723	44,816	45,892	47,039	48,215	49,421
62	5340001 Other Contractual Svcs	8,794	-	-	-	-	-	-	-	-	-	-
63	5349000 Contract Services-Other	18,541	45,150	46,143	47,158	48,290	49,353	50,586	51,801	53,096	54,423	55,784
64	5400001 Travel and Per Diem	-	12,360	12,632	12,910	13,220	13,510	13,848	14,181	14,535	14,899	15,271
65	5400105 Mileage-Local	64	-	-	-	-	-	-	-	-	-	-
66	5400900 Travel-Other	62	-	-	-	-	-	-	-	-	-	-
67	5410001 Communication Services	3,113	4,090	4,180	4,272	4,374	4,471	4,582	4,692	4,810	4,930	5,053
68	5410006 Comm Svcs-Repair & Maint	6,011	8,400	8,585	8,774	8,984	9,182	9,411	9,637	9,878	10,125	10,378
69	5420001 Freight	-	70	72	73	75	77	78	80	82	84	86
70	5420002 Postage	15	350	358	366	374	383	392	402	412	422	432
71	5440001 Rentals and Leases	115	350	357	364	373	381	391	400	410	421	431
72	5461000 Repair&Maint-Grounds	2,196	-	-	-	-	-	-	-	-	-	-
73	5462000 Repair&Maint-Buildings	2,384	178,500	182,427	186,440	190,915	195,115	199,993	204,793	209,913	215,160	220,539
74	5464000 Repair&Maint-Equipment	1,029	2,800	2,862	2,925	2,995	3,061	3,137	3,212	3,295	3,375	3,459
75	5470001 Printing and Binding Exp	5,803	700	715	731	749	765	784	803	823	844	865
76	5480001 Promotional Activities Exp	196	4,380	4,476	4,575	4,685	4,788	4,907	5,025	5,151	5,280	5,412
77	5490001 Othr Current Chgs&Obligat	-	530	542	554	567	579	594	608	623	639	655
78	5496501 Intgv Sv-Info Technology	2,164,880	2,022,620	2,067,118	2,112,594	2,163,296	2,210,889	2,266,161	2,320,549	2,378,563	2,438,027	2,498,978
79	5496521 Intgv Sv-Fleet-Op & Maint	1,826	2,500	2,555	2,611	2,674	2,733	2,801	2,868	2,940	3,013	3,089
80	5496551 Intgv Sv-Risk Financing	1,155,090	1,365,390	1,395,429	1,426,128	1,460,355	1,492,483	1,529,795	1,566,510	1,605,673	1,645,815	1,686,960
81	5496901 Intgv Sv-Cost Allocate	1,695,820	2,006,820	2,050,970	2,096,091	2,146,398	2,193,618	2,248,459	2,302,422	2,359,982	2,418,982	2,479,456
82	5510001 Office Supplies Exp	518	1,400	1,431	1,462	1,497	1,530	1,569	1,606	1,646	1,688	1,730
83	5520099 PC Purchases under \$1000	335	2,650	2,708	2,768	2,834	2,897	2,969	3,040	3,116	3,194	3,274
84	5529000 Oper. Supplies-Misc	3,149	1,820	1,860	1,901	1,947	1,989	2,039	2,088	2,140	2,194	2,249
85	5540001 Bks, Pub, Subscrp&Membshps	17,923	39,580	40,451	41,341	42,333	43,264	44,346	45,410	46,545	47,709	48,902
86	5550001 Training&Education Costs	3,284	11,260	11,508	11,761	12,043	12,308	12,616	12,919	13,242	13,573	13,912
87	5400100 Transportation Exp	1,439	-	-	-	-	-	-	-	-	-	-
88	5400200 Meals/Per Diem	591	-	-	-	-	-	-	-	-	-	-
89	5400300 Hotels/Motels/Lodging	3,058	-	-	-	-	-	-	-	-	-	-
90	5496706 Intgv Sv-Construction Management (43147)	57,800	99,130	101,013	103,236	105,713	108,039	110,740	113,398	116,233	119,139	122,117
91	5496707 Intgv Sv-Engineering Support (431572)	253,470	227,180	231,496	236,589	242,267	247,597	253,787	259,878	266,375	273,035	279,860
92	5496708 Intgv Sv-Survey and Mapping (431474)	27,390	28,030	28,563	29,191	29,892	30,549	31,313	32,064	32,866	33,688	34,530
93	5320001 Accounting & Auditing	19,546	19,000	19,361	19,787	20,262	20,708	21,225	21,735	22,278	22,835	23,406
94	5490060 Incentives & Awards	27	180	183	187	192	196	201	206	211	216	222
95	5431100 Util Svc-Elec-Generl-Power	556	-	-	-	-	-	-	-	-	-	-

**431240 - Technical Services**

Personal Services:

96	5120001 Regular Salaries & Wages	\$ 110,236	91,970	95,833	99,858	104,052	108,422	113,301	118,173	123,254	128,554	134,082
97	5140001 Overtime Pay	8,538	-	-	-	-	-	-	-	-	-	-
98	5210001 FICA Taxes	7,403	7,040	7,336	7,644	7,965	8,299	8,673	9,046	9,435	9,840	10,264
99	5220001 Retirement Contributions	7,893	7,640	7,961	8,295	8,644	9,007	9,412	9,817	10,239	10,679	11,138
100	5230001 Hlth,Life,Dntl,Std,Ltd	38,550	44,620	46,494	48,447	50,482	52,602	54,969	57,333	59,798	62,369	65,051

O&M Expenses:

101	5349000 Contract Services-Other	\$ 12,160	106,820	109,170	111,572	114,250	116,763	119,682	122,554	125,618	128,759	131,978
102	5410001 Communication Services	360	-	-	-	-	-	-	-	-	-	-
103	5529000 Oper. Supplies-Misc	(20,916)	92,910	94,954	97,043	99,372	101,558	104,097	106,596	109,260	111,992	114,792
104	5540001 Bks, Pub, Subscrp&Membshps	-	150	153	157	160	164	168	172	176	181	185
105	5440001 Rentals and Leases	90,597	-	-	-	-	-	-	-	-	-	-

**431250 - Maintenance North & South**

**Personal Services:**

106	5110001 Executive Salaries.	\$ 39,397	116,270	121,153	126,242	131,544	137,069	143,237	149,396	155,820	162,520	169,509
107	5120001 Regular Salaries & Wages	2,001,653	2,056,320	2,142,685	2,232,678	2,326,451	2,424,162	2,533,249	2,642,179	2,755,792	2,874,291	2,997,886
108	5140001 Overtime Pay	125,956	117,500	122,435	127,577	132,936	138,519	144,752	150,976	157,468	164,240	171,302
109	5200001 Employee Benefits-Overtime	-	18,590	19,371	20,184	21,032	21,915	22,902	23,886	24,914	25,985	27,102
110	5210001 FICA Taxes	143,736	166,210	173,191	180,465	188,044	195,942	204,760	213,564	222,748	232,326	242,316
111	5220001 Retirement Contributions	171,921	198,570	206,910	215,600	224,655	234,091	244,625	255,144	266,115	277,558	289,493
112	5230001 Hlth,Life,Dntl,Std,Ltd	762,806	1,027,020	1,070,155	1,115,101	1,161,936	1,210,737	1,265,220	1,319,625	1,376,368	1,435,552	1,497,281
113	5299991 Reg Salary&Wgs-Contra-Prj	12,766	-	-	-	-	-	-	-	-	-	-
114	5299992 Benefits-Contra-Projects	12,059	-	-	-	-	-	-	-	-	-	-

**O&M Expenses:**

115	5310033 General Consulting	\$ 8,317	4,160	4,252	4,345	4,449	4,547	4,661	4,773	4,892	5,014	5,140
116	5340003 Contract Svcs-Janitorial	13,355	16,440	16,802	17,171	17,583	17,970	18,420	18,862	19,333	19,816	20,312
117	5340004 Contract Svcs-Fire Protec	-	710	726	742	759	776	795	815	835	856	877
118	5349000 Contract Services-Other	404,695	181,480	185,473	189,553	194,102	198,372	203,332	208,212	213,417	218,752	224,221
119	5400001 Travel and Per Diem	-	1,880	1,921	1,964	2,011	2,055	2,106	2,157	2,211	2,266	2,323
120	5400100 Transportation Exp	628	-	-	-	-	-	-	-	-	-	-
121	5400110 Mileage-Out of Town	103	-	-	-	-	-	-	-	-	-	-
122	5400205 Meals-Taxable	14	-	-	-	-	-	-	-	-	-	-
123	5400300 Hotels/Motels/Lodging	1,882	-	-	-	-	-	-	-	-	-	-
124	5400900 Travel-Other	215	-	-	-	-	-	-	-	-	-	-
125	5410001 Communication Services	15,490	17,170	17,548	17,934	18,364	18,768	19,237	19,699	20,192	20,696	21,214
126	5420001 Freight	402	470	480	491	503	514	527	539	553	567	581
127	5420002 Postage	175	200	204	209	214	219	224	229	235	241	247
128	5431100 Util Svc-Elec- Generl-Power	29,607	30,550	32,078	33,681	35,365	37,134	38,990	40,940	42,987	45,136	47,393
129	5433000 Util Svc-County Water&Swr	3,159	4,700	4,803	4,909	5,027	5,137	5,266	5,392	5,527	5,665	5,807
130	5439000 Utility Svc-Miscellaneous	9,205	12,280	12,550	12,826	13,134	13,423	13,759	14,089	14,441	14,802	15,172
131	5440001 Rentals and Leases	167,756	181,480	185,473	189,553	194,102	198,372	203,332	208,212	213,417	218,752	224,221
132	5461000 Repair&Maint-Grounds	12,426	13,460	13,756	14,059	14,396	14,713	15,081	15,443	15,829	16,224	16,630
133	5462000 Repair&Maint-Buildings	6,838	13,350	13,644	13,944	14,279	14,593	14,957	15,316	15,699	16,092	16,494
134	5463000 Repair&Maint-Wtr/Swr Line	143,913	679,580	694,531	709,810	726,846	742,836	761,407	779,681	799,173	819,153	839,631
135	5464000 Repair&Maint-Equipment	135,891	90,880	92,879	94,923	97,201	99,339	101,823	104,266	106,873	109,543	112,284
136	5470001 Printing and Binding Exp	704	1,670	1,707	1,744	1,786	1,825	1,871	1,916	1,964	2,013	2,063
137	5490001 Othr Current Chgs&Obligat	71	1,590	1,625	1,661	1,701	1,738	1,781	1,824	1,870	1,917	1,964
138	5496521 Intgv Sv-Fleet-Op & Maint	366,881	424,160	433,492	443,028	453,661	463,642	475,233	486,638	498,804	511,274	524,056
139	5510001 Office Supplies Exp	6,061	12,630	12,908	13,192	13,508	13,806	14,151	14,490	14,853	15,224	15,605
140	5520001 Operating Supplies Exp	111	-	-	-	-	-	-	-	-	-	-
141	5520005 Small Tools,Supp&Allow.	2,161	29,790	30,445	31,115	31,862	32,563	33,377	34,178	35,032	35,908	36,806
142	5520006 Oper. Supplies-Clothing	10,239	14,100	14,410	14,727	15,081	15,412	15,798	16,177	16,581	16,996	17,421
143	5520009 Oper. Supplies-Computer	1,734	940	958	979	1,002	1,024	1,050	1,075	1,102	1,130	1,158
144	5520099 PC Purchases under \$1000	-	2,650	2,708	2,768	2,834	2,897	2,969	3,040	3,116	3,194	3,274
145	5529000 Oper. Supplies-Misc	399,019	662,470	677,044	691,939	708,546	724,134	742,237	760,051	779,052	798,528	818,492
146	5540001 Bks, Pub, Subscrp&Membshps	439	970	991	1,013	1,037	1,060	1,087	1,113	1,141	1,169	1,198
147	5550001 Training&Education Costs	7,611	10,570	10,803	11,040	11,305	11,554	11,843	12,127	12,430	12,741	13,059
148	5400105 Mileage-Local	24	-	-	-	-	-	-	-	-	-	-
149	5400200 Meals/Per Diem	421	-	-	-	-	-	-	-	-	-	-
150	5490060 Incentives & Awards	-	470	480	491	503	514	527	539	553	567	581
151	5699983 Op Exp-Proj-Burdening	101	-	-	-	-	-	-	-	-	-	-

**431330 - SCADA**

**Personal Services:**

152	5110001 Executive Salaries.	\$ 149,922	156,040	162,594	169,423	176,538	183,953	192,231	200,497	209,118	218,110	227,489
153	5120001 Regular Salaries & Wages	89,512	120,460	125,519	130,791	136,284	142,008	148,399	154,780	161,435	168,377	175,617
154	5140001 Overtime Pay	5,654	7,200	7,502	7,818	8,146	8,488	8,870	9,251	9,649	10,064	10,497
155	5200001 Employee Benefits-Overtime	-	1,140	1,188	1,238	1,290	1,344	1,404	1,465	1,528	1,593	1,662
156	5210001 FICA Taxes	18,274	21,160	22,049	22,975	23,940	24,945	26,068	27,189	28,358	29,577	30,849
157	5220001 Retirement Contributions	19,477	22,920	23,883	24,886	25,931	27,020	28,236	29,450	30,716	32,037	33,415
158	5230001 Hlth,Life,Dntl,Std,Ltd	56,020	81,040	84,444	87,990	91,686	95,537	99,836	104,129	108,606	113,276	118,147

**O&M Expenses:**

159	5310033 General Consulting	\$ 2,241	90,000	91,980	94,004	96,260	98,377	100,837	103,257	105,838	108,484	111,196
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Appendix B: Supporting Schedules for Sewer RSA

Schedule 5: Projection of Cash Outflows FY 2018-FY 2028

160	5349000 Contract Services-Other	19,953	12,000	12,264	12,534	12,835	13,117	13,445	13,768	14,112	14,465	14,826
161	5400001 Travel and Per Diem	-	3,600	3,679	3,760	3,850	3,935	4,033	4,130	4,234	4,339	4,448
162	5400100 Transportation Exp	1,008	-	-	-	-	-	-	-	-	-	-
163	5410001 Communication Services	10,113	27,240	27,839	28,452	29,135	29,776	30,520	31,252	32,034	32,835	33,655
164	5420001 Freight	12	60	61	63	64	66	67	69	71	72	74
165	5460001 Repair&Maintenance Svcs	21,627	-	-	-	-	-	-	-	-	-	-
166	5464000 Repair&Maint-Equipment	175,709	209,580	214,191	218,903	224,157	229,088	234,815	240,451	246,462	252,624	258,939
167	5470001 Printing and Binding Exp	-	60	61	63	64	66	67	69	71	72	74
168	5496521 Intgv Sv-Fleet-Op & Maint	4,263	4,620	4,722	4,826	4,941	5,050	5,176	5,301	5,433	5,569	5,708
169	5510001 Office Supplies Exp	2,533	60	61	63	64	66	67	69	71	72	74
170	5520009 Oper. Supplies-Computer	1,813	600	611	625	640	654	670	686	704	721	739
171	5529000 Oper. Supplies-Misc	5,828	2,760	2,821	2,883	2,952	3,017	3,092	3,167	3,246	3,327	3,410
172	5540001 Bks, Pub, Subscrp & Membrshps	126	390	399	407	417	426	437	447	459	470	482
173	5550001 Training&Education Costs	613	5,700	5,825	5,954	6,096	6,231	6,386	6,540	6,703	6,871	7,042
174	5400200 Meals/Per Diem	91	-	-	-	-	-	-	-	-	-	-
175	5400205 Meals-Taxable	32	-	-	-	-	-	-	-	-	-	-
176	5400300 Hotels/Motels/Lodging	979	-	-	-	-	-	-	-	-	-	-
177	5400900 Travel-Other	7	-	-	-	-	-	-	-	-	-	-
178	5400105 Mileage-Local	28	-	-	-	-	-	-	-	-	-	-
179	5420002 Postage	-	20	20	21	21	22	22	23	23	24	25
180	5520099 PC Purchases under \$1000	697	7,940	8,091	8,269	8,467	8,654	8,870	9,083	9,310	9,543	9,781
<b>431340 - Laboratories</b>												
<b>Personal Services:</b>												
181	5110001 Executive Salaries.	\$ 190,364	192,160	200,231	208,640	217,403	226,534	236,728	246,908	257,525	268,598	280,148
182	5120001 Regular Salaries & Wages	607,296	615,200	641,038	667,962	696,016	725,249	757,885	790,474	824,465	859,917	896,893
183	5140001 Overtime Pay	9,536	13,600	14,171	14,766	15,387	16,033	16,754	17,475	18,226	19,010	19,827
184	5200001 Employee Benefits-Overtime	-	2,160	2,251	2,345	2,444	2,546	2,661	2,775	2,895	3,019	3,149
185	5210001 FICA Taxes	59,510	61,770	64,364	67,068	69,884	72,820	76,097	79,369	82,782	86,341	90,054
186	5220001 Retirement Contributions	68,436	71,260	74,253	77,372	80,621	84,007	87,788	91,562	95,500	99,606	103,889
187	5230001 Hlth, Life, Dntl, Std, Ltd	237,534	274,630	286,164	298,183	310,707	323,757	338,326	352,874	368,047	383,873	400,380
188	5299991 Reg Salary&Wgs-Contra-Prj	11	-	-	-	-	-	-	-	-	-	-
189	5299992 Benefits-Contra-Projects	(9)	-	-	-	-	-	-	-	-	-	-
<b>O&amp;M Expenses:</b>												
190	5340003 Contract Svcs-Janitorial	\$ 2,966	12,380	12,652	12,931	13,241	13,532	13,871	14,204	14,559	14,923	15,296
191	5349000 Contract Services-Other	4,191	20,290	20,736	21,193	21,701	22,179	22,733	23,279	23,861	24,457	25,069
192	5400001 Travel and Per Diem	-	10,540	10,772	11,009	11,273	11,521	11,809	12,093	12,395	12,705	13,022
193	5400100 Transportation Exp	1,271	-	-	-	-	-	-	-	-	-	-
194	5400105 Mileage-Local	49	-	-	-	-	-	-	-	-	-	-
195	5400200 Meals/Per Diem	963	-	-	-	-	-	-	-	-	-	-
196	5400300 Hotels/Motels/Lodging	2,809	-	-	-	-	-	-	-	-	-	-
197	5400900 Travel-Other	78	-	-	-	-	-	-	-	-	-	-
198	5410001 Communication Services	33	680	695	710	727	743	762	780	800	820	840
199	5420001 Freight	163	680	695	710	727	743	762	780	800	820	840
200	5420002 Postage	24	110	112	115	118	120	123	126	129	133	136
201	5431100 Util Svc-Elec-Generl-Power	188,412	114,390	120,110	126,115	132,421	139,042	145,994	153,294	160,958	169,006	177,456
202	5433000 Util Svc-County Water&Swr	973	1,500	1,533	1,567	1,604	1,640	1,681	1,721	1,764	1,808	1,853
203	5440001 Rentals and Leases	2,910	3,820	3,893	3,978	4,074	4,163	4,267	4,370	4,479	4,591	4,706
204	5462000 Repair&Maint-Buildings	341	7,790	7,961	8,137	8,332	8,515	8,728	8,937	9,161	9,390	9,625
205	5464000 Repair&Maint-Equipment	86,925	126,230	129,007	131,845	135,010	137,980	141,429	144,824	148,444	152,155	155,959
206	5470001 Printing and Binding Exp	27	70	72	73	75	77	78	80	82	84	86
207	5490001 Othr Current Chgs&Obligat	2,516	7,960	8,135	8,314	8,514	8,701	8,918	9,132	9,361	9,595	9,835
208	5496521 Intgv Sv-Fleet-Op & Maint	2,920	3,200	3,270	3,342	3,423	3,498	3,585	3,671	3,763	3,857	3,954
209	5510001 Office Supplies Exp	2,494	3,060	3,127	3,196	3,273	3,345	3,428	3,511	3,599	3,688	3,781
210	5520009 Oper. Supplies-Computer	2,034	-	-	-	-	-	-	-	-	-	-
211	5529000 Oper. Supplies-Misc	131,530	156,400	159,841	163,357	167,278	170,958	175,232	179,438	183,923	188,522	193,235
212	5540001 Bks, Pub, Subscrp & Membrshps	368	580	593	606	620	634	650	665	682	699	717
213	5550001 Training&Education Costs	5,115	8,910	9,106	9,306	9,530	9,739	9,983	10,222	10,478	10,740	11,008
214	5310033 General Consulting	-	34,210	34,860	35,627	36,482	37,285	38,217	39,134	40,112	41,115	42,143
215	5520099 PC Purchases under \$1000	845	2,090	2,130	2,177	2,229	2,278	2,335	2,391	2,451	2,512	2,575
216	5400205 Meals-Taxable	67	-	-	-	-	-	-	-	-	-	-



**431350 - Monitoring**

Personal Services:

217	5110001 Executive Salaries.	\$ 68,307	71,450	74,451	77,578	80,836	84,231	88,022	91,807	95,754	99,872	104,166
218	5120001 Regular Salaries & Wages	523,807	544,340	567,202	591,025	615,848	641,713	670,591	699,426	729,501	760,870	793,587
219	5140001 Overtime Pay	10,054	13,090	13,640	14,213	14,810	15,432	16,126	16,819	17,543	18,297	19,084
220	5200001 Employee Benefits-Overtime	-	2,070	2,157	2,248	2,342	2,440	2,550	2,660	2,774	2,893	3,018
221	5210001 FICA Taxes	44,256	47,110	49,089	51,150	53,299	55,537	58,036	60,532	63,135	65,850	68,681
222	5220001 Retirement Contributions	52,798	56,590	58,967	61,443	64,024	66,713	69,715	72,713	75,840	79,101	82,502
223	5230001 Hlth,Life,Dntl,Std,Ltd	201,733	241,710	251,862	262,440	273,462	284,948	297,771	310,575	323,929	337,858	352,386
224	5299991 Reg Salary&Wgs-Contra-Prj	1,289	-	-	-	-	-	-	-	-	-	-
225	5299992 Benefits-Contra-Projects	126	-	-	-	-	-	-	-	-	-	-

O&M Expenses:

226	5349000 Contract Services-Other	\$ 33,066	13,380	13,674	13,975	14,311	14,625	14,991	15,351	15,735	16,128	16,531
227	5400001 Travel and Per Diem	-	6,880	7,031	7,186	7,359	7,520	7,708	7,893	8,091	8,293	8,500
228	5400100 Transportation Exp	300	-	-	-	-	-	-	-	-	-	-
229	5400205 Meals-Taxable	111	-	-	-	-	-	-	-	-	-	-
230	5400900 Travel-Other	184	-	-	-	-	-	-	-	-	-	-
231	5410001 Communication Services	4,032	5,600	5,723	5,849	5,989	6,121	6,274	6,425	6,585	6,750	6,919
232	5420001 Freight	285	160	164	167	171	175	179	184	188	193	198
233	5420002 Postage	198	680	695	710	727	743	762	780	800	820	840
234	5464000 Repair&Maint-Equipment	15,489	20,200	20,644	21,099	21,605	22,080	22,632	23,175	23,755	24,349	24,957
235	5470001 Printing and Binding Exp	1,112	1,080	1,104	1,128	1,155	1,181	1,210	1,239	1,270	1,302	1,334
236	5490001 Othr Current Chgs&Obligat	-	160	164	167	171	175	179	184	188	193	198
237	5490060 Incentives & Awards	53	-	-	-	-	-	-	-	-	-	-
238	5496521 Intgv Sv-Fleet-Op & Maint	17,598	29,530	30,180	30,844	31,584	32,279	33,086	33,880	34,727	35,595	36,485
239	5510001 Office Supplies Exp	7,617	2,010	2,054	2,099	2,150	2,197	2,252	2,306	2,364	2,423	2,483
240	5520005 Small Tools,Supp&Allow.	643	1,090	1,114	1,138	1,166	1,191	1,221	1,251	1,282	1,314	1,347
241	5520006 Oper. Supplies-Clothing	2,143	1,800	1,840	1,880	1,925	1,968	2,017	2,065	2,117	2,170	2,224
242	5529000 Oper. Supplies-Misc	480	14,000	14,308	14,623	14,974	15,303	15,686	16,062	16,464	16,875	17,297
243	5540001 Bks, Pub, Subscrp&Membshrps	176	190	194	198	203	208	213	218	223	229	235
244	5550001 Training&Education Costs	1,988	2,770	2,831	2,893	2,963	3,028	3,104	3,178	3,257	3,339	3,422
245	5400200 Meals/Per Diem	729	-	-	-	-	-	-	-	-	-	-
246	5400300 Hotels/Motels/Lodging	1,464	-	-	-	-	-	-	-	-	-	-
247	5310033 General Consulting	48,719	610	623	637	652	667	683	700	717	735	754
248	5340003 Contract Svcs-Janitorial	2,407	2,630	2,680	2,739	2,805	2,866	2,938	3,009	3,084	3,161	3,240
249	5400105 Mileage-Local	9	-	-	-	-	-	-	-	-	-	-
250	5433000 Util Svc-County Water&Swr	-	110	112	115	117	120	123	126	129	132	136
251	5440001 Rentals and Leases	1,519	31,250	31,938	32,640	33,423	34,159	35,013	35,853	36,749	37,668	38,610
252	5520099 PC Purchases under \$1000	98	5,380	5,482	5,603	5,737	5,864	6,010	6,154	6,308	6,466	6,628
253	5529000 Oper. Supplies-Misc	21,215	-	-	-	-	-	-	-	-	-	-
254	5461000 Repair&Maint-Grounds	12,922	24,840	25,312	25,869	26,490	27,072	27,749	28,415	29,126	29,854	30,600
255	5462000 Repair&Maint-Buildings	4,314	8,800	8,967	9,164	9,384	9,591	9,831	10,067	10,318	10,576	10,841

**431360 - South Operations (South Cross)**

Personal Services:

256	5110001 Executive Salaries.	\$ 177,143	244,940	255,227	265,947	277,117	288,756	301,750	314,725	328,258	342,373	357,095
257	5120001 Regular Salaries & Wages	2,356,798	2,698,070	2,811,389	2,929,467	3,052,505	3,180,710	3,323,842	3,466,767	3,615,838	3,771,319	3,933,486
258	5140001 Overtime Pay	259,070	206,000	214,652	223,667	233,061	242,850	253,778	264,691	276,072	287,944	300,325
259	5200001 Employee Benefits-Overtime	-	32,590	33,959	35,385	36,871	38,420	40,149	41,875	43,676	45,554	47,513
260	5210001 FICA Taxes	207,785	225,140	234,596	244,449	254,716	265,414	277,357	289,284	301,723	314,697	328,229
261	5220001 Retirement Contributions	225,723	248,030	258,447	269,302	280,613	292,398	305,556	318,695	332,399	346,692	361,600
262	5230001 Hlth,Life,Dntl,Std,Ltd	891,256	1,163,590	1,212,461	1,263,384	1,316,446	1,371,737	1,433,465	1,495,104	1,559,394	1,626,448	1,696,385
263	5299991 Reg Salary&Wgs-Contra-Prj	24,174	-	-	-	-	-	-	-	-	-	-
264	5299992 Benefits-Contra-Projects	8,601	-	-	-	-	-	-	-	-	-	-
265	5130001 Other Salaries And Wages	19,450	-	-	-	-	-	-	-	-	-	-

O&M Expenses:

266	5310033 General Consulting	\$ 197,818	252,410	257,963	263,638	269,966	275,905	282,802	289,590	296,829	304,250	311,856
267	5340003 Contract Svcs-Janitorial	66,114	76,190	77,866	79,579	81,489	83,282	85,364	87,413	89,598	91,838	94,134
268	5340005 Sludge Recycling	1,117,303	1,234,500	1,261,659	1,289,415	1,320,361	1,349,409	1,383,145	1,416,340	1,451,749	1,488,042	1,525,243
269	5349000 Contract Services-Other	560,358	1,080,990	1,104,772	1,129,077	1,156,175	1,181,610	1,211,151	1,240,218	1,271,224	1,303,004	1,335,579
270	5400001 Travel and Per Diem	-	10,670	10,905	11,145	11,412	11,663	11,955	12,242	12,548	12,861	13,183
271	5400105 Mileage-Local	132	-	-	-	-	-	-	-	-	-	-

Appendix B: Supporting Schedules for Sewer RSA

Schedule 5: Projection of Cash Outflows FY 2018-FY 2028

272	5400110 Mileage-Out of Town	969	-	-	-	-	-	-	-	-	-	-	-
273	5400900 Travel-Other	470	-	-	-	-	-	-	-	-	-	-	-
274	5410001 Communication Services	16,898	27,280	27,880	28,494	29,177	29,819	30,565	31,298	32,081	32,883	33,705	
275	5410006 Comm Svcs-Repair & Maint	1,373	500	511	522	535	547	560	574	588	603	618	
276	5420001 Utl Freight	4,710	24,280	24,814	25,360	25,969	26,540	27,204	27,856	28,553	29,267	29,998	
277	5420002 Postage	70	500	511	522	535	547	560	574	588	603	618	
278	5431100 Utl Svc-Elec-Generl-Power	2,434,023	2,440,000	2,562,000	2,690,100	2,824,605	2,965,835	3,114,127	3,269,833	3,433,325	3,604,991	3,785,241	
279	5432000 Utl Svc-Municipal Wtr&Swr	13,744	25,000	25,550	26,112	26,739	27,327	28,010	28,682	29,400	30,135	30,888	
280	5433000 Utl Svc-County Water&Swr	77,537	61,300	62,649	64,027	65,564	67,006	68,681	70,329	72,088	73,890	75,737	
281	5439000 Utility Svc-Miscellaneous	293,356	400,000	408,800	417,794	427,821	437,233	448,164	458,919	470,392	482,152	494,206	
282	5440001 Rentals and Leases	78,929	59,200	60,325	61,652	63,132	64,520	66,133	67,721	69,414	71,149	72,928	
283	5461000 Repair&Maint-Grounds	169,862	159,200	162,702	166,282	170,273	174,019	178,369	182,650	187,216	191,897	196,694	
284	5462000 Repair&Maint-Buildings	97,070	538,000	549,836	561,932	575,419	588,078	602,780	617,247	632,678	648,495	664,707	
285	5463000 Repair&Maint-Wtr/Swr Line	47,077	208,700	213,291	217,984	223,215	228,126	233,829	239,441	245,427	251,563	257,852	
286	5464000 Repair&Maint-Equipment	1,049,240	1,649,670	1,685,963	1,723,054	1,764,407	1,803,224	1,848,305	1,892,664	1,939,981	1,988,480	2,038,192	
287	5470001 Printing and Binding Exp	3,472	13,740	14,042	14,351	14,696	15,019	15,394	15,764	16,158	16,562	16,976	
288	5490001 Othr Current Chgs&Obligat	21,820	34,400	35,157	35,930	36,793	37,602	38,542	39,467	40,454	41,465	42,502	
289	5496521 Intgv Sv-Fleet-Op & Maint	407,281	591,910	604,932	618,241	633,078	647,006	663,181	679,098	696,075	713,477	731,314	
290	5510001 Office Supplies Exp	13,610	5,500	5,621	5,745	5,883	6,012	6,162	6,310	6,468	6,630	6,795	
291	5520002 Oper. Supplies-Fuel&Lub	-	20,800	21,258	21,725	22,247	22,736	23,305	23,864	24,460	25,072	25,699	
292	5520003 Oper. Supplies-Chemicals	2,163,021	2,721,160	2,781,026	2,842,208	2,910,421	2,974,450	3,048,812	3,121,983	3,200,033	3,280,033	3,362,034	
293	5520005 Small Tools,Supp&Allow.	7,826	20,000	20,440	20,890	21,391	21,862	22,408	22,946	23,520	24,108	24,710	
294	5520006 Oper. Supplies-Clothing	16,080	15,850	16,199	16,555	16,952	17,325	17,758	18,185	18,639	19,105	19,583	
295	5520009 Oper. Supplies-Computer	476	5,000	5,095	5,207	5,332	5,449	5,586	5,720	5,863	6,009	6,159	
296	5529000 Oper. Supplies-Misc	1,164,995	1,500,850	1,533,869	1,567,614	1,605,237	1,640,552	1,681,566	1,721,923	1,764,971	1,809,095	1,854,323	
297	5540001 Bks, Pub, Subscrp&Membrshps	682	1,000	1,022	1,044	1,070	1,093	1,120	1,147	1,176	1,205	1,236	
298	5550001 Training&Education Costs	87,094	78,700	80,431	82,201	84,174	86,026	88,176	90,292	92,550	94,863	97,235	
299	5400200 Meals/Per Diem	4,880	-	-	-	-	-	-	-	-	-	-	
300	5400205 Meals-Taxable	208	-	-	-	-	-	-	-	-	-	-	
301	5400300 Hotels/Motels/Lodging	19,152	-	-	-	-	-	-	-	-	-	-	
302	5340004 Contract Svcs-Fire Protec	50	3,070	3,128	3,197	3,274	3,346	3,430	3,512	3,600	3,690	3,782	
303	5520099 PC Purchases under \$1000	18,663	22,470	22,897	23,401	23,962	24,489	25,102	25,704	26,347	27,005	27,681	
304	5480001 Promotional Activities Exp	4,975	20,000	20,440	20,890	21,391	21,862	22,408	22,946	23,520	24,108	24,710	
305	5400100 Transportation Exp	2,302	-	-	-	-	-	-	-	-	-	-	
306	5490060 Incentives & Awards	8,036	-	-	-	-	-	-	-	-	-	-	
307	5520001 Operating Supplies Exp	5,155	-	-	-	-	-	-	-	-	-	-	
<b>435120 - North Operations (Dunn)</b>													
<b>Personal Services:</b>													
308	5110001 Executive Salaries.	\$ 24,727	92,940	96,843	100,911	105,149	109,565	114,496	119,419	124,554	129,910	135,496	
309	5120001 Regular Salaries & Wages	1,377,261	1,511,990	1,575,494	1,641,664	1,710,614	1,782,460	1,862,671	1,942,766	2,026,304	2,113,436	2,204,313	
310	5130001 Other Salaries And Wages	24,552	-	-	-	-	-	-	-	-	-	-	
311	5140001 Overtime Pay	89,836	150,000	156,300	162,865	169,705	176,833	184,790	192,736	201,024	209,668	218,683	
312	5200001 Employee Benefits-Overtime	-	23,730	24,727	25,765	26,847	27,975	29,234	30,491	31,802	33,169	34,596	
313	5210001 FICA Taxes	112,011	122,780	127,937	133,310	138,909	144,743	151,257	157,761	164,545	171,620	179,000	
314	5220001 Retirement Contributions	130,733	141,660	147,610	153,809	160,269	167,001	174,516	182,020	189,847	198,010	206,525	
315	5230001 Hlth,Life,Dntl,Std,Ltd	484,795	604,700	630,097	656,561	684,137	712,871	744,950	776,983	810,393	845,240	881,585	
<b>O&amp;M Expenses:</b>													
316	5310033 General Consulting	\$ 36,017	50,500	51,611	52,746	54,012	55,201	56,581	57,939	59,387	60,872	62,394	
317	5340003 Contract Svcs-Janitorial	16,505	16,650	17,016	17,391	17,808	18,200	18,655	19,103	19,580	20,070	20,571	
318	5340005 Sludge Recycling	494,017	450,000	459,900	470,018	481,298	491,887	504,184	516,284	529,191	542,421	555,982	
319	5349000 Contract Services-Other	59,670	108,020	110,396	112,825	115,533	118,075	121,027	123,931	127,029	130,205	133,460	
320	5400001 Travel and Per Diem	-	8,450	8,636	8,826	9,038	9,237	9,467	9,695	9,937	10,185	10,440	
321	5400100 Transportation Exp	288	-	-	-	-	-	-	-	-	-	-	
322	5400105 Mileage-Local	304	-	-	-	-	-	-	-	-	-	-	
323	5400200 Meals/Per Diem	672	-	-	-	-	-	-	-	-	-	-	
324	5400300 Hotels/Motels/Lodging	2,867	-	-	-	-	-	-	-	-	-	-	
325	5400900 Travel-Other	19	-	-	-	-	-	-	-	-	-	-	
326	5410001 Communication Services	8,885	7,280	7,440	7,604	7,786	7,958	8,157	8,352	8,561	8,775	8,995	
327	5420001 Freight	11,303	11,000	11,242	11,489	11,765	12,024	12,324	12,620	12,936	13,259	13,591	
328	5420002 Postage	25	80	82	84	86	87	90	92	94	96	99	
329	5431100 Utl Svc-Elec-Generl-Power	1,015,657	1,100,000	1,155,000	1,212,750	1,273,388	1,337,057	1,403,910	1,474,105	1,547,810	1,625,201	1,706,461	
330	5432000 Utl Svc-Municipal Wtr&Swr	686	500	511	522	535	547	560	574	588	603	618	

Appendix B: Supporting Schedules for Sewer RSA

Schedule 5: Projection of Cash Outflows FY 2018-FY 2028

331	5433000	Util Svc-County Water&Swr	17,995	20,000	20,440	20,890	21,391	21,862	22,408	22,946	23,520	24,108	24,710
332	5439000	Utility Svc-Miscellaneous	95,627	106,000	108,332	110,715	113,372	115,867	118,763	121,614	124,654	127,770	130,965
333	5440001	Rentals and Leases	8,612	13,060	13,308	13,601	13,927	14,234	14,590	14,940	15,313	15,696	16,088
334	5461000	Repair&Maint-Grounds	123,301	207,000	211,554	216,208	221,397	226,268	231,925	237,491	243,428	249,514	255,752
335	5462000	Repair&Maint-Buildings	9,363	293,500	299,957	306,556	313,913	320,819	328,840	336,732	345,150	353,779	362,624
336	5464000	Repair&Maint-Equipment	162,293	336,900	344,312	351,887	360,332	368,259	377,466	386,525	396,188	406,093	416,245
337	5470001	Printing and Binding Exp	77	300	307	313	321	328	336	344	353	362	371
338	5490001	Othr Current Chgs&Obligat	3,720	9,600	9,811	10,027	10,268	10,494	10,756	11,014	11,289	11,572	11,861
339	5496521	Intgv Sv-Fleet-Op & Maint	245,436	230,710	235,786	240,973	246,756	252,185	258,490	264,693	271,311	278,093	285,046
340	5510001	Office Supplies Exp	4,476	6,000	6,132	6,267	6,417	6,558	6,722	6,884	7,056	7,232	7,413
341	5520003	Oper. Supplies-Chemicals	511,597	495,300	506,197	517,333	529,749	541,403	554,938	568,257	582,463	597,025	611,951
342	5520005	Small Tools,Supp&Allow.	6,658	8,000	8,176	8,356	8,556	8,745	8,963	9,178	9,408	9,643	9,884
343	5520006	Oper. Supplies-Clothing	4,731	3,000	3,066	3,133	3,209	3,279	3,361	3,442	3,528	3,616	3,707
344	5529000	Oper. Supplies-Misc	450,714	440,000	449,680	459,573	470,603	480,956	492,980	504,811	517,432	530,367	543,627
345	5540001	Bks, Pub, Subscrp&Membbrshps	1,822	1,000	1,022	1,044	1,070	1,093	1,120	1,147	1,176	1,205	1,236
346	5550001	Training&Education Costs	14,292	31,150	31,835	32,536	33,317	34,049	34,901	35,738	36,632	37,548	38,486
347	5520099	PC Purchases under \$1000	4,913	4,840	4,946	5,055	5,177	5,291	5,423	5,553	5,692	5,834	5,980
348	5520009	Oper. Supplies-Computer	427	500	511	522	535	547	560	574	588	603	618
<b>431370 - Code Enforcement</b>													
<b>Personal Services:</b>													
349	5120001	Regular Salaries & Wages	\$ 14,979	16,050	16,724	17,427	18,158	18,921	19,773	20,623	21,510	22,434	23,399
350	5140001	Overtime Pay	1,408	510	531	554	577	601	628	655	683	713	744
351	5200001	Employee Benefits-Overtime	-	90	94	98	102	106	111	116	121	126	131
352	5210001	FICA Taxes	1,194	1,230	1,282	1,335	1,392	1,450	1,515	1,580	1,648	1,719	1,793
353	5220001	Retirement Contributions	1,311	1,340	1,396	1,455	1,516	1,580	1,651	1,722	1,796	1,873	1,954
354	5230001	Hlth, Life, Dntl, Std, Ltd	6,510	7,590	7,909	8,241	8,587	8,948	9,350	9,752	10,172	10,609	11,065
<b>O&amp;M Expenses:</b>													
355	5349000	Contract Services-Other	\$ 129	27,290	27,890	28,504	29,188	29,830	30,576	31,310	32,093	32,895	33,717
356	5400001	Travel and Per Diem	-	40	41	42	43	44	45	46	47	48	49
357	5420002	Postage	37	4,420	4,517	4,617	4,727	4,831	4,952	5,071	5,198	5,328	5,461
358	5470001	Printing and Binding Exp	1,100	1,330	1,359	1,389	1,423	1,454	1,490	1,526	1,564	1,603	1,643
359	5496521	Intgv Sv-Fleet-Op & Maint	786	690	705	721	738	754	773	792	811	832	853
360	5510001	Office Supplies Exp	26	130	133	136	139	142	146	149	153	157	161
361	5520006	Oper. Supplies-Clothing	13	70	72	73	75	77	78	80	82	84	86
362	5529000	Oper. Supplies-Misc	74	180	184	188	193	197	202	207	212	217	222
363	5410001	Communication Services	369	170	173	177	181	185	190	194	199	204	209
364	5480001	Promotional Activities Exp	1,347	10,200	10,424	10,654	10,909	11,149	11,428	11,702	11,995	12,295	12,602
365	5520099	PC Purchases under \$1000	191	-	-	-	-	-	-	-	-	-	-
366	5550001	Training&Education Costs	80	260	265	271	277	283	290	297	305	312	320
367	5400900	Travel-Other	3	-	-	-	-	-	-	-	-	-	-
<b>435130 - Purchase of Reclaim</b>													
<b>O&amp;M Expenses:</b>													
368	5432010	Util Svc-Municipl Wtr-Rclmd	\$ 19,732	90,000	91,980	94,004	96,260	98,377	100,837	103,257	105,838	108,484	111,196
<b>435110 - Wholesale Wastewater</b>													
<b>O&amp;M Expenses:</b>													
369	5340006	Swr Svcs-Treatment Charge	\$ 967,913	1,100,000	1,124,200	1,148,932	1,176,507	1,202,390	1,232,450	1,262,028	1,293,579	1,325,919	1,359,067
<b>894.051</b>													
<b>Personal Services:</b>													
370	5299991	Reg Salary&Wgs-Contra-Prj	\$ 10,039	-	-	-	-	-	-	-	-	-	-
371	5299992	Benefits-Contra-Projects	4,311	-	-	-	-	-	-	-	-	-	-
<b>O&amp;M Expenses:</b>													
372	5340001	Other Contractual Svcs	\$ 8,789	-	-	-	-	-	-	-	-	-	-
373	5460001	Repair&Maintenance Svcs	2,479	-	-	-	-	-	-	-	-	-	-
<b>431050 - Utilities Engineering</b>													
<b>Personal Services:</b>													
374	5110001	Executive Salaries.	\$ 959,973	1,172,710	1,194,991	1,221,281	1,250,592	1,278,105	1,310,058	1,341,499	1,375,037	1,409,412	1,444,648
375	5120001	Regular Salaries & Wages	154,392	196,590	200,325	204,732	209,646	214,258	219,615	224,885	230,507	236,270	242,177
376	5130001	Other Salaries And Wages	15,923	-	-	-	-	-	-	-	-	-	-

Appendix B: Supporting Schedules for Sewer RSA

Schedule 5: Projection of Cash Outflows FY 2018-FY 2028

377	5140001 Overtime Pay	-	790	805	823	842	861	883	904	926	949	973
378	5200001 Employee Benefits-Overtime	-	130	132	135	139	142	145	149	152	156	160
379	5210001 FICA Taxes	85,001	104,760	106,750	109,099	111,717	114,175	117,029	119,838	122,834	125,905	129,053
380	5220001 Retirement Contributions	95,513	119,560	121,832	124,512	127,500	130,305	133,563	136,768	140,188	143,692	147,285
381	5230001 Hlth.Life,Dntl,Std,Ltd	250,829	360,800	367,655	375,744	384,761	393,226	403,057	412,730	423,048	433,625	444,465
382	5299989 Rg Sal&Wges-Contra-Prj-Bur	(360,209)	(218,860)	(223,018)	(227,925)	(233,395)	(238,530)	(244,493)	(250,361)	(256,620)	(263,035)	(269,611)
383	5299991 Reg Salary&Wgs-Contra-Prj	(463,892)	(558,500)	(569,112)	(581,632)	(595,591)	(608,694)	(623,911)	(638,885)	(654,857)	(671,229)	(688,010)
384	5299992 Benefits-Contra-Projects	(176,548)	(236,390)	(240,881)	(246,181)	(252,089)	(257,635)	(264,076)	(270,414)	(277,174)	(284,104)	(291,206)

**O&M Expenses:**

388	5310033 General Consulting	\$ 3,390,150	3,009,100	3,066,273	3,133,731	3,208,940	3,279,537	3,361,526	3,442,202	3,528,257	3,616,464	3,706,875
389	5349000 Contract Services-Other	26,764	78,440	79,930	81,689	83,649	85,490	87,627	89,730	91,973	94,273	96,629
390	5399989 Op Exp-Contra-Proj-Burdng	(264,279)	(319,790)	(325,866)	(333,035)	(341,028)	(348,531)	(357,244)	(365,818)	(374,963)	(384,337)	(393,946)
391	5400001 Travel and Per Diem	-	24,200	24,660	25,202	25,807	26,375	27,034	27,683	28,375	29,085	29,812
392	5400100 Transportation Exp	2,790	-	-	-	-	-	-	-	-	-	-
393	5400105 Mileage-Local	1,265	-	-	-	-	-	-	-	-	-	-
394	5400110 Mileage-Out of Town	464	-	-	-	-	-	-	-	-	-	-
395	5400200 Meals/Per Diem	2,787	-	-	-	-	-	-	-	-	-	-
396	5400300 Hotels/Motels/Lodging	10,112	-	-	-	-	-	-	-	-	-	-
397	5400900 Travel-Other	283	-	-	-	-	-	-	-	-	-	-
398	5410001 Communication Services	5,792	8,300	8,458	8,644	8,851	9,046	9,272	9,495	9,732	9,975	10,225
399	5420001 Freight	9	200	204	208	213	218	223	229	235	240	246
400	5420002 Postage	108	160	163	167	171	174	179	183	188	192	197
401	5440001 Rentals and Leases	3,249	10,270	10,496	10,727	10,984	11,226	11,507	11,783	12,077	12,379	12,689
402	5444000 Rental&Leases-Equipment	41	-	-	-	-	-	-	-	-	-	-
403	5464000 Repair&Maint-Equipment	6,056	7,900	8,050	8,227	8,425	8,610	8,825	9,037	9,263	9,495	9,732
404	5470001 Printing and Binding Exp	599	280	285	292	299	305	313	320	328	337	345
405	5490001 Othr Current Chgs&Obligat	196	2,180	2,221	2,270	2,325	2,376	2,435	2,494	2,556	2,620	2,686
406	5490060 Incentives & Awards	577	-	-	-	-	-	-	-	-	-	-
407	5496501 Intgv Sv-Info Technology	172,740	175,880	179,222	183,165	187,561	191,687	196,479	201,195	206,224	211,380	216,665
408	5496521 Intgv Sv-Fleet-Op & Maint	4,274	2,620	2,670	2,729	2,794	2,855	2,927	2,997	3,072	3,149	3,228
409	5496551 Intgv Sv-Risk Financing	86,940	118,720	120,976	123,637	126,604	129,390	132,624	135,807	139,203	142,683	146,250
410	5496706 Intgv Sv-Construction Management (43147)	4,350	8,620	8,784	8,977	9,192	9,395	9,630	9,861	10,107	10,360	10,619
411	5496707 Intgv Sv-Engineering Support (431572)	19,080	19,760	20,135	20,578	21,072	21,536	22,074	22,604	23,169	23,748	24,342
412	5496708 Intgv Sv-Survey and Mapping (431474)	2,060	2,440	2,486	2,541	2,602	2,659	2,726	2,791	2,861	2,932	3,006
413	5496901 Intgv Sv-Cost Allocate	127,640	174,220	177,530	181,436	185,790	189,878	194,625	199,296	204,278	209,385	214,620
414	5510001 Office Supplies Exp	20,531	7,360	7,500	7,665	7,849	8,021	8,222	8,419	8,630	8,846	9,067
415	5520005 Small Tools,Supp&Allow.	-	400	408	417	427	436	447	458	469	481	493
416	5520009 Oper. Supplies-Computer	34,462	28,000	28,616	29,246	29,947	30,606	31,371	32,124	32,927	33,751	34,594
417	5520099 PC Purchases under \$1000	2,977	2,650	2,700	2,760	2,826	2,888	2,960	3,031	3,107	3,185	3,265
418	5529000 Oper. Supplies-Misc	19	1,900	1,936	1,979	2,026	2,071	2,123	2,173	2,228	2,284	2,341
419	5540001 Bks, Pub,Subscrp&Membrshps	1,376	4,130	4,208	4,301	4,404	4,501	4,614	4,724	4,843	4,964	5,088
420	5550001 Training&Education Costs	9,532	15,000	15,285	15,621	15,996	16,348	16,757	17,159	17,588	18,028	18,478
421	5699983 Op Exp-Proj-Burdening	6,058	-	-	-	-	-	-	-	-	-	-

**431085 - Customer Service**

**Personal Services:**

422	5110001 Executive Salaries.	\$ 124,385	116,750	118,968	121,586	124,504	127,243	130,424	133,554	136,893	140,315	143,823
423	5120001 Regular Salaries & Wages	1,085,050	1,166,890	1,189,061	1,215,220	1,244,386	1,271,762	1,303,556	1,334,841	1,368,212	1,402,418	1,437,478
424	5140001 Overtime Pay	9,265	25,540	26,025	26,598	27,236	27,835	28,531	29,216	29,946	30,695	31,462
425	5200001 Employee Benefits-Overtime	-	4,040	4,117	4,207	4,308	4,403	4,513	4,621	4,737	4,855	4,977
426	5210001 FICA Taxes	88,344	98,200	100,066	102,267	104,722	107,026	109,701	112,334	115,142	118,021	120,971
427	5220001 Retirement Contributions	98,366	107,890	109,940	112,359	115,055	117,586	120,526	123,419	126,504	129,667	132,908
428	5230001 Hlth.Life,Dntl,Std,Ltd	499,264	599,970	611,369	624,820	639,815	653,891	670,238	686,324	703,482	721,069	739,096
429	5299991 Reg Salary&Wgs-Contra-Prj	(393)	-	-	-	-	-	-	-	-	-	-
430	5299992 Benefits-Contra-Projects	634	-	-	-	-	-	-	-	-	-	-

**O&M Expenses:**

431	5310033 General Consulting	\$ 16,268	-	-	-	-	-	-	-	-	-	-
432	5349000 Contract Services-Other	728,585	789,830	804,837	822,543	842,284	860,814	882,335	903,511	926,099	949,251	972,982
433	5400001 Travel and Per Diem	-	11,300	11,515	11,768	12,050	12,316	12,623	12,926	13,250	13,581	13,920
434	5400100 Transportation Exp	2,076	-	-	-	-	-	-	-	-	-	-
435	5400105 Mileage-Local	234	-	-	-	-	-	-	-	-	-	-
436	5400110 Mileage-Out of Town	290	-	-	-	-	-	-	-	-	-	-
437	5400200 Meals/Per Diem	982	-	-	-	-	-	-	-	-	-	-

438	5400205 Meals-Taxable	6	-	-	-	-	-	-	-	-	-	-
439	5400300 Hotels/Motels/Lodging	3,771	-	-	-	-	-	-	-	-	-	-
440	5410001 Communication Services	654	2,940	2,996	3,062	3,135	3,204	3,284	3,363	3,447	3,533	3,622
441	5420001 Freight	998	2,310	2,354	2,406	2,463	2,518	2,581	2,642	2,709	2,776	2,846
442	5420002 Postage	129,333	166,030	169,185	172,907	177,056	180,952	185,475	189,927	194,675	199,542	204,530
443	5440001 Rentals and Leases	1,547	1,710	1,748	1,786	1,829	1,869	1,916	1,962	2,011	2,061	2,113
444	5464000 Repair&Maint-Equipment	98,108	103,950	105,925	108,255	110,854	113,292	116,125	118,912	121,884	124,932	128,055
445	5470001 Printing and Binding Exp	31,800	45,220	46,079	47,093	48,223	49,284	50,516	51,729	53,022	54,347	55,706
446	5480001 Promotional Activities Exp	310	14,400	14,717	15,041	15,402	15,740	16,134	16,521	16,934	17,357	17,791
447	5490001 Othr Current Chgs&Obligat	90	300	306	312	320	327	335	343	352	361	370
448	5510001 Office Supplies Exp	7,276	5,060	5,156	5,270	5,396	5,515	5,653	5,788	5,933	6,081	6,233
449	5520009 Oper. Supplies-Computer	1,607	1,440	1,472	1,504	1,540	1,574	1,613	1,652	1,693	1,736	1,779
450	5520099 PC Purchases under \$1000	4,086	11,290	11,505	11,758	12,040	12,305	12,612	12,915	13,238	13,569	13,908
451	5529000 Oper. Supplies-Misc	13,552	2,030	2,069	2,114	2,165	2,212	2,268	2,322	2,380	2,440	2,501
452	5540001 Bks, Pub, Subscrp&Membrshps	1,111	17,670	18,006	18,402	18,844	19,258	19,740	20,213	20,719	21,237	21,767
453	5550001 Training&Education Costs	18,099	14,400	14,674	14,996	15,356	15,694	16,087	16,473	16,884	17,307	17,739
454	OPEB Contribution	\$ 915,328	915,328	915,328	915,328	915,328	915,328	915,328	915,328	915,328	915,328	915,328
<b>Sub-Total O&amp;M Expenses</b>		<b>\$ 44,672,799</b>	<b>52,551,368</b>	<b>54,078,284</b>	<b>55,681,607</b>	<b>57,406,788</b>	<b>59,122,350</b>	<b>61,057,650</b>	<b>62,988,822</b>	<b>65,025,245</b>	<b>67,134,280</b>	<b>69,318,718</b>
455	Personal Services Execution Percentage	100%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%
456	O&M Execution Percentage	100%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%
<b>Total O&amp;M Expenses</b>		<b>\$ 44,672,799</b>	<b>50,974,827</b>	<b>52,455,936</b>	<b>54,011,159</b>	<b>55,684,584</b>	<b>57,348,680</b>	<b>59,225,920</b>	<b>61,099,158</b>	<b>63,074,488</b>	<b>65,120,251</b>	<b>67,239,156</b>
<b>Capital Outlay</b>												
457	Total Capital Outlay	\$ 1,781,221	3,085,150	3,145,257	3,214,453	3,291,599	3,364,015	3,448,115	3,530,870	3,619,142	3,709,620	3,802,361
<b>Long-Term Debt Service Payments:</b>												
458	Existing Debt Service	\$ 14,788,280	15,082,864	15,059,721	15,009,787	14,973,429	14,934,863	14,903,203	14,995,210	14,936,266	14,872,611	14,799,648
459	Cumulative New Debt Service (Calc)	\$ -	1,323,701	3,345,067	4,591,889	4,847,629	4,855,899	4,855,899	4,855,899	4,855,899	4,855,899	4,855,899
<b>Total Long-Term Debt Service Payments</b>		<b>\$ 14,788,280</b>	<b>16,406,565</b>	<b>18,404,788</b>	<b>19,601,677</b>	<b>19,821,058</b>	<b>19,790,762</b>	<b>19,759,102</b>	<b>19,851,110</b>	<b>19,792,165</b>	<b>19,728,510</b>	<b>19,655,547</b>
<b>Transfers Out</b>												
460	Renewal & Replacement Contribution <sup>(1)</sup>	\$ 21,322,120	22,701,760	-	6,939,628	33,917,821	39,911,229	45,716,708	35,678,610	36,860,030	36,882,171	36,890,707
461	R&R Transfer	-	-	-	-	-	-	-	-	-	-	-
<b>Total Transfers Out</b>		<b>\$ 21,322,120</b>	<b>22,701,760</b>	<b>-</b>	<b>6,939,628</b>	<b>33,917,821</b>	<b>39,911,229</b>	<b>45,716,708</b>	<b>35,678,610</b>	<b>36,860,030</b>	<b>36,882,171</b>	<b>36,890,707</b>
<b>TOTAL CASH OUTFLOWS (Excludes Cash Funding of CIP)</b>		<b>\$ 82,564,421</b>	<b>93,168,302</b>	<b>74,005,981</b>	<b>83,766,916</b>	<b>112,715,063</b>	<b>120,414,685</b>	<b>128,149,846</b>	<b>120,159,747</b>	<b>123,345,825</b>	<b>125,440,552</b>	<b>127,587,771</b>

(1) FY 2018 and FY 2019 Renewal & Replacement Contributions are based on FY 2018 Estimate and FY 2019 Budget Request, respectively, as provided by County staff. Each year thereafter, the Renewal & Replacement Contribution is calculated based on the funding requirements of the Capital Improvement Plan less any available bond proceeds and any excess fund balance in the R&R Fund above the minimum requirement.

Appendix B: Supporting Schedules for Sewer RSA

Schedule 6: Capital Improvement Program

Project Description	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1 000744A - MISCELLANEOUS IMPROVEMENTS	\$ 550,000	1,033,300.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00
2 000791A - FDOT RELOCATION PROJECTS MISCELLANEOUS	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
3 000831A - Water, Sewer and Reclaimed Water Relocation Pr	150,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
4 000847A - SOUTH CROSS BAYOU WASTEWATER TREATMENT FA	900,000	500,000	500,000	1,000,000	2,000,000	2,000,000	2,000,000	-	-	-	-
5 000852A - W.E. DUNN WASTEWATER TREATMENT FACILITY UPG	2,030,000	500,000	800,000	800,000	800,000	1,000,000	2,000,000	-	-	-	-
6 000964A - Annual Contract Sanitary Sewer Pump Station Rep	2,000,000	1,500,000	1,500,000	1,500,000	1,500,000	2,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
7 001039B - Park St/Starkey Rd. 84th Lane to N. of 82nd Ave Uti	170,000	-	-	-	-	-	-	-	-	-	-
8 001057A - General Upgrades to Supervisory Control and Data	164,500	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
9 001272A - Sanitary Sewer Repair, Rehabilitation & Extension	6,000	-	-	-	415,000	415,000	415,000	415,000	415,000	415,000	415,000
10 001272B - Annual Sanitary Sewer Repair and Extension Progr	424,000	-	-	-	-	-	-	-	-	-	-
11 001272C - Annual Sewer Repair FY19-21	-	70,000	415,000	415,000	-	-	-	-	-	-	-
12 001517A - Subaqueous Crossings (Boca Ciega)	5,000,000	-	-	-	-	-	-	-	-	-	-
13 001589A - Pass A Grille Improvements	30,000	-	-	-	-	-	-	-	-	-	-
14 001589B - Pass A Grille Water Transmission and Distribution Me	150,000	100,000	-	-	-	-	-	-	-	-	-
15 001814A - Sanitary Sewer Manhole Rehab Project	-	-	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000
16 001814B - Sanitary Sewer Manhole Rehabilitation FY17-FY19	150,000	350,000	-	-	-	-	-	-	-	-	-
17 001933A - Sanitary Sewer Cured In Place Pipe Lining	5,000	10,000	-	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000
18 001933B - Annual Sanitary Sewer Cured In Place Pipe Lining-	10,000	-	-	-	-	-	-	-	-	-	-
19 001933C - Annual Sewer Cured In Place Pipelining- Madeira	850,000	520,000	-	-	-	-	-	-	-	-	-
20 001933D - Annual Sewer CIPP - Tarpon Springs, Palm Harbor, v	-	1,550,000	-	-	-	-	-	-	-	-	-
21 001933E - Annual Sewer CIPP - Bardmoor, Kenneth City	-	660,000	-	-	-	-	-	-	-	-	-
22 001933F - Annual Sewer CIPP - Belleair, Belleair Bluffs	-	-	1,210,000	-	-	-	-	-	-	-	-
23 001933G - Annual Sewer CIPP - Ridgewood, Oakhurst, Bellea	-	-	1,210,000	-	-	-	-	-	-	-	-
24 002149A - Water & Sewer Operations Center	-	200,000	200,000	760,000	1,559,500	-	-	-	-	-	-
25 002160A - Pump Station 016/Park Blvd Force Main to South C	641,000	6,500,000	5,000,000	-	-	-	-	-	-	-	-
26 002165A - Cured-in-Place Pipe Liner in 54" Reconnect Servic	1,800,000	-	-	-	-	-	-	-	-	-	-
27 002166A - Centrifuge Upgrade	800,000	500,000	2,000,000	7,500,000	3,000,000	-	-	-	-	-	-
28 002206A - Headwork's Barscreen Replacement @ W.E. DUNN	1,650,000	-	-	-	-	-	-	-	-	-	-
29 002246A - Annual Water / Reclaimed Installation and Repair	100,000	100,000	254,000	254,000	254,000	254,000	254,000	254,000	254,000	254,000	254,000
30 002346A - Indian Rocks Sewer Rehabilitation	400,000	200,000	-	-	-	-	-	-	-	-	-
31 002346B - Indian Rocks Sewer CIPP - Phase 1	-	300,000	-	-	-	-	-	-	-	-	-
32 002346C - Indian Rocks Sewer CIPP - Phase 2	-	200,000	-	-	-	-	-	-	-	-	-
33 002415A - WE DUNN Rotary Drum Thickener Replacement	1,825,000	-	-	-	-	-	-	-	-	-	-
34 002709A - SCB Generator Building #1 Electrical Improvement	200,000	1,400,000	-	-	-	-	-	-	-	-	-
35 002747A - Large Diameter Sanitary Sewer Interceptor Rehabi	910,000	-	-	-	-	-	-	-	-	-	-
36 002747B - Sewer Interceptor Rehabilitation- Bryan Dairy and 1	245,000	50,000	-	-	-	-	-	-	-	-	-
37 002747C - Sewer Interceptor Rehabilitation 94th Ave to 86th /	150,000	200,000	-	-	-	-	-	-	-	-	-
38 002747D - Sewer Interceptor Rehabilitation from 86th Ave to	150,000	400,000	-	-	-	-	-	-	-	-	-
39 002747E - Sewer Interceptor Rehabilitation North Lake Seminc	70,000	220,000	-	-	-	-	-	-	-	-	-
40 002747F - Sanitary Sewer Interceptor Pipe Rehabilitation - Bec	-	200,000	-	-	-	-	-	-	-	-	-

Project Description	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
41 002747G - Sanitary Sewer Interceptor Pipe Rehabilitation - 10	-	-	300,000	-	-	-	-	-	-	-	-
42 002747H - Sanitary Sewer Interceptor Pipe Rehabilitation - 74th	-	-	200,000	-	-	-	-	-	-	-	-
43 002747I - Sanitary Sewer Interceptor Pipe Rehabilitation - Leal	-	-	300,000	-	-	-	-	-	-	-	-
44 002747J - Sanitary Sewer Interceptor Pipe Rehabilitation - Har	-	100,000	-	-	-	-	-	-	-	-	-
45 002747K - Sanitary Sewer Interceptor Pipe Rehabilitation - Ser	-	120,000	-	-	-	-	-	-	-	-	-
46 002783A - Utilities Relocations Mitchell's Beach, Boca Ciega, I	80,000	-	-	-	-	-	-	-	-	-	-
47 002789B - City of Treasure Island Sunset Beach Watershed Ph.	110,000	-	-	-	-	-	-	-	-	-	-
48 002791C - PS119 Basin Repairs	350,000	350,000	-	-	-	-	-	-	-	-	-
49 002826A - South Cross Bayou Water Reclamation Facility Nori	1,400,000	-	-	-	-	-	-	-	-	-	-
50 002827A - South Cross Bayou Water Reclamation Facility Fall	1,500,000	-	-	-	-	-	-	-	-	-	-
51 002936B - Corey Causeway Bridge 20 Inch Reclaimed Water	20,000	180,000	-	-	-	-	-	-	-	-	-
52 002937A - South Cross Bayou Aeration Improvements	75,000	200,000	2,300,000	2,100,000	-	-	-	-	-	-	-
53 002938A - South Cross Bayou Biosolids Process Train Improven	-	-	-	3,000,000	3,000,000	3,000,000	-	-	-	-	-
54 002939A - South Cross Bayou Co-Generation Improvement	-	-	200,000	1,800,000	100,000	900,000	-	-	-	-	-
55 002940A - South Cross Bayou South Train Blower Improvemen	-	-	-	-	200,000	350,000	1,180,000	-	-	-	-
56 002941A - South Cross Bayou High Service Pump Improvemen	-	-	-	150,000	1,535,000	365,000	-	-	-	-	-
57 002942A - Pump Station 016 Odor Control Improvements	100,000	1,400,000	-	-	-	-	-	-	-	-	-
58 002944A - South Cross Bayou Grit Facility Improvements	500,000	4,500,000	9,000,000	2,000,000	-	-	-	-	-	-	-
59 002992B - Pump Station 122 Collection System and Bulkhead	200,000	600,000	-	-	-	-	-	-	-	-	-
60 002992C - Pinellas Park Master Meter Replacement	200,000	-	-	-	-	-	-	-	-	-	-
61 003122B - Dunn Filtration and Disinfection Improvements	50,000	500,000	2,800,000	4,600,000	-	-	-	-	-	-	-
62 003123A - Countywide Sewer Force Main Air Release Valve R	-	-	500,000	500,000	500,000	500,000	-	500,000	500,000	500,000	500,000
63 003123D - Air Release Valve Replacement FY18	-	-	-	-	-	-	-	-	-	-	-
64 003123I - Omaha Street Air Release Valves	250,000	-	-	-	-	-	-	-	-	-	-
65 003123J - ARV Hamlin Road and Nearby Design	60,000	150,000	-	-	-	-	-	-	-	-	-
66 003123K - ARV Disston Ave	50,000	125,000	-	-	-	-	-	-	-	-	-
67 003123L - ARV Highland Ave	60,000	175,000	-	-	-	-	-	-	-	-	-
68 003124A - Pump Station No. 190 Upgrades and Force Main In	160,000	1,100,000	300,000	-	-	-	-	-	-	-	-
69 003142A - Pump Station No. 357 Upgrades and Force Main In	150,000	500,000	-	-	-	-	-	-	-	-	-
70 003147A - Pinellas Park Interceptor Collection System Improv	-	-	-	-	500,000	1,500,000	5,000,000	-	-	-	-
71 003204F - Pump Station 054 Forcemain Extension	180,000	20,000	-	-	-	-	-	-	-	-	-
72 003204H - Sanitary Sewer Overflow Abatement CIP	-	-	700,000	700,000	-	-	-	-	-	-	-
73 003204I - SSO Abatement - 82nd Avenue Sewer capacity Imp	60,000	200,000	-	-	-	-	-	-	-	-	-
74 003204J - SSO Abatement - 62nd St Sewer capacity Improve	60,000	200,000	-	-	-	-	-	-	-	-	-
75 003205A - Pump Station 079 Improvements (North Redington	55,000	-	1,400,000	1,100,000	-	-	-	-	-	-	-
76 003206A - Pump Station 018 Improvements (Seminole)	20,000	610,000	-	-	-	-	-	-	-	-	-
77 003207A - McKay Creek Reclaimed Water Pump Station Tank	100,000	910,000	-	-	-	-	-	-	-	-	-
78 003208A - South Cross Bayou Sludge Holding Tank and Digest	200,000	2,000,000	-	-	-	-	-	-	-	-	-

Project Description	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
79 003210C - Inisbrook Force Main Improvements	3,500,000	-	-	-	-	-	-	-	-	-	-
80 003210H - Forcemain and ARV Replacement - Klosterman Rc	80,000	350,000	-	-	-	-	-	-	-	-	-
81 003239A - Pump Station and Collection System Odor Control	50,000	10,000	-	-	-	-	-	-	-	-	-
82 003239B - Pump Station 109 Odor Control	50,000	10,000	-	-	-	-	-	-	-	-	-
83 003239C - Pump Station 072 Odor Control	35,000	10,000	-	-	-	-	-	-	-	-	-
84 003239D - Manhole Odor Control (Culvers/PS016)	40,000	50,000	-	-	-	-	-	-	-	-	-
85 003407A - South Cross Bayou Pavement Rehabilitation	-	-	-	-	750,000	-	-	-	-	-	-
86 003408A - South Cross Bayou Denitrification Filter Rehab	-	-	-	300,000	2,200,000	2,200,000	-	-	-	-	-
87 003409A - Dunn Electrical Upgrades	120,000	400,000	1,000,000	2,000,000	-	-	-	-	-	-	-
88 003430A - Dunn Sludge Press Upgrades	-	-	200,000	2,000,000	-	-	-	-	-	-	-
89 003431A - Dunn Pond Liner and Reject Tank	-	-	-	-	500,000	3,000,000	13,000,000	-	-	-	-
90 003432A - Dunn Odor Control System	-	100,000	500,000	800,000	3,000,000	-	-	-	-	-	-
91 003433A - Dunn Storage Building	-	-	-	-	-	500,000	-	-	-	-	-
92 003438A - Dunn Ditch Erosion	-	600,000	-	-	-	-	-	-	-	-	-
93 003508A - Southcross Emergency Manhole Replacement	130,000	-	-	-	-	-	-	-	-	-	-
94 003605A - Gravity Sewer Ductal Iron Pipe Rehab Program thr	-	-	500,000	500,000	500,000	-	-	-	-	-	-
95 003605B - Gravity Sewer DIP Rehabilitation Program	10,000	300,000	15,000	-	-	-	-	-	-	-	-
96 003605C - Gravity Sewer DIP Rehabilitation Program - Curlew	10,000	80,000	-	-	-	-	-	-	-	-	-
97 003746A - WED Grit Capture System Improvements	-	-	-	150,000	200,000	3,000,000	2,500,000	-	-	-	-
98 003747A - WE Dunn Offsite Reclaim Pump Station Improve	-	-	-	-	400,000	2,200,000	2,200,000	-	-	-	-
99 003748A - Gulf Blvd . Relocations @ the Narrows	50,000	500,000	500,000	-	-	-	-	-	-	-	-
100 003749A - SCB Reclaim Loop Upgrades	75,000	500,000	-	-	-	-	-	-	-	-	-
101 003750A - WE Dunn Internal Recycle Pump Station Rehabilita	-	200,000	300,000	500,000	-	-	-	-	-	-	-
102 003751A - WE Dunn Mixer/Aeration Improvements	-	-	-	-	200,000	1,100,000	1,100,000	-	-	-	-
103 003752A - WE Dunn Center Train Weir Gate Replacement	-	-	-	-	200,000	800,000	-	-	-	-	-
104 003753A - WE Dunn Second Stage Aeration Improvements	-	-	-	-	200,000	1,100,000	1,100,000	-	-	-	-
105 003754A - Logan Laboratory Chiller Yard Replacement	-	280,000	-	-	-	-	-	-	-	-	-
106 003755A - SCB Fog system Upgrades	-	100,000	-	-	-	-	-	-	-	-	-
107 003756A - SCB Plant Lighting Upgrades	-	200,000	1,000,000	-	-	-	-	-	-	-	-
108 003757A - South Cross Bayou Clarifier Drain Improvements	-	250,000	250,000	-	-	-	-	-	-	-	-
109 003758A - South Cross Bayou Influent Pump Station Improver	-	-	-	200,000	500,000	1,000,000	1,500,000	-	-	-	-
110 003759A - South Cross Bayou Administration Building Improve	-	-	-	-	50,000	300,000	1,000,000	-	-	-	-
111 003760A - Force Main Capacity Improvements - East Lake Rc	-	-	-	100,000	4,000,000	2,500,000	-	-	-	-	-
112 003761A - Force Main Capacity Improvements - Highland La	-	-	-	-	150,000	4,000,000	3,500,000	-	-	-	-
113 003762A - Pump Station Generator Improvements	-	2,000,000	2,000,000	-	-	-	-	-	-	-	-
114 003763A - Utilities Facilities Security	-	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000
115 003765A - Quantum and Unity Upgrade	-	500,000	2,000,000	1,500,000	-	-	-	-	-	-	-
116 003766A - SCB Force Main Sampling Skids	-	-	-	20,000	300,000	-	-	-	-	-	-
117 003769A - Reclaimed Water Meters	50,000	600,000	600,000	600,000	2,100,000	2,100,000	2,100,000	600,000	2,100,000	2,100,000	2,100,000



Project Description	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
118 New Customer Information System	-	-	3,000,000	-	-	-	-	-	-	-	-
119 Unspecified Future Capital	-	-	-	-	-	-	-	27,000,000	27,000,000	27,000,000	27,000,000
120 R&R From Various Cost Centers	77,124	-	-	-	-	-	-	-	-	-	-
<b>121 Total CIP Budget (in current dollars)</b>	<b>\$ 31,897,624</b>	<b>39,123,300</b>	<b>44,304,000</b>	<b>40,249,000</b>	<b>34,013,500</b>	<b>39,484,000</b>	<b>45,249,000</b>	<b>35,169,000</b>	<b>36,669,000</b>	<b>36,669,000</b>	<b>36,669,000</b>
122 Cumulative Projected Cost Escalation <sup>(1)</sup>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>123 Resulting CIP Funding Level</b>	<b>\$ 31,897,624</b>	<b>39,123,300</b>	<b>44,304,000</b>	<b>40,249,000</b>	<b>34,013,500</b>	<b>39,484,000</b>	<b>45,249,000</b>	<b>35,169,000</b>	<b>36,669,000</b>	<b>36,669,000</b>	<b>36,669,000</b>
124 Annual CIP Execution Percentage	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>125 Final CIP Funding Level</b>	<b>\$ 31,897,624</b>	<b>39,123,300</b>	<b>44,304,000</b>	<b>40,249,000</b>	<b>34,013,500</b>	<b>39,484,000</b>	<b>45,249,000</b>	<b>35,169,000</b>	<b>36,669,000</b>	<b>36,669,000</b>	<b>36,669,000</b>

(1) The 10-year Capital Improvement Program provided by County staff already accounts for future cost inflation. As such, no additional cost escalation is assumed.

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>1 Total Rate Revenue</b>											
2 Retail & Wholesale Sewer Rate Revenue	\$ 58,911,934	58,911,934	59,625,742	65,426,722	71,791,766	78,775,691	86,438,642	94,846,603	97,894,180	101,039,249	104,284,918
3 Additional Rate Revenue from Growth	-	123,454	124,689	136,534	149,505	163,708	179,260	196,290	202,179	208,244	214,491
4 Subtotal	\$ 58,911,934	59,035,389	59,750,431	65,563,256	71,941,271	78,939,399	86,617,902	95,042,893	98,096,358	101,247,493	104,499,409
5 Weighted Average Rate Increase	0.00%	1.00%	9.50%	9.50%	9.50%	9.50%	9.50%	3.00%	3.00%	3.00%	3.00%
6 Additional Rate Revenue From Rate Increase	-	590,354	5,676,291	6,228,509	6,834,421	7,499,243	8,228,701	2,851,287	2,942,891	3,037,425	3,134,982
8 Total Rate Revenue	\$ 58,911,934	59,625,742	65,426,722	71,791,766	78,775,691	86,438,642	94,846,603	97,894,180	101,039,249	104,284,918	107,634,391
9 Plus: Other Operating Revenue <sup>(1)</sup>	18,999,279	21,068,498	21,831,447	23,469,144	25,222,906	27,103,808	29,099,579	29,904,609	30,733,790	31,587,847	32,467,526
10 <b>Equals: Total Operating Revenue</b>	<b>\$ 77,911,214</b>	<b>80,694,241</b>	<b>87,258,169</b>	<b>95,260,910</b>	<b>103,998,597</b>	<b>113,542,450</b>	<b>123,946,182</b>	<b>127,798,789</b>	<b>131,773,039</b>	<b>135,872,765</b>	<b>140,101,917</b>
<b>11 Less: Operating Expenses</b>											
12 Personal Services	\$ (17,122,509)	(19,027,751)	(19,720,762)	(20,450,725)	(21,216,239)	(22,006,173)	(22,891,233)	(23,773,828)	(24,696,274)	(25,656,844)	(26,657,139)
13 O&M Expenses	(27,550,290)	(31,947,076)	(32,735,174)	(33,560,435)	(34,468,345)	(35,342,507)	(36,334,687)	(37,325,330)	(38,378,214)	(39,463,407)	(40,582,018)
14 <b>Equals: Net Operating Income</b>	<b>\$ 33,238,414</b>	<b>29,719,414</b>	<b>34,802,233</b>	<b>41,249,751</b>	<b>48,314,013</b>	<b>56,193,770</b>	<b>64,720,261</b>	<b>66,699,631</b>	<b>68,698,552</b>	<b>70,752,513</b>	<b>72,862,760</b>
<b>15 Plus: Non-Operating Income/(Expense)</b>											
16 Interest Earned On Fund Balances	\$ 1,097,836	1,233,867	1,985,882	2,069,561	1,876,454	1,686,765	1,475,240	1,443,239	1,732,406	2,066,817	2,471,653
17 <b>Equals: Net Income</b>	<b>\$ 34,336,250</b>	<b>30,953,281</b>	<b>36,788,115</b>	<b>43,319,312</b>	<b>50,190,467</b>	<b>57,880,535</b>	<b>66,195,502</b>	<b>68,142,870</b>	<b>70,430,957</b>	<b>72,819,330</b>	<b>75,334,413</b>
<b>18 Less: Revenues Excluded From Coverage Test</b>											
19 Impact Fees	\$ (601,400)	(900,000)	(440,000)	(440,000)	(440,000)	(440,000)	(440,000)	(440,000)	(440,000)	(440,000)	(440,000)
20 Transfers In	-	-	-	-	-	-	-	-	-	-	-
21 <b>Equals: Net Income Available For Debt Service</b>	<b>\$ 33,734,850</b>	<b>30,053,281</b>	<b>36,348,115</b>	<b>42,879,312</b>	<b>49,750,467</b>	<b>57,440,535</b>	<b>65,755,502</b>	<b>67,702,870</b>	<b>69,990,957</b>	<b>72,379,330</b>	<b>74,894,413</b>
<b>22 Debt Service Coverage Test</b>											
23 Existing Senior Lien Debt	\$ 14,788,280	15,082,864	15,059,721	15,009,787	14,973,429	14,934,863	14,903,203	14,995,210	14,936,266	14,872,611	14,799,648
24 Cumulative New Senior Lien Debt - As Calculated By Model	-	1,323,701	3,345,067	4,591,889	4,847,629	4,855,899	4,855,899	4,855,899	4,855,899	4,855,899	4,855,899
25 <b>Total Senior Lien Debt Service</b>	<b>\$ 14,788,280</b>	<b>16,406,565</b>	<b>18,404,788</b>	<b>19,601,677</b>	<b>19,821,058</b>	<b>19,790,762</b>	<b>19,759,102</b>	<b>19,851,110</b>	<b>19,792,165</b>	<b>19,728,510</b>	<b>19,655,547</b>
26 Calculated Debt Service Coverage - Test I	1.15	2.28	1.83	2.19	2.51	2.90	3.33	3.41	3.54	3.67	3.81
27 Calculated Debt Service Coverage - Test II	1.25	2.32	1.89	2.21	2.53	2.92	3.35	3.43	3.56	3.69	3.83
<b>28 Cash Flow Test</b>											
29 Net Income Available For Debt Service	\$ 34,336,250	30,953,281	36,788,115	43,319,312	50,190,467	57,880,535	66,195,502	68,142,870	70,430,957	72,819,330	75,334,413
30 Less: Non-Operating Expenditures											
31 Net Interfund Transfers (In - Out)	\$ (21,322,120)	(22,701,760)	-	(6,939,628)	(33,917,821)	(39,911,229)	(45,716,708)	(35,678,610)	(36,860,030)	(36,882,171)	(36,890,707)
32 Capital Outlay	\$ (1,781,221)	(3,085,150)	(3,145,257)	(3,214,453)	(3,291,599)	(3,364,015)	(3,448,115)	(3,530,870)	(3,619,142)	(3,709,620)	(3,802,361)
33 Renewal & Replacement Transfer	(14,788,280)	(16,406,565)	(18,404,788)	(19,601,677)	(19,821,058)	(19,790,762)	(19,759,102)	(19,851,110)	(19,792,165)	(19,728,510)	(19,655,547)
34 <b>Net Cash Flow</b>	<b>\$ (3,555,371)</b>	<b>(11,240,194)</b>	<b>15,238,070</b>	<b>13,563,555</b>	<b>(6,840,011)</b>	<b>(5,185,470)</b>	<b>(2,728,424)</b>	<b>9,082,280</b>	<b>10,159,620</b>	<b>12,499,029</b>	<b>14,985,798</b>
<b>35 Unrestricted Reserve Fund Test</b>											
36 Balance At Beginning Of Fiscal Year	\$ 28,428,386	24,873,014	13,632,821	28,870,891	42,434,445	35,594,434	30,408,964	27,680,540	36,762,820	46,922,440	59,421,470
37 Cash Flow Surplus/(Deficit)	-	-	15,238,070	13,563,555	-	-	-	9,082,280	10,159,620	12,499,029	14,985,798
38 Reserve Fund Balance Used For Cash Flow Deficit	(3,555,371)	(11,240,194)	-	-	(6,840,011)	(5,185,470)	(2,728,424)	-	-	-	-
39 <b>Balance At End Of Fiscal Year</b>	<b>\$ 24,873,014</b>	<b>13,632,821</b>	<b>28,870,891</b>	<b>42,434,445</b>	<b>35,594,434</b>	<b>30,408,964</b>	<b>27,680,540</b>	<b>36,762,820</b>	<b>46,922,440</b>	<b>59,421,470</b>	<b>74,407,268</b>
40 Minimum Working Capital Reserve Target	9,306,833	10,619,756	10,928,320	11,252,325	11,600,955	11,947,642	12,338,733	12,728,991	13,140,518	13,566,719	14,008,158
41 <b>Excess/(Deficiency) Of Working Capital To Target</b>	<b>\$ 15,566,181</b>	<b>3,013,065</b>	<b>17,942,571</b>	<b>31,182,121</b>	<b>23,993,479</b>	<b>18,461,322</b>	<b>15,341,807</b>	<b>24,033,829</b>	<b>33,781,922</b>	<b>45,854,751</b>	<b>60,399,110</b>

(1) Other operating revenue includes retail and wholesale reclaimed water rate revenue.

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
<b>1 Renewal &amp; Replacement</b>											
2 Balance At Beginning Of Fiscal Year	41,647,618	31,072,115	38,740,575	23,971,575	4,462,203	4,866,524	5,293,753	5,761,461	6,271,071	6,462,101	6,675,272
3 Additional Annual Revenues	21,322,120	22,701,760	-	6,939,628	33,917,821	39,911,229	45,716,708	35,678,610	36,860,030	36,882,171	36,890,707
4 Less: Payment Of Debt Service	-	-	-	-	-	-	-	-	-	-	-
5 Subtotal	62,969,738	53,773,875	38,740,575	30,911,203	38,380,024	44,777,753	51,010,461	41,440,071	43,131,101	43,344,272	43,565,979
6 Less: Restricted Funds	(3,267,957)	(3,950,452)	(4,096,405)	(4,462,203)	(4,866,524)	(5,293,753)	(5,761,461)	(6,271,071)	(6,462,101)	(6,675,272)	(6,896,979)
7 Total Amount Available For Projects	59,701,782	49,823,422	34,644,169	26,449,000	33,513,500	39,484,000	45,249,000	35,169,000	36,669,000	36,669,000	36,669,000
8 Amount Paid For Projects	(31,897,624)	(15,033,300)	(14,769,000)	(26,449,000)	(33,513,500)	(39,484,000)	(45,249,000)	(35,169,000)	(36,669,000)	(36,669,000)	(36,669,000)
9 Subtotal	27,804,158	34,790,122	19,875,169	-	-	-	-	-	-	-	-
10 Add Back: Restricted Funds	3,267,957	3,950,452	4,096,405	4,462,203	4,866,524	5,293,753	5,761,461	6,271,071	6,462,101	6,675,272	6,896,979
11 Plus: Interest Earnings	572,835	698,127	1,003,394	483,374	158,588	172,725	176,883	174,472	184,631	190,492	196,798
12 Less: Interest Allocated To Cash Flow	(572,835)	(698,127)	(1,003,394)	(483,374)	(158,588)	(172,725)	(176,883)	(174,472)	(184,631)	(190,492)	(196,798)
13 Balance At End Of Fiscal Year	31,072,115	38,740,575	23,971,575	4,462,203	4,866,524	5,293,753	5,761,461	6,271,071	6,462,101	6,675,272	6,896,979
<b>14 Vehicle Replacement</b>											
15 Balance At Beginning Of Fiscal Year	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370
16 Additional Annual Revenues	-	-	-	-	-	-	-	-	-	-	-
17 Less: Payment Of Debt Service	-	-	-	-	-	-	-	-	-	-	-
18 Subtotal	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370
19 Less: Restricted Funds	(5,519,370)	(5,519,370)	(5,519,370)	(5,519,370)	(5,519,370)	(5,519,370)	(5,519,370)	(5,519,370)	(5,519,370)	(5,519,370)	(5,519,370)
20 Total Amount Available For Projects	-	-	-	-	-	-	-	-	-	-	-
21 Amount Paid For Projects	-	-	-	-	-	-	-	-	-	-	-
22 Subtotal	-	-	-	-	-	-	-	-	-	-	-
23 Add Back: Restricted Funds	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370
24 Plus: Interest Earnings	86,955	110,387	176,620	187,659	187,659	187,659	176,620	160,062	160,062	160,062	160,062
25 Less: Interest Allocated To Cash Flow	(86,955)	(110,387)	(176,620)	(187,659)	(187,659)	(187,659)	(176,620)	(160,062)	(160,062)	(160,062)	(160,062)
26 Balance At End Of Fiscal Year	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370	5,519,370
<b>27 Sewer Interest &amp; Sinking</b>											
28 Balance At Beginning Of Fiscal Year	1,247,038	1,266,685	1,292,018	1,333,363	1,378,697	1,425,573	1,474,043	1,521,212	1,565,327	1,610,722	1,657,433
29 Additional Annual Revenues	-	-	-	-	-	-	-	-	-	-	-
30 Less: Payment Of Debt Service	-	-	-	-	-	-	-	-	-	-	-
31 Subtotal	1,247,038	1,266,685	1,292,018	1,333,363	1,378,697	1,425,573	1,474,043	1,521,212	1,565,327	1,610,722	1,657,433
32 Less: Restricted Funds	-	-	-	-	-	-	-	-	-	-	-
33 Total Amount Available For Projects	1,247,038	1,266,685	1,292,018	1,333,363	1,378,697	1,425,573	1,474,043	1,521,212	1,565,327	1,610,722	1,657,433
34 Amount Paid For Projects	-	-	-	-	-	-	-	-	-	-	-
35 Subtotal	1,247,038	1,266,685	1,292,018	1,333,363	1,378,697	1,425,573	1,474,043	1,521,212	1,565,327	1,610,722	1,657,433
36 Add Back: Restricted Funds	-	-	-	-	-	-	-	-	-	-	-
37 Plus: Interest Earnings	19,647	25,334	41,345	45,334	46,876	48,469	47,169	44,115	45,394	46,711	48,066
38 Less: Interest Allocated To Cash Flow	-	-	-	-	-	-	-	-	-	-	-
39 Balance At End Of Fiscal Year	1,266,685	1,292,018	1,333,363	1,378,697	1,425,573	1,474,043	1,521,212	1,565,327	1,610,722	1,657,433	1,705,498
<b>40 Revenue Fund</b>											
41 Balance At Beginning Of Fiscal Year	28,428,386	24,873,014	13,632,821	28,870,891	42,434,445	35,594,434	30,408,964	27,680,540	36,762,820	46,922,440	59,421,470
42 Additional Annual Revenues	(3,555,371)	(11,240,194)	15,238,070	13,563,555	(6,840,011)	(5,185,470)	(2,728,424)	9,082,280	10,159,620	12,499,029	14,985,798
43 Less: Payment Of Debt Service	-	-	-	-	-	-	-	-	-	-	-
44 Subtotal	24,873,014	13,632,821	28,870,891	42,434,445	35,594,434	30,408,964	27,680,540	36,762,820	46,922,440	59,421,470	74,407,268
45 Less: Restricted Funds	(9,306,833)	(10,619,756)	(10,928,320)	(11,252,325)	(11,600,955)	(11,947,642)	(12,338,733)	(12,728,991)	(13,140,518)	(13,566,719)	(14,008,158)
46 Total Amount Available For Projects	15,566,181	3,013,065	17,942,571	31,182,121	23,993,479	18,461,322	15,341,807	24,033,829	33,781,922	45,854,751	60,399,110
47 Amount Paid For Projects	-	-	-	-	-	-	-	-	-	-	-
48 Subtotal	15,566,181	3,013,065	17,942,571	31,182,121	23,993,479	18,461,322	15,341,807	24,033,829	33,781,922	45,854,751	60,399,110
49 Add Back: Restricted Funds	9,306,833	10,619,756	10,928,320	11,252,325	11,600,955	11,947,642	12,338,733	12,728,991	13,140,518	13,566,719	14,008,158
50 Plus: Interest Earnings	419,871	385,058	680,059	1,212,191	1,326,491	1,122,058	929,432	934,429	1,213,436	1,541,987	1,940,517
51 Less: Interest Allocated To Cash Flow	(419,871)	(385,058)	(680,059)	(1,212,191)	(1,326,491)	(1,122,058)	(929,432)	(934,429)	(1,213,436)	(1,541,987)	(1,940,517)
52 Balance At End Of Fiscal Year	24,873,014	13,632,821	28,870,891	42,434,445	35,594,434	30,408,964	27,680,540	36,762,820	46,922,440	59,421,470	74,407,268
<b>53 Restricted Reserves</b>											
54 Balance At Beginning Of Fiscal Year	1,153,635	1,153,635	2,875,808	4,987,240	5,973,790	6,009,534	6,009,534	6,009,534	6,009,534	6,009,534	6,009,534
55 Additional Funds:	-	-	-	-	-	-	-	-	-	-	-
56 Debt Service Reserve On New Debt	-	1,722,173	2,111,432	986,550	35,745	-	-	-	-	-	-
57 Other Additional Funds	-	-	-	-	-	-	-	-	-	-	-
58 Subtotal	1,153,635	2,875,808	4,987,240	5,973,790	6,009,534	6,009,534	6,009,534	6,009,534	6,009,534	6,009,534	6,009,534
59 Plus: Interest Earnings	18,175	40,294	125,809	186,338	203,717	204,324	192,305	174,276	174,276	174,276	174,276
60 Less: Interest Allocated To Cash Flow	(18,175)	(40,294)	(125,809)	(186,338)	(203,717)	(204,324)	(192,305)	(174,276)	(174,276)	(174,276)	(174,276)
61 Balance At End Of Fiscal Year	1,153,635	2,875,808	4,987,240	5,973,790	6,009,534	6,009,534	6,009,534	6,009,534	6,009,534	6,009,534	6,009,534

FINAL CAPITAL PROJECTS FUNDING SOURCES	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Renewal & Replacement	\$ 31,897,624	15,033,300	14,769,000	26,449,000	33,513,500	39,484,000	45,249,000	35,169,000	36,669,000	36,669,000	36,669,000
Debt Proceeds	-	24,090,000	29,535,000	13,800,000	500,000	-	-	-	-	-	0
<b>TOTAL PROJECTS PAID</b>	<b>\$ 31,897,624</b>	<b>39,123,300</b>	<b>44,304,000</b>	<b>40,249,000</b>	<b>34,013,500</b>	<b>39,484,000</b>	<b>45,249,000</b>	<b>35,169,000</b>	<b>36,669,000</b>	<b>36,669,000</b>	<b>36,669,000</b>

Projected Sewer Sales (In 1,000 Gallons)	FY 2014 <sup>(1)</sup>	FY 2015 <sup>(1)</sup>	FY 2016 <sup>(1)</sup>	FY 2017 <sup>(1)</sup>	FY 2018 <sup>(1)</sup>	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Projected Annual Growth:	N/A	N/A	N/A	N/A	N/A	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Projected Retail Sewer Sales:	7,397,458	7,544,270	7,796,088	7,895,326	7,809,039	7,825,403	7,841,768	7,858,132	7,874,497	7,890,861	7,907,225	7,923,590	7,939,954	7,956,319	7,972,683
In MGD	20.27	20.67	21.36	21.63	21.39	21.44	21.48	21.53	21.57	21.62	21.66	21.71	21.75	21.80	21.84
Projected Wholesale Sewer Sales:															
Initial Projection	2,537,940	2,051,100	1,775,552	1,616,657	2,023,435	2,027,675	2,031,915	2,036,155	2,040,396	2,044,636	2,048,876	2,053,116	2,057,357	2,061,597	2,065,837
In MGD	6.95	5.62	4.86	4.43	5.54	5.56	5.57	5.58	5.59	5.60	5.61	5.62	5.64	5.65	5.66
<b>Total Projected Sewer Sales</b>	<b>9,935,398</b>	<b>9,595,370</b>	<b>9,571,640</b>	<b>9,511,983</b>	<b>9,832,474</b>	<b>9,853,078</b>	<b>9,873,683</b>	<b>9,894,288</b>	<b>9,914,892</b>	<b>9,935,497</b>	<b>9,956,102</b>	<b>9,976,706</b>	<b>9,997,311</b>	<b>10,017,916</b>	<b>10,038,520</b>
<b>Projected Sewer Sales in MGD</b>	<b>27.22</b>	<b>26.29</b>	<b>26.22</b>	<b>26.06</b>	<b>26.94</b>	<b>26.99</b>	<b>27.05</b>	<b>27.11</b>	<b>27.16</b>	<b>27.22</b>	<b>27.28</b>	<b>27.33</b>	<b>27.39</b>	<b>27.45</b>	<b>27.50</b>

(1) Retail and wholesale sewer sales are based upon actual sales as provided by County staff.

## **APPENDIX C: SUPPORTING SCHEDULES FOR WATER COSA**

- Schedule 1 Retail & Wholesale Cost of Service Allocation Results Summary**
- Schedule 2 Retail & Wholesale and Retail Fixed & Variable Cost of Service Allocation Results**
- Schedule 3 Allocation of Debt Service to Water Supply and Water Distribution**
- Schedule 4 Allocation of O&M and Capital Costs to Water Supply**
- Schedule 5 Allocation of O&M and Capital Costs to Water Distribution**
- Schedule 6 Allocation of Off-setting Revenues to Water Supply and Water Distribution**

Appendix C: Supporting Schedules for Water COSA Schedule 1: Retail & Wholesale Cost of Service Allocation Results Summary

		FY 2019 TEST YEAR		FY 2015 TEST YEAR	
1	<u>WATER SUPPLY:</u>				
2	Operating, Administrative & Capital Expenses	\$ 58,253,897		\$ 76,133,567	
3	Debt Service	-		-	
4	Subtotal Revenue Requirement	\$ 58,253,897		\$ 76,133,567	
5	Off-Setting Revenues	(1,980,830)		(1,082,387)	
6	Use of Reserve Funds <sup>(1)</sup>	(2,671,955)		(7,389,920)	
7	Total Revenue Requirement - Water Supply	\$ 53,601,112		\$ 67,661,260	
8	<u>WATER DISTRIBUTION:</u>				
9	Operating, Administrative & Capital Expenses	\$ 33,875,524		\$ 25,247,008	
10	Debt Service	-		-	
11	Subtotal Revenue Requirement	\$ 33,875,524		\$ 25,247,008	
12	Off-Setting Revenues	(5,319,876)		(4,490,453)	
13	Use of Reserve Funds <sup>(2)</sup>	4,580,249		(2,002,474)	
14	Total Revenue Requirement - Water Distribution	\$ 33,135,897		\$ 18,754,081	
15	<u>COMBINED WATER SYSTEM:</u>				
16	Operating, Administrative & Capital Expenses	\$ 92,129,421		\$ 101,380,576	
17	Debt Service	-		-	
18	Subtotal Revenue Requirement	\$ 92,129,421		\$ 101,380,576	
19	Off-Setting Revenues	(7,300,706)		(5,572,841)	
20	Use of Reserve Funds	1,908,294		(9,392,394)	
21	Total Revenue Requirement - Combined Water System	\$ 86,737,009		\$ 86,415,341	
22	<u>Reallocation of Water Distribution Revenue Requirement:</u>				
23	% of Below Ground Assets Required to Serve Wholesale <sup>(3)</sup>	37.00%		25.00%	
24	Allocation to Water Supply <sup>(4)</sup>	\$ 8,784,640		\$ 3,269,560	
25	<u>Billed Water Demands (In 1,000 gallons):</u>				
26	Wholesale	23.1%	3,702,725	28.3%	4,849,388
27	Retail	76.9%	12,346,111	71.7%	12,286,241
28	<u>FY 2019 Cost of Service Allocations:</u>				
29	Wholesale	16.59%	\$ 14,393,399	23.23%	\$ 20,073,443
30	Retail	83.41%	\$ 72,343,610	76.77%	\$ 66,341,898
31	<u>FY 2019 Rate Revenues (Per FAMS):</u>				
32	Wholesale	17.64%	\$ 15,299,590	22.14%	\$ 19,134,724
33	Retail	82.36%	\$ 71,437,419	77.86%	\$ 67,280,617
34	<u>FY 2019 Rate Revenues per FY 2019 Cost of Service Analysis:</u>				
35	Wholesale	\$ 15,299,590		\$ 19,134,724	
36	Retail	\$ 71,437,419		\$ 67,280,617	
37	<u>FY 2019 Revenue Adjustments Per Cost of Service Analysis:</u>				
38	Wholesale	\$ (906,191)		\$ 938,719	
39	Retail	\$ 906,191		\$ (938,719)	
40	<u>FY 2019 Rate Adjustments to Align with Cost of Service Analysis:</u>				
41	Wholesale	-5.92%		4.91%	
42	Retail	1.27%		-1.40%	

- (1) Reflects the portion of unrestricted reserves necessary to fund the annual Renewal & Replacement Fund transfer allocable to Water Supply.
- (2) Reflects the portion of unrestricted reserves necessary to fund the annual Renewal & Replacement Fund transfer allocable to Water Distribution.
- (3) Wholesale allocation based on linear footage of water lines greater than 8" as a percentage of total linear footage of water lines.
- (4) Not applicable to Renewal, Replacement, & Improvement Expenses, as the allocation of capital expenditures already included the allocation of below ground assets to Water Supply.

	FY 2019 TEST YEAR <sup>(1)</sup>	WHOLESALE VS. RETAIL ALLOCATION:				RETAIL FIXED VS. VARIABLE ALLOCATION:		
		RETAIL		WHOLESALE		TOTAL RETAIL <sup>(4)</sup>		
		RETAIL	WHOLESALE	RETAIL	WHOLESALE	FIXED	VARIABLE	
<b>1 WATER SUPPLY:</b>								
2	Operating, Administrative & Capital Expenses <sup>(2)</sup>	\$ 58,253,897	76.93%	23.07%	\$ 44,813,784	13,440,113	\$ 38,928,750	5,885,034
3	Debt Service	-			-	-	-	-
4	Subtotal Revenue Requirement	\$ 58,253,897			-	-	-	-
5	Off-Setting Revenues <sup>(2)</sup>	(1,980,830)	76.93%	23.07%	(1,523,820)	(457,009)	(1,323,709)	(200,111)
6	Use of Reserve Funds <sup>(2)</sup>	(2,671,955)	76.93%	23.07%	(2,055,492)	(616,463)	(1,785,561)	(269,931)
7	<b>Total Revenue Requirement - Water Supply</b>	<b>\$ 53,601,112</b>			<b>\$ 41,234,471</b>	<b>12,366,641</b>	<b>\$ 35,819,480</b>	<b>5,414,991</b>
<b>8 WATER DISTRIBUTION:</b>								
9	Operating, Administrative & Capital Expenses <sup>(3)</sup>	\$ 33,875,524	93.88%	6.12%	\$ 31,803,526	2,071,997	\$ 27,627,025	4,176,501
10	Debt Service	-			-	-	-	-
11	Subtotal Revenue Requirement	\$ 33,875,524			-	-	-	-
12	Off-Setting Revenues <sup>(3)</sup>	(5,319,876)	93.88%	6.12%	(4,994,485)	(325,390)	(4,338,600)	(655,886)
13	Use of Reserve Funds <sup>(3)</sup>	4,580,249	93.88%	6.12%	4,300,098	280,151	3,735,401	564,697
14	<b>Total Revenue Requirement - Water Distribution</b>	<b>\$ 33,135,897</b>			<b>\$ 31,109,139</b>	<b>2,026,758</b>	<b>\$ 27,023,826</b>	<b>4,085,313</b>
<b>15 COMBINED WATER SYSTEM:</b>								
16	Operating, Administrative & Capital Expenses	\$ 92,129,421			\$ 76,617,310	\$ 15,512,111	\$ 66,555,775	\$ 10,061,535
17	Debt Service	-			-	-	-	-
18	Subtotal Revenue Requirement	\$ 92,129,421			\$ 76,617,310	\$ 15,512,111	\$ 66,555,775	\$ 10,061,535
19	Off-Setting Revenues	(7,300,706)			(6,518,306)	(782,400)	(5,662,309)	(855,997)
20	Use of Reserve Funds	1,908,294			2,244,606	(336,312)	1,949,840	294,766
21	<b>Total Revenue Requirement - Combined Water System</b>	<b>\$ 86,737,009</b>			<b>\$ 72,343,610</b>	<b>\$ 14,393,399</b>	<b>\$ 62,843,306</b>	<b>\$ 9,500,304</b>

(1) FY 2019 Test Year expenses are based on FY 2019 Proposed Budget, executed at 97%.  
 (2) Retail and wholesale allocation of water Supply expenses is based upon projected FY 2019 billed volume shown in Schedule 1  
 (3) \$8.8M of water Distribution expense is part of the wholesale system, which is allocated to retail and wholesale based on projected FY 2019 billed volume shown in Schedule 1.  
 (4) Retail allocation of fixed and variable costs are based upon costs of each cost center, shown in Schedules 4 and 5.



		FY 2017 ACTUAL	FY 2018 ESTIMATE	FY 2019 TEST YEAR	FY 2020 PROJECTED	3-YEAR AVERAGE
1	<b>TOTAL DEBT SERVICE - COMBINED WATER SYSTEM <sup>(1)</sup></b>	\$ -	-	-	-	\$ -
2	<u>Debt Service by Issue:</u>					
3	N/A	\$ -	-	-	-	\$ -
4	Other Debt Service Costs	\$ -	-	-	-	\$ -
5	Senior Lien Debt Service - Water Supply	\$ -	-	-	-	\$ -
6	Coverage Requirement	1.00	-	-	-	\$ -
7	Senior Lien Debt Service - Water Distribution	\$ -	-	-	-	\$ -
8	Coverage Requirement	1.00	-	-	-	\$ -
9	<b>Total Debt on Bonds</b>	\$ -	-	-	-	\$ -
10	<b>Coverage Requirement</b>	1.00	-	-	-	\$ -

(1) There is no debt service for the Pinellas County Utility Water Fund.

	FY 2017 ACTUAL	FY 2018 ESTIMATE	FY 2019 TEST YEAR <sup>(1)</sup>	3-YEAR AVERAGE	FIXED VS. VARIABLE ALLOCATION: FY 2019 TEST YEAR	
					\$ FIXED	\$ VAR
<b>1 OPERATING &amp; MAINTENANCE EXPENSES</b>						
2 431320 - Water Supply & Transmission <sup>(2)</sup>	\$ 4,135,583	3,782,016	4,396,302	\$ 4,104,634	\$ 2,846,436	1,549,866
3 431330 - Supervisory Control and Data Acquisition (SCADA) <sup>(3)</sup>	151,889	119,501	125,242	132,210	93,931	31,310
4 431340 - Water Quality Laboratory <sup>(4)</sup>	412,215	428,781	455,415	432,137	426,043	29,372
5 431350 - Water Quality - Monitoring <sup>(5)</sup>	650,945	706,413	808,398	721,918	-	808,398
6 431370 - Water & Sewer Code Enforcement	103,590	144,761	244,653	164,335	244,653	-
7 431415 Land, Forestry and Wildlife	598,494	617,427	737,734	651,218	737,734	-
<b>8 TOTAL OPERATING &amp; MAINTENANCE EXPENSES</b>	<b>\$ 6,052,715</b>	<b>5,798,899</b>	<b>6,767,743</b>	<b>\$ 6,206,452</b>	<b>\$ 4,348,797</b>	<b>2,418,946</b>
<b>9 TAMPA BAY WATER EXPENSES:</b>						
10 433110 Tampa Bay Water (TBW) <sup>(6)</sup>	\$ 39,961,996	41,760,867	40,712,808	\$ 40,811,890	\$ 34,198,759	6,514,049
<b>11 TOTAL TAMPA BAY WATER EXPENSES</b>	<b>\$ 39,961,996</b>	<b>41,760,867</b>	<b>40,712,808</b>	<b>\$ 40,811,890</b>	<b>\$ 34,198,759</b>	<b>6,514,049</b>
<b>12 GENERAL &amp; ADMINISTRATIVE EXPENSES:</b>						
13 431040 Facility Maintenance	\$ 129,793	842,427	1,087,593	\$ 686,604	\$ 1,087,593	-
14 431050 - Utilities Engineering	904,682	1,145,559	2,738,068	1,596,103	2,738,068	-
15 431085 - Customer Service	2,921,884	3,161,524	3,493,882	3,192,430	3,493,882	-
16 431130 - Water & Sewer Administration	6,486,297	7,198,474	9,284,695	7,656,489	9,284,695	-
17 894031 - Emergency Events-Water	-	93,619	-	31,206	-	-
18 OPEB Contribution <sup>(7)</sup>	791,759	791,759	768,006	783,841	768,006	-
19 Data Processing Costs	(1,850,510)	(2,350,750)	(3,382,790)	(2,528,017)	-	(3,382,790)
20 Subtotal	\$ 9,383,905	10,882,611	13,989,453	\$ 11,418,656	\$ 17,372,243	(3,382,790)
21 Allocation to Water Supply <sup>(8)</sup>	37.93%	37.93%	37.93%	37.93%	37.93%	37.93%
<b>22 TOTAL GENERAL &amp; ADMINISTRATIVE EXPENSES</b>	<b>\$ 3,559,003</b>	<b>4,127,412</b>	<b>5,305,734</b>	<b>\$ 4,330,717</b>	<b>\$ 6,588,714</b>	<b>(1,282,980)</b>
<b>23 RENEWAL, REPLACEMENT, &amp; IMPROVEMENT PROJECT EXPENSES:</b>						
24 Water Supply & Transmission <sup>(9)</sup>	\$ 3,667,168	2,473,300	5,056,700	\$ 3,732,389	\$ 5,056,700	-
<b>25 TOTAL RENEWAL, REPLACEMENT, &amp; IMPROVEMENT PROJECT EXPENSES</b>	<b>\$ 3,667,168</b>	<b>2,473,300</b>	<b>5,056,700</b>	<b>\$ 3,732,389</b>	<b>\$ 5,056,700</b>	<b>-</b>
<b>26 IN-HOUSE COST CENTER EXPENSES:</b>						
<b>27 Admin &amp; Business Support Cost Centers</b>						
28 431130 Water & Sewer Administration	\$ 27	-	-	\$ 9	\$ -	-
29 Subtotal	\$ 27	-	-	\$ 9	\$ -	-
30 Allocation to Water Supply <sup>(10)</sup>	37.93%	37.93%	37.93%	37.93%	37.93%	37.93%
31 Total Admin & Business Support Cost Centers	\$ 10	-	-	\$ 3	\$ -	-
<b>32 TOTAL IN-HOUSE COST CENTER EXPENSES</b>	<b>\$ 10</b>	<b>-</b>	<b>-</b>	<b>\$ 3</b>	<b>\$ -</b>	<b>-</b>
<b>33 CAPITAL EQUIPMENT EXPENSES:</b>						
<b>34 Admin &amp; Business Support Cost Centers</b>						
35 431085 - Customer Service	\$ -	-	337,150	\$ 112,383	\$ 337,150	-
36 431130 Water & Sewer Administration	-	-	31,300	10,433	31,300	-
37 Subtotal	\$ -	-	368,450	\$ 122,817	\$ 368,450	-
38 Allocation to Water Supply <sup>(10)</sup>	37.93%	37.93%	37.93%	37.93%	37.93%	37.93%
39 Total Admin & Business Support Cost Centers	\$ -	-	139,741	\$ 46,580	\$ 139,741	-
<b>40 Water &amp; Sewer Cost Centers</b>						
41 431320 - Water Supply & Transmission	\$ 37,625	99,438	91,000	\$ 76,021	\$ 91,000	-
42 431330 - Supervisory Control and Data Acquisition (SCADA) <sup>(3)</sup>	(710)	14,691	875	4,952	875	-
43 431340 - Water Quality Laboratory	42,869	23,596	136,570	67,678	136,570	-
44 431350 - Water Quality - Monitoring <sup>(5)</sup>	35,849	81,717	11,385	42,984	11,385	-
45 431370 - Water & Sewer Code Enforcement	(2,610)	-	1,750	(287)	1,750	-
46 431415 Land, Forestry and Wildlife	18,097	-	-	6,032	-	-
47 Total Water & Sewer Cost Centers	\$ 131,120	219,443	241,580	\$ 197,381	\$ 241,580	-
<b>48 Engineering &amp; Technical Support Cost Centers</b>						
49 431040 - Facility Maintenance	\$ -	-	73,930	\$ 24,643	\$ 73,930	-
50 431050 - Utilities Engineering	7,044	22,551	24,590	18,062	24,590	-
51 431470 - CIP Planning & Design	-	6,275	-	2,092	-	-
52 431471 - Construction Mgmt	-	85,750	-	28,583	-	-
51 Subtotal	\$ 7,044	114,576	98,520	\$ 73,380	\$ 98,520	-
53 Allocation to Water Supply <sup>(11)</sup>	30.03%	30.03%	30.03%	30.03%	30.03%	30.03%
54 Total Engineering & Technical Support Cost Centers	\$ 2,116	34,413	29,590	\$ 22,039	\$ 29,590	-
<b>55 TOTAL CAPITAL EQUIPMENT EXPENSES</b>	<b>\$ 133,235</b>	<b>253,855</b>	<b>410,911</b>	<b>\$ 266,001</b>	<b>\$ 410,911</b>	<b>-</b>
<b>56 TOTAL EXPENSES - WATER SUPPLY</b>	<b>\$ 53,374,127</b>	<b>54,414,333</b>	<b>58,253,897</b>	<b>\$ 55,347,453</b>	<b>\$ 50,603,881</b>	<b>7,650,016</b>

(1) FY 2019 Test Year expenses are based on FY 2019 Proposed Budget, executed at 97%.  
 (2) Chemical portion of costs (36%) assumed to be variable.  
 (3) Costs assumed to be 50% allocable to Water Supply and 50% allocable to Water Distribution based on County staff direction. Costs assumed to be 75% fixed and 25% variable based on County staff direction.  
 (4) Electric power portion of costs (7%) assumed to be variable.  
 (5) Costs assumed to be 50% allocable to Water Supply and 50% allocable to Water Distribution based on County staff direction.  
 (6) Tampa Bay Water expense based on Data expense projections used in Revenue Sufficiency Analysis.  
 (7) FY 2018 and FY 2019 expense provided by County staff.  
 (8) Based upon the 3-year average of Operating & Maintenance Expenses and In-House Cost Center Expenses directly assignable to wWater Supply.  
 (9) Based upon allocation of capital expenditures by function as provided by County staff.  
 (10) Based upon the annual allocations of General & Administrative Expenses to Water Supply.  
 (11) Based upon the 3-year average of Renewal, Replacement, & Improvement Project Expenses directly assignable to Water Supply.

	FY 2017 ACTUAL	FY 2018 ESTIMATE	FY 2019 TEST YEAR <sup>(1)</sup>	3-YEAR AVERAGE	FIXED VS. VARIABLE ALLOCATION: FY 2019 TEST YEAR	
					\$ FIXED	\$ VAR
<b>1 OPERATING &amp; MAINTENANCE EXPENSES</b>						
2 431070 - Field Services	\$ 820,152	784,352	829,641	\$ 811,382	\$ -	829,641
3 431240 - Technical Services	3,250,753	2,413,063	3,305,818	2,989,878	3,305,818	-
4 431250 - Maintenance North & South <sup>(2)</sup>	5,079,088	4,998,924	5,815,887	5,297,966	5,784,037	31,850
5 431330 - Supervisory Control and Data Acquisition (SCADA) <sup>(3)</sup>	151,889	119,501	125,242	132,210	93,931	31,310
6 431350 - Water Quality - Monitoring <sup>(4)</sup>	650,945	706,413	808,398	721,918	-	808,398
<b>7 TOTAL OPERATING &amp; MAINTENANCE EXPENSES</b>	<b>\$ 9,952,826</b>	<b>9,022,253</b>	<b>10,884,986</b>	<b>\$ 9,953,355</b>	<b>\$ 9,183,787</b>	<b>1,701,199</b>
<b>8 GENERAL &amp; ADMINISTRATIVE EXPENSES:</b>						
9 431040 - Facility Maintenance	\$ 129,793	842,427	1,087,593	\$ 686,604	\$ 1,087,593	-
10 431050 - Utilities Engineering	904,682	1,145,559	2,738,068	1,596,103	2,738,068	-
11 431085 - Customer Service	2,921,884	3,161,524	3,493,882	3,192,430	3,493,882	-
12 431130 - Water & Sewer Administration	6,486,297	7,198,474	9,284,695	7,656,489	9,284,695	-
13 894031 - Emergency Events-Water	-	93,619	-	31,206	-	-
14 OPEB Contribution <sup>(5)</sup>	791,759	791,759	768,006	783,841	768,006	-
15 Data Processing Costs	(1,850,510)	(2,350,750)	(3,382,790)	(2,528,017)	-	(3,382,790)
16 Subtotal	\$ 9,383,905	10,882,611	13,989,453	\$ 11,418,656	\$ 17,372,243	(3,382,790)
17 Allocation to Water Distribution <sup>(6)</sup>	62.07%	62.07%	62.07%	62.07%	62.07%	62.07%
18 Subtotal	\$ 5,824,902	6,755,199	8,683,719	\$ 7,087,940	\$ 10,783,529	(2,099,810)
19 Data Processing Costs	1,850,510	2,350,750	3,382,790	2,528,017	-	3,382,790
<b>20 TOTAL GENERAL &amp; ADMINISTRATIVE EXPENSES</b>	<b>\$ 7,675,412</b>	<b>9,105,949</b>	<b>12,066,509</b>	<b>\$ 9,615,957</b>	<b>\$ 10,783,529</b>	<b>1,282,980</b>
<b>21 RENEWAL, REPLACEMENT, &amp; IMPROVEMENT PROJECT EXPENSES:</b>						
22 Water Distribution <sup>(7)</sup>	\$ 10,367,499	6,320,000	9,396,000	\$ 8,694,500	\$ 9,396,000	-
<b>23 TOTAL RENEWAL, REPLACEMENT, &amp; IMPROVEMENT PROJECT EXPENSES</b>	<b>\$ 10,367,499</b>	<b>6,320,000</b>	<b>9,396,000</b>	<b>\$ 8,694,500</b>	<b>\$ 9,396,000</b>	<b>-</b>
<b>24 IN-HOUSE COST CENTER EXPENSES:</b>						
<b>25 Admin &amp; Business Support Cost Centers</b>						
26 431130 Water & Sewer Administration	\$ 27	-	-	\$ 9	\$ -	-
27 Subtotal	\$ 27	-	-	\$ 9	\$ -	-
28 Allocation to Water Distribution <sup>(8)</sup>	62.07%	62.07%	62.07%	62.07%	62.07%	62.07%
29 Total Admin & Business Support Cost Centers	\$ 17	-	-	\$ 6	\$ -	-
<b>30 Water &amp; Sewer Cost Centers</b>						
31 431250 Maintenance North & South	\$ 183,838	-	429,780	\$ 204,539	\$ 429,780	-
32 Total Water & Sewer Cost Centers	\$ 183,838	-	429,780	\$ 204,539	\$ 429,780	-
<b>33 TOTAL IN-HOUSE COST CENTER EXPENSES</b>	<b>\$ 183,855</b>	<b>-</b>	<b>429,780</b>	<b>\$ 204,545</b>	<b>\$ 429,780</b>	<b>-</b>
<b>34 CAPITAL EQUIPMENT EXPENSES:</b>						
<b>35 Admin &amp; Business Support Cost Centers</b>						
36 431085 - Customer Service	\$ -	-	337,150	\$ 112,383	\$ 337,150	-
37 431130 Water & Sewer Administration	-	-	31,300	10,433	31,300	-
38 Subtotal	\$ -	-	368,450	\$ 122,817	\$ 368,450	-
39 Allocation to Water Distribution <sup>(8)</sup>	62.07%	62.07%	62.07%	62.07%	62.07%	62.07%
40 Total Admin & Business Support Cost Centers	\$ -	-	228,709	\$ 76,236	\$ 228,709	-
<b>41 Water &amp; Sewer Cost Centers</b>						
42 431070 - Field Services	\$ -	24,760	114,000	\$ 46,253	\$ 114,000	-
43 431240 - Technical Services	82,052	33,626	50,550	55,409	50,550	-
44 431250 - Maintenance North & South	900,352	480,997	623,800	668,383	623,800	-
45 431330 - Supervisory Control and Data Acquisition (SCADA) <sup>(3)</sup>	(710)	14,691	875	4,952	875	-
46 431350 - Water Quality - Monitoring <sup>(4)</sup>	35,849	81,717	11,385	42,984	11,385	-
47 Total Water & Sewer Cost Centers	\$ 1,017,543	635,791	800,610	\$ 817,981	\$ 800,610	-
<b>48 Engineering &amp; Technical Support Cost Centers</b>						
49 431040 - Facility Maintenance	\$ -	-	73,930	\$ 36,983	\$ 73,930	-
50 431050 - Utilities Engineering	7,044	22,551	24,590	19,724	24,590	-
51 431470 - CIP Planning & Design	-	6,275	-	-	-	-
52 431471 - Construction Mgmt	-	85,750	-	-	-	-
51 Subtotal	\$ 7,044	114,576	98,520	\$ 73,380	\$ 98,520	-
53 Allocation to Water Distribution <sup>(9)</sup>	69.97%	69.97%	69.97%	69.97%	69.97%	69.97%
54 Total Engineering & Technical Support Cost Centers	\$ 4,928	80,163	68,930	\$ 51,340	\$ 68,930	-
<b>55 TOTAL CAPITAL EQUIPMENT EXPENSES</b>	<b>\$ 1,022,471</b>	<b>715,954</b>	<b>1,098,249</b>	<b>\$ 945,558</b>	<b>\$ 1,098,249</b>	<b>-</b>
<b>56 TOTAL EXPENSES - WATER DISTRIBUTION</b>	<b>\$ 29,202,062</b>	<b>25,164,156</b>	<b>33,875,524</b>	<b>\$ 29,413,914</b>	<b>\$ 30,891,345</b>	<b>2,984,179</b>

(1) FY 2019 Test Year expenses are based on FY 2019 Proposed Budget, executed at 97%.  
 (2) Electric power portion of costs (7%) assumed to be variable.  
 (3) Costs assumed to be 50% allocable to Water Supply and 50% allocable to Water Distribution based on County staff direction. Costs assumed to be 75% fixed and 25% variable based on County staff direction.  
 (4) Costs assumed to be 50% allocable to Water Supply and 50% allocable to Water Distribution based on County staff direction.  
 (5) FY 2018 and FY 2019 expense provided by County staff.  
 (6) Based upon the 3-year average of Operating & Maintenance Expenses and In-House Cost Center Expenses directly assignable to Water Distribution.  
 (7) Based upon allocation of capital expenditures by function as provided by County staff.  
 (8) Based upon the annual allocations of General & Administrative Expenses to Water Distribution.  
 (9) Based upon the 3-year average of Renewal, Replacement, & Improvement Project Expenses directly assignable to Water Distribution.

	FY 2017 ACTUAL	FY 2018 ESTIMATE	FY 2019 TEST YEAR	3-YEAR AVERAGE
<b>1 OFF-SETTING REVENUES - WATER SUPPLY:</b>				
<b>2 Interest Income - O &amp; M and R &amp; R</b>				
3 3611210 Interest-Cash Pools	\$ 73,314	-	-	\$ 24,438.12
4 3611700 Interest-St Brd Of Admin	129,884	-	-	43,295
5 3611800 Interest-Treasury Notes	500,798	-	-	166,933
6 3611991 Other Interest Earnings	55,884	-	-	18,628
7 3613001 Net Inc/Dec In Fair Value	(174,775)	-	-	(58,258)
8 3611700 Interest - LGIP & Public Funds D	750	-	-	250
9 3611800 Interest-Securities	3,387	-	-	1,129
10 3433124 Water Connection Fees-Interest	129	-	-	43
11 Interest - Unrestricted Funds	-	1,351,201	1,893,874	1,081,692
12 Interest - Restricted Funds	-	-	-	-
13 Subtotal	\$ 589,370	1,351,201	1,893,874	\$ 1,278,149
14 Allocation to Water Supply <sup>(1)</sup>	65.30%	65.30%	65.30%	65.30%
15 Total Interest Income - O & M and R & R	\$ 384,847	882,307	1,236,661	\$ 834,605
<b>16 Other Operating Revenue</b>				
17 3650001 Forestry Operations - Sales	\$ 801,758	831,210	493,295	\$ 708,754
18 3433122 Wholesale Wtr Meter Svc Chg	19,272	19,272	20,000	19,515
19 3312001 Fed Grant-Public Safety	-	-	230,874	76,958
20 3642200 Sale-Surplus County Land	-	605,800	-	201,933
21 Total Other Operating Revenue	\$ 821,030	1,456,282	744,168	\$ 1,007,160
<b>22 TOTAL OFF-SETTING REVENUES - WATER SUPPLY</b>	<b>\$ 1,205,877</b>	<b>2,338,589</b>	<b>1,980,830</b>	<b>\$ 1,841,765</b>
<b>23 OFF-SETTING REVENUES - WATER DISTRIBUTION:</b>				
<b>24 Interest Income - O &amp; M and R &amp; R</b>				
25 Allocation to Water Distribution <sup>(2)</sup>	34.70%	34.70%	34.70%	34.70%
26 Total Interest Income - O & M and R & R	\$ 204,523	468,894	657,213	\$ 443,543
<b>27 Other Operating Revenue</b>				
28 3433120 Service Charges	\$ 777,443	887,715	850,000	\$ 838,386
29 3433121 Water - Late Payment Fee	(3,192,855)	758,118	785,000	(549,912)
30 3433123 Backflow Maint Fee-Sap	686,540	691,778	710,000	696,106
31 3433130 Fireline Payments	190,609	194,541	200,000	195,050
32 3433150 Contractual Billing Svc	397,266	402,602	420,000	406,623
33 3433302 Water Conservation	496,312	462,909	500,000	486,407
34 3433501 Wellhead Protection	625	625	495	582
35 3433560 Overage & Shortage	33	14	-	16
36 3490010 Chg For Sv-Bad Dbt Ex(Dr)	(60,662)	(43,384)	-	(34,682)
37 3621008 Rents - Bldg/Space	234,500	314,495	323,400	290,799
38 3644100 Sale Of Surplus Equipment	387,868	181,182	105,000	224,683
39 3644200 Ins Proceeds-Furn/Fxtr/Eq	58,969	34,702	10,495	34,722
40 3650002 Sale-Surplus Eq Under Cap	2,113	-	-	704
41 3650003 Scrap Sales	4,904	3,902	-	2,935
42 3699213 Bill2Pay Trans Revenue Sap	37,714	40,264	40,000	39,326
43 3699311 Inter-Sales Tax Commissions	-	11	-	4
44 3699350 Refund Of Prior Yrs Exp	(11,028)	484,806	-	157,926
45 3699991 Miscellaneous Revenue	55,733	67,065	28,000	50,266
46 3898331 Cap Con-Pvt-Wtr Back Flow	186,731	127,258	158,000	157,330
47 3898332 Cap Con-Pvt-Wtr Connectn	450,511	410,180	532,274	464,322
48 3699990 Overage & Shortage	-	(25)	-	(8)
49 Total Other Operating Revenue	\$ 703,326	5,018,758	4,662,663	\$ 3,461,582
<b>50 TOTAL OFF-SETTING REVENUES - WATER DISTRIBUTION</b>	<b>\$ 907,849</b>	<b>5,487,652</b>	<b>5,319,876</b>	<b>\$ 3,905,126</b>
<b>51 TOTAL OFF-SETTING REVENUES - COMBINED WATER SYSTEM</b>	<b>\$ 2,113,726</b>	<b>7,826,241</b>	<b>7,300,706</b>	<b>\$ 5,746,891</b>

(1) Based upon the 3-year average of total Operating, Administrative & Capital Expenses directly assignable to Water Supply.

(2) Based upon the 3-year average of total Operating, Administrative & Capital Expenses directly assignable to Water Distribution.

## **APPENDIX D: SUPPORTING SCHEDULES FOR SEWER COSA**

- Schedule 1 Retail & Wholesale Cost of Service Allocation Results Summary**
- Schedule 2 Retail & Wholesale and Retail Fixed & Variable Cost of Service Allocation Results**
- Schedule 3 Allocation of Debt Service to Treatment & Disposal and Collection & Transmission**
- Schedule 4 Allocation of O&M and Capital Costs to Treatment & Disposal**
- Schedule 5 Allocation of O&M and Capital Costs to Collection & Transmission**
- Schedule 6 Allocation of Off-setting Revenues to Treatment & Disposal and Collection & Transmission**

		FY 2019 TEST YEAR		FY 2015 TEST YEAR	
1	<u>SEWER TREATMENT &amp; DISPOSAL:</u>				
2	Operating, Administrative & Capital Expenses	\$	43,852,638	\$	32,478,993
3	Debt Service		7,264,998		8,762,306
4	Subtotal Revenue Requirement	\$	51,117,636	\$	41,241,299
5	Off-Setting Revenues		(4,931,105)		(5,622,502)
6	Use of Reserve Funds <sup>(1)</sup>		(10,976,424)		(213,863)
7	<u>Total Revenue Requirement - Sewer Treatment &amp; Disposal</u>	\$	35,210,107	\$	35,404,933
8	<u>SEWER COLLECTION &amp; TRANSMISSION:</u>				
9	Operating, Administrative & Capital Expenses	\$	49,330,639	\$	31,110,900
10	Debt Service		9,141,567		5,693,671
11	Subtotal Revenue Requirement	\$	58,472,206	\$	36,804,570
12	Off-Setting Revenues		(5,718,970)		(643,491)
13	Use of Reserve Funds <sup>(2)</sup>		(16,685,306)		(725,579)
14	<u>Total Revenue Requirement - Sewer Collection &amp; Transmission</u>	\$	36,067,930	\$	35,437,245
15	<u>COMBINED SEWER SYSTEM:</u>				
16	Operating, Administrative & Capital Expenses	\$	93,183,277	\$	63,589,892
17	Debt Service		16,406,565		14,455,977
18	Subtotal Revenue Requirement	\$	109,589,842	\$	78,045,869
19	Off-Setting Revenues		(10,650,075)		(6,264,249)
20	Use of Reserve Funds		(27,661,730)		(939,442)
21	<u>Total Revenue Requirement - Combined Sewer System</u>	\$	71,278,037	\$	68,826,079
22	<u>Reallocation of Sewer C&amp;T Revenue Requirement:</u>				
23	% of Below Ground Assets Required to Serve Wholesale <sup>(3)</sup>		19.49%		25.00%
24	Allocation to Sewer T&D <sup>(4)</sup>		2,441,209		6,087,232
25	<u>Billed Sewer Flows (In 1,000 gallons):</u>				
26	Wholesale	20.58%	2,027,675	22.72%	2,210,958
27	Retail	79.42%	7,825,403	77.28%	7,520,913
28	<u>FY 2019 Cost of Service Allocations:</u>		\$ 71,278,037		\$ 68,826,079
29	Wholesale	10.87%	\$ 7,748,302	13.32%	\$ 9,166,574
30	Retail	89.13%	\$ 63,529,735	86.68%	\$ 59,659,506
31	<u>FY 2019 Rate Revenues (Per FAMS):</u>		\$ 71,278,037		\$ 68,826,079
32	Wholesale	12.26%	\$ 8,737,700	13.58%	\$ 9,346,090
33	Retail	87.74%	\$ 62,540,337	86.42%	\$ 59,479,990

<u>FY 2019 Rate Revenues per FY 2019 Cost of Service Analysis:</u>					
Wholesale	\$	7,748,302		\$	9,346,090
Retail	\$	63,529,735		\$	49,444,368
<u>FY 2019 Revenue Adjustments Per Cost of Service Analysis:</u>					
Wholesale	\$	(989,398)		\$	(179,516)
Retail	\$	989,398		\$	179,516
<u>FY 2019 Rate Adjustments to Align with Cost of Service Analysis:</u>					
Wholesale		-12.77%			-1.92%
Retail		1.56%			0.36%

(1) Reflects the portion of unrestricted reserves necessary to fund the annual Renewal & Replacement Fund transfer allocable to Sewer Treatment & Disposal.

(2) Reflects the portion of unrestricted reserves necessary to fund the annual Renewal & Replacement Fund transfer allocable to Sewer Collection & Transmission.

(3) Wholesale allocation based on linear footage of sewer lines greater than 10" as a percentage of total linear footage of sewer lines.

(4) Not applicable to Renewal, Replacement, & Improvement Expenses, as the allocation of capital expenditures already included the allocation of below ground assets to Sewer Treatment & Disposal.

	FY 2019 TEST YEAR <sup>(1)</sup>	WHOLESALE VS. RETAIL ALLOCATION				RETAIL FIXED VS. VARIABLE ALLOCATION	
		RETAIL	WHOLESALE	RETAIL	WHOLESALE	TOTAL RETAIL <sup>(3)</sup>	
						FIXED	VARIABLE
						83.12%	16.88%
<b>1 SEWER TREATMENT &amp; DISPOSAL:</b>							
2	Operating, Administrative & Capital Expenses <sup>(1)</sup>	\$ 43,852,638		\$ 34,828,159	9,024,479	\$ 28,948,181	5,879,979
3	Debt Service <sup>(1)</sup>	7,264,998		5,769,927	1,495,071	4,795,800	974,127
4	Subtotal Revenue Requirement	\$ 51,117,636					
5	Off-Setting Revenues <sup>(1)</sup>	(4,931,105)		(3,916,328)	(1,014,777)	(3,255,141)	(661,187)
6	Use of Reserve Funds <sup>(1)</sup>	(10,976,424)		(8,717,575)	(2,258,849)	(7,245,801)	(1,471,773)
7	<b>Total Revenue Requirement - Sewer Treatment &amp; Disposal</b>	<b>\$ 35,210,107</b>		<b>\$ 27,964,184</b>	<b>7,245,923</b>	<b>\$ 23,243,038</b>	<b>4,721,145</b>
<b>8 SEWER COLLECTION &amp; TRANSMISSION:</b>							
9	Operating, Administrative & Capital Expenses <sup>(2)</sup>	\$ 49,330,639		\$ 48,643,528	687,111	\$ 40,431,124	8,212,404
10	Debt Service <sup>(2)</sup>	9,141,567		9,014,237	127,330	7,492,379	1,521,858
11	Subtotal Revenue Requirement	\$ 58,472,206					
12	Off-Setting Revenues <sup>(2)</sup>	(5,718,970)		(5,639,312)	(79,658)	(4,687,237)	(952,075)
13	Use of Reserve Funds <sup>(2)</sup>	(16,685,306)		(16,452,902)	(232,404)	(13,675,187)	(2,777,715)
14	<b>Total Revenue Requirement - Sewer Collection &amp; Transmission</b>	<b>\$ 36,067,930</b>		<b>\$ 35,565,551</b>	<b>502,379</b>	<b>\$ 29,561,080</b>	<b>6,004,471</b>
<b>15 COMBINED SEWER SYSTEM:</b>							
16	Operating, Administrative & Capital Expenses	\$ 93,183,277		\$ 83,471,688	\$ 9,711,589	\$ 69,379,305	14,092,382
17	Debt Service	16,406,565		14,784,163	1,622,401	12,288,178	2,495,985
18	Subtotal Revenue Requirement	\$ 109,589,842		\$ 98,255,851	\$ 11,333,991	\$ 81,667,484	16,588,368
19	Off-Setting Revenues	(10,650,075)		(9,555,640)	(1,094,435)	(7,942,377)	(1,613,262)
20	Use of Reserve Funds	(27,661,730)		(25,170,476)	(2,491,254)	(20,920,988)	(4,249,489)
21	<b>Total Revenue Requirement - Combined Sewer System</b>	<b>\$ 71,278,037</b>		<b>\$ 63,529,735</b>	<b>\$ 7,748,302</b>	<b>\$ 52,804,118</b>	<b>10,725,617</b>

(1) FY 2019 Test Year expenses are based on FY 2019 Proposed Budget, executed at 97%.  
 (2) Retail and wholesale allocation of Sewer Treatment & Disposal expenses is based upon projected FY 2019 billed volume shown in Schedule 1.  
 (3) \$2.4M of Sewer Collection & Transmission expense is part of the wholesale system, which is allocated to retail and wholesale based on projected FY 2019 billed volume shown in Schedule 1.  
 (4) Retail allocation of fixed and variable costs are based upon costs of each cost center, shown in Schedules 4 and 5.

		FY 2017 ACTUAL	FY 2018 ESTIMATE	FY 2019 TEST YEAR	3-YEAR AVERAGE		
1	<b>TOTAL DEBT SERVICE - COMBINED SEWER SYSTEM</b>	\$ 12,283,974	14,788,281	16,406,565	\$ 14,492,940		
2	<u>Debt Service by Issue:</u>						
		T&D <sup>(1)</sup>	C&T <sup>(1)</sup>				
3	Series 2003 Sewer Revenue Bonds	31%	69%	\$ 260,750	260,750	260,750	\$ 260,750
4	Series 2008A Sewer Revenue Bonds	39%	61%	2,192,588	2,284,354	2,462,836	2,313,259
5	Series 2008B Sewer Revenue Bonds	39%	61%	1,465,374	5,469,007	5,574,700	4,169,694
6	Series 2011 Sewer Bonds	100%	0%	3,612,374	-	-	1,204,125
7	Series 2012 Sewer Bonds	31%	69%	4,752,888	4,751,488	4,751,088	4,751,821
8	Series 2016 Sewer Bonds	100%	0%	2,026,126	2,022,682	2,033,490	2,027,433
9	Projected Future Debt Service	41%	59%	\$ -	-	1,323,701	\$ 441,234
10	Senior Lien Debt Service - Sewer Treatment & Disposal			\$ 6,593,207	6,600,286	7,264,998	\$ 6,819,497
11	Coverage Requirement		1.00	\$ -	-	-	\$ -
12	Senior Lien Debt Service - Sewer Collection & Transmission			\$ 5,690,767	8,187,994	9,141,567	\$ 7,673,443
13	Coverage Requirement		1.00	\$ -	-	-	\$ -
14	<b>Total Debt on Bonds</b>			\$ 12,283,974	14,788,281	16,406,565	\$ 14,492,940
15	<b>Coverage Requirement</b>		1.00	\$ -	-	-	\$ -

(1) Allocation based upon the portion of the system that received the direct benefit from the proceeds of each issuance.



	FY 2017	FY 2018	FY 2019	3-YEAR	FIXED VS. VARIABLE ALLOCATION:	
	ACTUAL	ESTIMATE	TEST YEAR <sup>(1)</sup>		AVERAGE	FY 2019 TEST YEAR
					\$ FIXED	\$ VAR
<b>1 OPERATING &amp; MAINTENANCE EXPENSES</b>						
2 431330 SCADA <sup>(2)</sup>	\$ 463,333	293,266	375,676	\$ 377,425	\$ 281,757	93,919
3 431340 Laboratories <sup>(3)</sup>	1,518,863	1,612,701	1,693,300	1,608,288	1,578,910	114,390
4 431350 Monitoring <sup>(4)</sup>	443,455	540,621	557,512	513,863	-	557,512
5 431360 South Operations (South Cross) <sup>(5)</sup>	9,597,794	9,687,533	11,869,046	10,384,791	6,687,086	5,181,960
6 435110 Wholesale Wastewater	774,516	967,913	1,067,000	936,476	-	1,067,000
7 435120 North Operations (Dunn) <sup>(5)</sup>	3,749,219	3,824,592	4,411,019	3,994,943	2,815,719	1,595,300
8 435130 Purchase of Reclaim (Water)	61,843	19,732	87,300	56,292	87,300	-
<b>9 TOTAL OPERATING &amp; MAINTENANCE EXPENSES</b>	<b>\$ 16,609,022</b>	<b>16,946,358</b>	<b>20,060,854</b>	<b>\$ 17,872,078</b>	<b>\$ 11,450,772</b>	<b>8,610,081</b>
<b>10 GENERAL &amp; ADMINISTRATIVE EXPENSES:</b>						
11 431040 Facility Maintenance	\$ 206,622	459,619	585,676	\$ 417,306	\$ 585,676	-
12 431130 Water & Sewer Administration	4,280,142	5,863,791	6,463,673	5,535,869	6,463,672.60	-
13 431050 Utilities Engineering	2,287,186	4,239,983	4,194,794	3,573,988	4,194,794.10	-
14 431085 Customer Service	2,773,704	2,965,702	3,209,885	2,983,097	3,209,885.20	-
15 OPEB Contribution <sup>(6)</sup>	915,328	915,328	887,868	906,175	887,868.16	-
16 Data Processing Costs	(2,071,800)	(2,838,470)	(2,198,500)	(2,369,590)	-	(2,198,500)
17 Subtotal	\$ 8,391,182	11,605,954	13,143,396	\$ 11,046,844	\$ 15,341,896	(2,198,500)
18 Allocation to Sewer Treatment & Disposal <sup>(7)</sup>	54.88%	54.88%	54.88%	54.88%	54.88%	54.88%
<b>19 TOTAL GENERAL &amp; ADMINISTRATIVE EXPENSES</b>	<b>\$ 4,604,999</b>	<b>6,369,234</b>	<b>7,212,968</b>	<b>\$ 6,062,401</b>	<b>\$ 8,419,484</b>	<b>(1,206,515)</b>
<b>20 RENEWAL, REPLACEMENT, &amp; IMPROVEMENT PROJECT EXPENSES:</b>						
21 Sewer Treatment & Disposal <sup>(8)</sup>	\$ 3,344,873	13,419,500	12,383,300	\$ 9,715,891	\$ 12,383,300	-
22 Reclaimed <sup>(8)</sup>	684,000	766,000	3,200,000	1,550,000	3,200,000	-
<b>23 TOTAL RENEWAL, REPLACEMENT, &amp; IMPROVEMENT PROJECT EXPENSES</b>	<b>\$ 4,028,873</b>	<b>14,185,500</b>	<b>15,583,300</b>	<b>\$ 11,265,891</b>	<b>\$ 15,583,300</b>	<b>-</b>
<b>24 CAPITAL EQUIPMENT EXPENSES:</b>						
<b>25 Admin &amp; Business Support Cost Centers</b>						
26 431085 Customer Service	\$ 1,286	819	309,600	\$ 103,902	\$ 309,600	-
27 431040 Facility Maintenance	-	-	1,570	523	1,570	-
28 Subtotal	\$ 1,286	819	311,170	\$ 104,425	\$ 311,170	-
29 Allocation to Sewer Treatment & Disposal <sup>(9)</sup>	54.88%	54.88%	54.88%	54.88%	54.88%	54.88%
<b>30 Total Admin &amp; Business Support Cost Centers</b>	<b>\$ 706</b>	<b>450</b>	<b>170,767</b>	<b>\$ 57,307</b>	<b>\$ 170,767</b>	<b>-</b>
<b>31 Water &amp; Sewer Cost Centers</b>						
32 431130 Water & Sewer Administration	\$ 40,088	-	700	\$ 13,596	\$ 700	-
33 431330 SCADA <sup>(2)</sup>	28,646	140,266	875	56,596	875	-
34 431340 Laboratories	161,416	79,643	107,020	116,026	107,020	-
35 431350 Monitoring <sup>(4)</sup>	31,709	85,751	4,945	40,802	4,945	-
36 431360 South Operations (South Cross) <sup>(5)</sup>	304,217	346,829	528,212	393,086	528,212	-
37 435120 North Operations (Dunn) <sup>(5)</sup>	116,919	251,505	177,227	181,884	177,227	-
38 Total Water & Sewer Cost Centers	\$ 682,995	903,995	818,979	\$ 801,990	\$ 818,979	-
<b>39 Engineering &amp; Technical Support Cost Centers</b>						
40 431050 Utilities Engineering	\$ 3,619	7,101	16,110	\$ 8,943	\$ 16,110	-
41 431470 CIP Planning & Design	-	66,115	-	\$ 22,038	-	-
42 431471 Construction Management	-	31	-	\$ 10	-	-
43 Subtotal	\$ 3,619	73,247	16,110	\$ 30,992	\$ 16,110	-
44 Allocation to Sewer Treatment & Disposal <sup>(10)</sup>	35.82%	35.82%	35.82%	35.82%	35.82%	35.82%
<b>45 Total Engineering &amp; Technical Support Cost Centers</b>	<b>\$ 1,296</b>	<b>26,234</b>	<b>5,770</b>	<b>\$ 11,100</b>	<b>\$ 5,770</b>	<b>-</b>
<b>46 TOTAL CAPITAL EQUIPMENT EXPENSES</b>	<b>\$ 684,997</b>	<b>930,678</b>	<b>995,516</b>	<b>\$ 870,397</b>	<b>\$ 995,516</b>	<b>-</b>
<b>47 TOTAL EXPENSES - SEWER TREATMENT &amp; DISPOSAL</b>	<b>\$ 25,927,891</b>	<b>38,431,770</b>	<b>43,852,638</b>	<b>\$ 36,070,767</b>	<b>\$ 36,449,072</b>	<b>7,403,566</b>

Appendix D: Supporting Schedules for Sewer COSA Schedule 5: Allocation of O&M and Capital Costs to Transmission & Distribution

	FY 2017	FY 2018	FY 2019	3-YEAR	FIXED VS. VARIABLE ALLOCATION:	
	ACTUAL	ESTIMATE	TEST YEAR <sup>(1)</sup>		AVERAGE	FY 2019 TEST YEAR
					\$ FIXED	\$ VAR
<b>1 OPERATING &amp; MAINTENANCE EXPENSES</b>						
2 431240 Technical Services	\$ 288,172	254,823	340,616	\$ 294,537	\$ 340,616	-
3 431250 Maintenance North & South <sup>(2)</sup>	6,966,066	5,030,940	5,756,562	5,917,856	5,726,012	30,550
4 431330 SCADA <sup>(3)</sup>	463,333	293,266	375,676	377,425	281,757	93,919
5 431350 Monitoring	443,455	540,621	557,512	513,863	-	557,512
6 431370 Code Enforcement	21,688	29,557	69,442	40,229	69,442	-
7 431070 Field Services	731,614	715,599	765,844	737,686	-	765,844
8 Pump Station Costs (North & South) <sup>(4)</sup>	6,314,294	6,391,594	7,706,425	6,804,104	4,630,571	3,075,854
9 431474 - Surveying & Mapping	-	25,618	-	8,539	-	-
<b>10 TOTAL OPERATING &amp; MAINTENANCE EXPENSES</b>	<b>\$ 15,228,622</b>	<b>13,282,018</b>	<b>15,572,077</b>	<b>\$ 14,694,239</b>	<b>\$ 11,048,398</b>	<b>4,523,679</b>
<b>11 GENERAL &amp; ADMINISTRATIVE EXPENSES:</b>						
12 431040 Facility Maintenance	\$ 206,622	459,619	585,676	\$ 417,306	\$ 585,676	-
13 431130 Water & Sewer Administration	4,280,142	5,863,791	6,463,673	5,535,869	6,463,673	-
14 431050 Utilities Engineering	2,287,186	4,239,983	4,194,794	3,573,988	4,194,794	-
15 431085 Customer Service	2,773,704	2,965,702	3,209,885	2,983,097	3,209,885	-
16 OPEB Contribution <sup>(5)</sup>	915,328	915,328	887,868	906,175	887,868	-
17 Data Processing Costs	(2,071,800)	(2,838,470)	(2,198,500)	(2,369,590)	-	(2,198,500)
18 Subtotal	\$ 8,391,182	11,605,954	13,143,396	\$ 11,046,844	\$ 15,341,896	(2,198,500)
19 Allocation to Sewer Collection & Transmission <sup>(6)</sup>	45.12%	45.12%	45.12%	45.12%	45.12%	45.12%
20 Subtotal	\$ 3,786,183	5,236,719	5,930,428	\$ 4,984,444	\$ 6,922,413	(991,985)
21 Data Processing Costs	2,071,800	2,838,470	2,198,500	2,369,590	-	2,198,500
<b>22 TOTAL GENERAL &amp; ADMINISTRATIVE EXPENSES</b>	<b>\$ 5,857,983</b>	<b>8,075,189</b>	<b>8,128,928</b>	<b>\$ 7,354,034</b>	<b>\$ 6,922,413</b>	<b>1,206,515</b>
<b>23 RENEWAL, REPLACEMENT, &amp; IMPROVEMENT PROJECT EXPENSES:</b>						
24 Sewer Collection <sup>(7)</sup>	\$ 19,394,323	17,635,000	23,540,000	\$ 20,189,774	\$ 23,540,000	-
<b>25 TOTAL RENEWAL, REPLACEMENT, &amp; IMPROVEMENT PROJECT EXPENSES</b>	<b>\$ 19,394,323</b>	<b>17,635,000</b>	<b>23,540,000</b>	<b>\$ 20,189,774</b>	<b>\$ 23,540,000</b>	<b>-</b>
<b>26 CAPITAL EQUIPMENT EXPENSES:</b>						
<b>27 Admin &amp; Business Support Cost Centers</b>						
28 431085 Customer Service	\$ 1,286	819	309,600	\$ 103,902	\$ 309,600	-
29 431040 Facility Maintenance	-	-	1,570	523	1,570	-
30 Subtotal	\$ 1,286	819	311,170	\$ 104,425	\$ 311,170	-
31 Allocation to Sewer Collection & Transmission <sup>(8)</sup>	45.12%	45.12%	45.12%	45.12%	45.12%	45.12%
32 Total Admin & Business Support Cost Centers	\$ 580	370	140,403	\$ 47,118	\$ 140,403	-
<b>33 Water &amp; Sewer Cost Centers</b>						
34 431070 Field Services	\$ 3,800	2,127,07	3,750	\$ 3,226	\$ 3,750	-
35 431250 Maintenance North & South	518,208	371,413	1,595,000	828,207	1,595,000	-
36 431330 SCADA	28,646	140,266	875	56,596	875	-
37 431350 Monitoring	31,709	85,751	4,945	40,802	4,945	-
38 431360 South Operations (South Cross)	146,315	166,810	254,048	189,058	254,048	-
39 435120 North Operations (Dunn)	52,957	113,916	80,273	82,382	80,272.59	-
40 Total Water & Sewer Cost Centers	\$ 781,635	880,283	1,938,891	\$ 1,200,270	\$ 1,938,891	-
<b>41 Engineering &amp; Technical Support Cost Centers</b>						
42 431050 Utilities Engineering	\$ 3,619	7,101	16,110	\$ 8,943	\$ 16,110	-
43 431470 CIP Planning & Design	-	66,115	-	22,038	-	-
44 431471 Construction Management	-	31	-	10	-	-
45 Subtotal	\$ 3,619	73,247	16,110	\$ 30,992	\$ 16,110	-
46 Allocation to Sewer Collection & Transmission <sup>(9)</sup>	64.18%	64.18%	64.18%	64.18%	64.18%	64.18%
47 Total Engineering & Technical Support Cost Centers	\$ 2,323	47,014	10,340	\$ 19,892	\$ 10,340	-
<b>48 TOTAL CAPITAL EQUIPMENT EXPENSES</b>	<b>\$ 784,538</b>	<b>927,667</b>	<b>2,089,634</b>	<b>\$ 1,267,280</b>	<b>\$ 2,089,634</b>	<b>-</b>
<b>49 TOTAL EXPENSES - SEWER COLLECTION &amp; TRANSMISSION</b>	<b>\$ 41,265,466</b>	<b>39,919,874</b>	<b>49,330,639</b>	<b>\$ 43,505,326</b>	<b>\$ 43,600,445</b>	<b>5,730,194</b>

- (1) FY 2019 Test Year expenses are based on FY 2019 Proposed Budget, executed at 97%.
- (2) Electric power portion of costs (1%) assumed to be variable.
- (3) Costs assumed to be 50% allocable to Sewer Treatment & Disposal and 50% allocable to Sewer Collection & Transmission based on County staff direction. Costs assumed to be 75% fixed and 25% variable based on County staff direction.
- (4) Represents Pump Station portion of cost center assignable to Sewer Collection & Transmission (32%).
- (5) FY 2018 and FY 2019 expense provided by County staff.
- (6) Based upon the 3-year average of Operating & Maintenance Expenses directly assignable to Sewer Collection & Transmission.
- (7) Based upon allocation of capital expenditures by function as provided by County staff on August 27, 2018.
- (8) Based upon the annual allocations of General & Administrative expenses to Sewer Collection & Transmission.
- (9) Based upon the 3-year average of Renewal, Replacement, & Improvement project expenses directly assignable to Sewer Collection & Transmission.

	FY 2017 ACTUAL	FY 2018 ESTIMATE	FY 2019 BUDGET	3-YEAR AVERAGE
<b>1 OFF-SETTING REVENUES - SEWER TREATMENT &amp; DISPOSAL:</b>				
2 <u>Interest Income - O &amp; M and R &amp; R</u>				
3 3611210 Interest-Cash Pools	\$ 68,368	-	-	\$ 22,789
4 3611700 Interest-St Brd Of Admin	132,835	-	-	44,278
5 3611800 Interest-Treasury Notes	511,779	-	-	170,593
6 3611991 Other Interest Earnings	2,811	-	-	937
7 3613001 Net Inc/Dec In Fair Value	(158,496)	(245,635)	-	(134,710)
8 Interest - Unrestricted Funds	-	1,079,845	1,193,576	757,807
9 Interest - Restricted Funds	-	18,178	40,294	19,491
10 Subtotal	\$ 557,297	852,388	1,233,871	\$ 881,185
11 Allocation to Sewer Treatment & Disposal <sup>(1)</sup>	45.33%	45.33%	45.33%	45.33%
12 Total Interest Income - O & M and R & R	\$ 252,615	386,376	559,297	\$ 399,429
13 <u>Other Operating Revenue</u>				
14 3290006 Ind Wastwtr Dschrg Permts	\$ 33,950	27,150	15,800	\$ 25,633
15 3290007 Grease Permitting Fee	107,415	112,260	105,295	108,323
16 3435320 Reclaimed Water Svc Chrg <sup>(2)</sup>	2,382,111	2,481,179	2,682,059	2,515,116
17 3435322 Ws Reclaimed Meter Sv Chr <sup>(2)</sup>	1,411	1,411	1,483	1,435
18 3435331 Reclaim Water-St Pete Bch <sup>(2)</sup>	54,086	49,488	56,916	53,497
19 3435332 Reclaim Water-So Pasadena <sup>(2)</sup>	11,945	10,892	12,545	11,794
20 3435333 Reclaim Wtr-Pinellas Park <sup>(2)</sup>	97,623	88,885	88,865	91,791
21 3435334 Reclaim Wtr-Belleair <sup>(2)</sup>	8,255	4,819	2,347	5,140
22 3435502 Laboratory Services	211,284	205,997	200,000	205,760
23 3435601 Fat / Oil / Grease Tip Fees	226,263	226,263	238,168	230,231
24 3435701 Pelletized Sludge Sales	193,418	191,634	200,000	195,017
25 3699305 Inter-Reimb-External-Other	281,620	113,616	175,000	190,079
26 3312001 Fed Grant-Public Safety	556,936	-	593,330	383,422
27 Total Other Operating Revenue	\$ 4,166,317	3,513,594	4,371,808	\$ 4,017,240
<b>28 TOTAL OFF-SETTING REVENUES - SEWER TREATMENT &amp; DISPOSAL</b>	<b>\$ 4,418,932</b>	<b>3,899,970</b>	<b>4,931,105</b>	<b>\$ 4,416,669</b>
<b>29 OFF-SETTING REVENUES - SEWER COLLECTION &amp; TRANSMISSION:</b>				
30 <u>Interest Income - O &amp; M and R &amp; R</u>				
31 Allocation to Sewer Collection & Transmission <sup>(3)</sup>	\$ 304,682	466,012	674,574	\$ 481,756
32 <u>Other Operating Revenue</u>				
33 3435320 Reclaimed Water Svc Chrg <sup>(2)</sup>	2,724,839	2,838,160	3,067,941	2,876,980
34 3435322 Ws Reclaimed Meter Sv Chr <sup>(2)</sup>	1,613	1,613	1,696	1,641
35 3435331 Reclaim Water-St Pete Bch <sup>(2)</sup>	61,868	56,608	65,105	61,194
36 3435332 Reclaim Water-So Pasadena <sup>(2)</sup>	13,664	12,459	14,350	13,491
37 3435333 Reclaim Wtr-Pinellas Park <sup>(2)</sup>	111,668	101,674	101,651	104,998
38 3435334 Reclaim Wtr-Belleair <sup>(2)</sup>	9,442	5,512	2,685	5,880
39 3251100 Capital Imprvmnt Assessmt	5	-	-	2
40 3435120 Tapping Fees	22,184	83,285	25,000	43,490
41 3435160 Connection Fees-Interest	470	470	495	478
42 3435121 Sewer-Late Payment Fee	-	516,715	589,474	368,730
43 3435570 Miscellaneous Revenue	41,382	44,174	45,000	43,519
44 3490010 Chg For Sv-Bad Debt Ex	(53,391)	2,266	-	(17,042)
45 3644100 Sale Of Surplus Equipment	323,084	53,615	35,000	137,233
46 3644200 Ins Proceeds-Furn/Fxtr/Eq	16,224	24,025	20,000	20,083
47 3650003 Scrap Sales	12,867	17,599	1,000	10,489
48 3699350 Refund Of Prior Yrs Exp	1,235	(1,030)	-	68
49 3699990 Overage & Shortage	(4)	-	-	(1)
50 3699991 Other Misc Revenue	34,280	16,148	-	16,809
51 3898351 Cap Con-Pvt-Swr Connectn	1,361,442	601,400	900,000	954,281
52 3621008 Rents - Bldg/Space	126,269	169,344	175,000	156,871
53 Total Other Operating Revenue	\$ 4,809,141	4,544,037	5,044,396	\$ 4,799,191
<b>54 TOTAL OFF-SETTING REVENUES - SEWER COLLECTION &amp; TRANSMISSION</b>	<b>\$ 5,113,823</b>	<b>5,010,049</b>	<b>5,718,970</b>	<b>\$ 5,280,947</b>
<b>55 TOTAL OFF-SETTING REVENUES - COMBINED SEWER SYSTEM</b>	<b>\$ 9,532,755</b>	<b>8,910,019</b>	<b>10,650,075</b>	<b>\$ 9,697,616</b>

(1) Based upon the 3-year average of total Operating, Administrative & Capital Expenses directly assignable to Sewer Treatment & Disposal.

(2) Allocation between Sewer Treatment & Disposal and Sewer Collection & Transmission based on allocation of revenue requirement, shown in Schedule 1.

(3) Based upon the 3-year average of total Operating, Administrative & Capital Expenses directly assignable to Sewer Collection & Transmission.

## **APPENDIX E: SUPPORTING SCHEDULES FOR RECLAIMED WATER COSA**

**Schedule 1 Allocation of Sewer System FY 2019 O&M Costs by Cost Center to Reclaimed Water**

**Schedule 2 Summary of Sewer and Reclaimed Water Allocation Factors**

**Schedule 3 Allocation of Sewer System New Capital Expenditures to Reclaimed Water**

**Schedule 4 Calculation of Historical Capital Investment in Reclaimed Water**

**Schedule 5 Allocation of FY 2019 Reclaimed Water Revenue Requirements to System Functions**

**Schedule 6 Summary of Reclaimed Water Cost of Service Allocations to Functions and Customer Classes**

OPERATING & MAINTENANCE EXPENSES											
	Maintenance North & South	SCADA	Laboratories	Monitoring	South Operations (South Cross)	Code Enforcement	Wholesale Wastewater	North Operations (Dunn)	Purchase of Reclaim (Water)	Field Services	Technical Services
	431250	431330	431340	431350	431360	431370	435110	435120	435130	431070	431240
<b>FY 2019 TEST YEAR (1)</b>	\$ 5,756,562	751,352	1,693,300	1,115,025	17,577,564	69,442	1,067,000	6,408,926	87,300	765,844	340,616
Allocation Criteria	WTD	EST	EST	WTD	EST	RW	S	EST	RW	CUS	WTD
Sewer Allocation %	85%	90%	90%	85%	85%	0%	100%	85%	0%	76%	85%
Reclaimed Allocation %	15%	10%	10%	15%	15%	100%	0%	15%	100%	24%	15%
Sewer Costs	\$ 4,882,858	676,217	1,523,970	945,792	14,940,929	-	1,067,000	5,447,587	-	579,351	288,918
Reclaimed Costs	\$ 873,704	75,135	169,330	169,233	2,636,635	69,442	-	961,339	87,300	186,493	51,697

(1) FY 2019 Test Year expenses are based on the FY 2019 Proposed Budget, executed at 97%.

GENERAL & ADMINISTRATIVE EXPENSES						
	Facility Maintenance	Water & Sewer Administration	Utilities Engineering	Customer Service	OPEB Contribution	TOTAL O&M
	431040	431130	431050	431085		
<b>FY 2019 TEST YEAR (1)</b>	585,676	6,463,673	4,194,794	3,209,885	887,868	\$ 50,974,827
Allocation Criteria	FA	WTD	CIP	CUS	WTD	
Sewer Allocation %	80%	85%	89%	76%	85%	84.82%
Reclaimed Allocation %	20%	15%	11%	24%	15%	15.18%
Sewer Costs	468,569	5,482,647	3,752,921	2,428,237	753,112	\$ 43,238,110
Reclaimed Costs	117,107	981,026	441,873	781,648	134,756	\$ 7,736,717

(1) FY 2019 Test Year expenses are based on the FY 2019 Proposed Budget, executed at 97%.

**Table 1: Allocation Criteria Legend**

Allocation Criteria	Code	Sewer	Reclaimed	Sewer %	Reclaimed %
FY 18 Revenues	REV	\$ 70,099,217	\$ 5,652,701	92.54%	7.46%
FY 17 Flows (in 1,000 gallons)	FLO	9,511,983	8,734,450	52.13%	47.87%
Customer Count	CUS	71,075	22,879	75.65%	24.35%
CIP	CIP	\$ 407,507,855	\$ 47,980,370	89.47%	10.53%
Fixed Assets	FA	\$ 741,217,130	\$ 185,248,502	80.00%	20.00%
Sewer Only	S			100.00%	0.00%
Reclaimed Only	RW			0.00%	100.00%
50% / 50%	50%			50.00%	50.00%
Weighted Average	WTD			84.82%	15.18%
Staff Estimate	EST			Input	Input

**Table 2: Reuse Flow and Customer Count Allocation**

Customer	FY17 Flows	FY17 Cust.
Belleair	160,885	1
Pinellas Park	953,677	1
S. Pasadena	1,621,810	1
St. Pete Beach	1,101,490	1
<b>Total Wholesale</b>	<b>3,837,862</b>	<b>4</b>
Retail	4,896,588	22,875
<b>Total</b>	<b>8,734,450</b>	<b>22,879</b>
Retail Monthly Use / Account	17,838	

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	TOTAL	% Sewer	% Reuse
<b>CAPITAL PROJECT</b>														
1 000744A - MISCELLANEOUS IMPROVEMENTS	\$ 550,000	1,033,300	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	\$ 2,933,300	100%	0%
2 000791A - FDOT RELOCATION PROJECTS MISCELLANEOUS	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,100,000	100%	0%
3 000831A - Water, Sewer and Reclaimed Water Relocation Projects	150,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	750,000	0%	100%
4 000847A - SOUTH CROSS BAYOU WASTEWATER TREATMENT FACILITY UPGRADE	900,000	500,000	500,000	1,000,000	2,000,000	2,000,000	2,000,000	-	-	-	-	8,900,000	100%	0%
5 000852A - W.E. DUNN WASTEWATER TREATMENT FACILITY UPGRADES AND REPAIR	2,030,000	500,000	800,000	800,000	800,000	1,000,000	2,000,000	-	-	-	-	7,930,000	100%	0%
6 000964A - Annual Contract Sanitary Sewer Pump Station Repair, Rehabilitation	2,000,000	1,500,000	1,500,000	1,500,000	1,500,000	2,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	25,000,000	100%	0%
7 001039B - Park St/Starkey Rd. 84th Lane to N. of 82nd Ave Utilities	170,000	-	-	-	-	-	-	-	-	-	-	170,000	100%	0%
8 001057A - General Upgrades to Supervisory Control and Data Acquisition (SCADA)	164,500	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	6,164,500	100%	0%
9 001272A - Sanitary Sewer Repair, Rehabilitation & Extension	6,000	-	-	-	415,000	415,000	415,000	415,000	415,000	415,000	415,000	2,911,000	100%	0%
10 001272B - Annual Sanitary Sewer Repair and Extension Program	424,000	-	-	-	-	-	-	-	-	-	-	424,000	100%	0%
11 001272C - Annual Sewer Repair FY19-21	-	70,000	415,000	415,000	-	-	-	-	-	-	-	900,000	100%	0%
12 001517A - Subaqueous Crossings (Boca Ciega)	5,000,000	-	-	-	-	-	-	-	-	-	-	5,000,000	100%	0%
13 001589A - Pass A Grille Improvements	30,000	-	-	-	-	-	-	-	-	-	-	30,000	0%	100%
14 001589B - Pass A Grille Water Transmission and Distribution Main Relocations	150,000	100,000	-	-	-	-	-	-	-	-	-	250,000	0%	100%
15 001814A - Sanitary Sewer Manhole Rehab Project	-	-	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	2,880,000	100%	0%
16 001814B - Sanitary Sewer Manhole Rehabilitation FY17-FY19	150,000	350,000	-	-	-	-	-	-	-	-	-	500,000	100%	0%
17 001933A - Sanitary Sewer Cured In Place Pipe Lining	5,000	10,000	-	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000	16,415,000	100%	0%
18 001933B - Annual Sanitary Sewer Cured In Place Pipe Lining- Countywide	10,000	-	-	-	-	-	-	-	-	-	-	10,000	100%	0%
19 001933C - Annual Sewer Cured In Place Pipelining- Madeira beach, Gulfport	850,000	520,000	-	-	-	-	-	-	-	-	-	1,370,000	100%	0%
20 001933D - Annual Sewer CIPP - Tarpon Springs, Palm Harbor, Curlew City	-	1,550,000	-	-	-	-	-	-	-	-	-	1,550,000	100%	0%
21 001933E - Annual Sewer CIPP - Bardmoor, Kenneth City	-	660,000	-	-	-	-	-	-	-	-	-	660,000	100%	0%
22 001933F - Annual Sewer CIPP - Belleair, Belleair Bluffs	-	-	1,210,000	-	-	-	-	-	-	-	-	1,210,000	100%	0%
23 001933G - Annual Sewer CIPP - Ridgewood, Oakhurst, Belleair Beach, N. Lak	-	-	1,210,000	-	-	-	-	-	-	-	-	1,210,000	100%	0%
24 002149A - Water & Sewer Operations Center	-	200,000	760,000	1,559,500	-	-	-	-	-	-	-	2,719,500	100%	0%
25 002160A - Pump Station 016/Park Blvd Force Main to South Cross Bayou Rep	641,000	6,500,000	5,000,000	-	-	-	-	-	-	-	-	12,141,000	100%	0%
26 002165A - Cured-in-Place Pipe Lining in 54" Reconnect Service Line	1,800,000	-	-	-	-	-	-	-	-	-	-	1,800,000	100%	0%
27 002166A - Centrifuge Upgrade	800,000	500,000	2,000,000	7,500,000	3,000,000	-	-	-	-	-	-	13,800,000	100%	0%
28 002206A - Headwork's Barscreen Replacement @ W.E. DUNN	1,650,000	-	-	-	-	-	-	-	-	-	-	1,650,000	100%	0%
29 002246A - Annual Water / Reclaimed Installation and Repair	100,000	100,000	254,000	254,000	254,000	254,000	254,000	254,000	254,000	254,000	254,000	2,486,000	100%	0%
30 002346A - Indian Rocks Sewer Rehabilitation	400,000	200,000	-	-	-	-	-	-	-	-	-	600,000	100%	0%
31 002346B - Indian Rocks Sewer CIPP - Phase 1	-	300,000	-	-	-	-	-	-	-	-	-	300,000	100%	0%
32 002346C - Indian Rocks Sewer CIPP - Phase 2	-	200,000	-	-	-	-	-	-	-	-	-	200,000	100%	0%
33 002415A - WE DUNN Rotary Drum Thickener Replacement	1,825,000	-	-	-	-	-	-	-	-	-	-	1,825,000	100%	0%
34 002709A - SCB Generator Building #1 Electrical Improvements	200,000	1,400,000	-	-	-	-	-	-	-	-	-	1,600,000	100%	0%
35 002747A - Large Diameter Sanitary Sewer Interceptor Rehabilitation with CIP	910,000	-	-	-	-	-	-	-	-	-	-	910,000	100%	0%
36 002747B - Sewer Interceptor Rehabilitation- Bryan Dairy and 102nd Ave	245,000	50,000	-	-	-	-	-	-	-	-	-	295,000	100%	0%
37 002747C - Sewer Interceptor Rehabilitation 94th Ave to 86th Ave	150,000	200,000	-	-	-	-	-	-	-	-	-	350,000	100%	0%
38 002747D - Sewer Interceptor Rehabilitation from 86th Ave to Pump Station 0	150,000	400,000	-	-	-	-	-	-	-	-	-	550,000	100%	0%
39 002747E - Sewer Interceptor Rehabilitation North Lake Seminole	70,000	220,000	-	-	-	-	-	-	-	-	-	290,000	100%	0%
40 002747F - Sanitary Sewer Interceptor Pipe Rehabilitation - Bee Pond Road	-	200,000	-	-	-	-	-	-	-	-	-	200,000	100%	0%
41 002747G - Sanitary Sewer Interceptor Pipe Rehabilitation - 109th St.	-	-	300,000	-	-	-	-	-	-	-	-	300,000	100%	0%
42 002747H - Sanitary Sewer Interceptor Pipe Rehabilitation -74th Ave	-	-	200,000	-	-	-	-	-	-	-	-	200,000	100%	0%
43 002747I - Sanitary Sewer Interceptor Pipe Rehabilitation -Lealman	-	-	300,000	-	-	-	-	-	-	-	-	300,000	100%	0%
44 002747J - Sanitary Sewer Interceptor Pipe Rehabilitation - Hamlin Blvd and 4	-	100,000	-	-	-	-	-	-	-	-	-	100,000	100%	0%
45 002747K - Sanitary Sewer Interceptor Pipe Rehabilitation - Seminole By-Pass	-	120,000	-	-	-	-	-	-	-	-	-	120,000	100%	0%
46 002783A - Utilities Relocations Mitchell's Beach, Boca Ciega, City of Madeira	80,000	-	-	-	-	-	-	-	-	-	-	80,000	30%	70%
47 002789B - City of Treasure Island Sunset Beach Watershed Phase VI	110,000	-	-	-	-	-	-	-	-	-	-	110,000	0%	100%
48 002791C - P5119 Basin Repairs	350,000	350,000	-	-	-	-	-	-	-	-	-	700,000	100%	0%
49 002826A - South Cross Bayou Water Reclamation Facility North Train Anoxic	1,400,000	-	-	-	-	-	-	-	-	-	-	1,400,000	100%	0%
50 002827A - South Cross Bayou Water Reclamation Facility Fall Protection Pha	1,500,000	-	-	-	-	-	-	-	-	-	-	1,500,000	100%	0%
51 002936B - Corey Causeway Bridge 20 Inch Reclaimed Water Repair	20,000	180,000	-	-	-	-	-	-	-	-	-	200,000	0%	100%
52 002937A - South Cross Bayou Aeration Improvements	75,000	200,000	2,300,000	2,100,000	-	-	-	-	-	-	-	4,675,000	100%	0%
53 002938A - South Cross Bayou Biosolids Process Train Improvements	-	-	-	3,000,000	3,000,000	3,000,000	-	-	-	-	-	9,000,000	100%	0%
54 002939A - South Cross Bayou Co-Generation Improvement	-	-	200,000	1,800,000	100,000	900,000	-	-	-	-	-	3,000,000	100%	0%
55 002940A - South Cross Bayou South Train Blower Improvements	-	-	-	-	200,000	350,000	1,180,000	-	-	-	-	1,730,000	100%	0%
56 002941A - South Cross Bayou High Service Pump Improvements	-	-	-	150,000	1,535,000	365,000	-	-	-	-	-	2,050,000	0%	100%
57 002942A - Pump Station 016 Odor Control Improvements	100,000	1,400,000	-	-	-	-	-	-	-	-	-	1,500,000	100%	0%
58 002944A - South Cross Bayou Grit Facility Improvements	500,000	4,500,000	9,000,000	2,000,000	-	-	-	-	-	-	-	16,000,000	100%	0%
59 002992B - Pump Station 122 Collection System and Bulkhead Wall Improvem	200,000	600,000	-	-	-	-	-	-	-	-	-	800,000	100%	0%
60 002992C - Pinellas Park Master Meter Replacement	200,000	-	-	-	-	-	-	-	-	-	-	200,000	100%	0%
61 003122B - Dunn Filtration and Disinfection Improvements	50,000	500,000	2,800,000	4,600,000	-	-	-	-	-	-	-	7,950,000	100%	0%
62 003123A - Countywide Sewer Force Main Air Release Valve Replacement	-	-	500,000	500,000	500,000	500,000	-	500,000	500,000	500,000	500,000	4,000,000	100%	0%
63 003123D - Air Release Valve Replacement FY18	-	-	-	-	-	-	-	-	-	-	-	-	100%	0%
64 003123I - Omaha Street Air Release Valves	250,000	-	-	-	-	-	-	-	-	-	-	250,000	100%	0%
65 003123J - ARV Hamlin Road and Nearby Design	60,000	150,000	-	-	-	-	-	-	-	-	-	210,000	100%	0%
66 003123K - ARV Diston Ave	50,000	125,000	-	-	-	-	-	-	-	-	-	175,000	100%	0%
67 003123L - ARV Highland Ave	60,000	175,000	-	-	-	-	-	-	-	-	-	235,000	100%	0%
68 003124A - Pump Station No. 190 Upgrades and Force Main Improvements	160,000	1,100,000	300,000	-	-	-	-	-	-	-	-	1,560,000	100%	0%
69 003142A - Pump Station No. 357 Upgrades and Force Main Improvements	150,000	500,000	-	-	-	-	-	-	-	-	-	650,000	100%	0%
70 003147A - Pinellas Park Interceptor Collection System Improvements	-	-	-	-	500,000	1,500,000	5,000,000	-	-	-	-	7,000,000	100%	0%
71 003204F - Pump Station 054 Forcemain Extension	180,000	20,000	-	-	-	-	-	-	-	-	-	200,000	100%	0%
72 003204H - Sanitary Sewer Overflow Abatement CIP	-	-	700,000	700,000	-	-	-	-	-	-	-	1,400,000	100%	0%
73 003204I - SSO Abatement - 82nd Avenue Sewer capacity Improvement	60,000	200,000	-	-	-	-	-	-	-	-	-	260,000	100%	0%
74 003204J - SSO Abatement - 62nd St Sewer capacity Improvement	60,000	200,000	-	-	-	-	-	-	-	-	-	260,000	100%	0%

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	TOTAL	% Sewer	% Reuse
<b>CAPITAL PROJECT</b>														
75 003205A - Pump Station 079 Improvements (North Redington Beach)	55,000	-	1,400,000	1,100,000	-	-	-	-	-	-	-	2,555,000	100%	0%
76 003206A - Pump Station 018 Improvements (Seminole)	20,000	610,000	-	-	-	-	-	-	-	-	-	630,000	100%	0%
77 003207A - McKay Creek Reclaimed Water Pump Station Tank Improvement	100,000	910,000	-	-	-	-	-	-	-	-	-	1,010,000	0%	100%
78 003208A - South Cross Bayou Sludge Holding Tank and Digester Mixing Improvements	200,000	2,000,000	-	-	-	-	-	-	-	-	-	2,200,000	100%	0%
79 003210C - Inisbrook Force Main Improvements	3,500,000	-	-	-	-	-	-	-	-	-	-	3,500,000	100%	0%
80 003210H - Force Main and ARV Replacement - Klosterman Road and Diston	80,000	350,000	-	-	-	-	-	-	-	-	-	430,000	100%	0%
81 003239A - Pump Station and Collection System Odor Control Equipment	50,000	10,000	-	-	-	-	-	-	-	-	-	60,000	100%	0%
82 003239B - Pump Station 109 Odor Control	50,000	10,000	-	-	-	-	-	-	-	-	-	60,000	100%	0%
83 003239C - Pump Station 072 Odor Control	35,000	10,000	-	-	-	-	-	-	-	-	-	45,000	100%	0%
84 003239D - Manhole Odor Control (Culvers/PS016)	40,000	50,000	-	-	-	-	-	-	-	-	-	90,000	100%	0%
85 003407A - South Cross Bayou Pavement Rehabilitation	-	-	-	-	750,000	-	-	-	-	-	-	750,000	100%	0%
86 003408A - South Cross Bayou Denitrification Filter Rehab	-	-	-	300,000	2,200,000	2,200,000	-	-	-	-	-	4,700,000	100%	0%
87 003409A - Dunn Electrical Upgrades	120,000	400,000	1,000,000	2,000,000	-	-	-	-	-	-	-	3,520,000	100%	0%
88 003430A - Dunn Sludge Press Upgrades	-	-	200,000	2,000,000	-	-	-	-	-	-	-	2,200,000	100%	0%
89 003431A - Dunn Pond Liner and Reject Tank	-	-	-	-	500,000	3,000,000	13,000,000	-	-	-	-	16,500,000	0%	100%
90 003432A - Dunn Odor Control System	-	100,000	500,000	800,000	3,000,000	-	-	-	-	-	-	4,400,000	100%	0%
91 003433A - Dunn Storage Building	-	-	-	-	-	500,000	-	-	-	-	-	500,000	100%	0%
92 003438A - Dunn Ditch Erosion	-	600,000	-	-	-	-	-	-	-	-	-	600,000	0%	100%
93 003508A - Southcross Emergency Manhole Replacement	130,000	-	-	-	-	-	-	-	-	-	-	130,000	100%	0%
94 003605A - Gravity Sewer Ductal Iron Pipe Rehab Program throughout the CO	-	-	500,000	500,000	500,000	-	-	-	-	-	-	1,500,000	100%	0%
95 003605B - Gravity Sewer DIP Rehabilitation Program	10,000	300,000	15,000	-	-	-	-	-	-	-	-	325,000	100%	0%
96 003605C - Gravity Sewer DIP Rehabilitation Program - Curlew	10,000	80,000	-	-	-	-	-	-	-	-	-	90,000	100%	0%
97 003746A - WED Grit Capture System Improvements	-	-	-	150,000	200,000	3,000,000	2,500,000	-	-	-	-	5,850,000	100%	0%
98 003747A - WE Dunn Offsite Reclaim Pump Station Improvements	-	-	-	-	400,000	2,200,000	2,200,000	-	-	-	-	4,800,000	0%	100%
99 003748A - Gulf Blvd - Relocations @ the Narrows	50,000	500,000	500,000	-	-	-	-	-	-	-	-	1,050,000	50%	50%
100 003749A - SCB Reclaim Loop Upgrades	75,000	500,000	-	-	-	-	-	-	-	-	-	575,000	0%	100%
101 003750A - WE Dunn Internal Recycle Pump Station Rehabilitation	-	200,000	300,000	500,000	-	-	-	-	-	-	-	1,000,000	100%	0%
102 003751A - WE Dunn Mixer/Aeration Improvements	-	-	-	-	200,000	1,100,000	1,100,000	-	-	-	-	2,400,000	100%	0%
103 003752A - WE Dunn Center Train Weir Gate Replacement	-	-	-	-	200,000	800,000	-	-	-	-	-	1,000,000	100%	0%
104 003753A - WE Dunn Second Stage Aeration Improvements	-	-	-	-	200,000	1,100,000	1,100,000	-	-	-	-	2,400,000	100%	0%
105 003754A - Logan Laboratory Chiller Yard Replacement	-	280,000	-	-	-	-	-	-	-	-	-	280,000	100%	0%
106 003755A - SCB Fog system Upgrades	-	100,000	-	-	-	-	-	-	-	-	-	100,000	100%	0%
107 003756A - SCB Plant Lighting Upgrades	-	200,000	-	-	-	-	-	-	-	-	-	200,000	100%	0%
108 003757A - South Cross Bayou Clarifier Drain Improvements	-	250,000	250,000	-	-	-	-	-	-	-	-	500,000	100%	0%
109 003758A - South Cross Bayou Influent Pump Station Improvements	-	-	-	200,000	500,000	1,000,000	1,500,000	-	-	-	-	3,200,000	100%	0%
110 003759A - South Cross Bayou Administration Building Improvements	-	-	-	-	50,000	300,000	1,000,000	-	-	-	-	1,350,000	100%	0%
111 003760A - Force Main Capacity Improvements - East Lake Road	-	-	-	100,000	4,000,000	2,500,000	-	-	-	-	-	6,600,000	100%	0%
112 003761A - Force Main Capacity Improvements - Highland Lakes FM	-	-	-	-	150,000	4,000,000	3,500,000	-	-	-	-	7,650,000	100%	0%
113 003762A - Pump Station Generator Improvements	-	2,000,000	2,000,000	-	-	-	-	-	-	-	-	4,000,000	100%	0%
114 003763A - Utilities Facilities Security	-	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	1,200,000	100%	0%
115 003765A - Quantum and Unity Upgrade	-	500,000	2,000,000	1,500,000	-	-	-	-	-	-	-	4,000,000	100%	0%
116 003766A - SCB Force Main Sampling Skids	-	-	20,000	300,000	-	-	-	-	-	-	-	320,000	100%	0%
117 003769A - Reclaimed Water Meters	50,000	600,000	600,000	600,000	2,100,000	2,100,000	2,100,000	600,000	2,100,000	2,100,000	2,100,000	15,050,000	0%	100%
118 New Customer Information System	-	-	3,000,000	-	-	-	-	-	-	-	-	3,000,000	100%	0%
119 Unspecified Future Capital	-	-	-	-	-	-	-	27,000,000	27,000,000	27,000,000	27,000,000	108,000,000	100%	0%
120 R&R From Various Cost Centers	77,124	-	-	-	-	-	-	-	-	-	-	77,124	85%	15%
121 Capital Outlay	1,781,221	3,085,150	3,145,257	3,214,453	3,291,599	3,364,015	3,448,115	3,530,870	3,619,142	3,709,620	3,802,361	35,991,802	85%	15%
<b>122 Total Project Costs (Future \$)</b>	<b>\$ 33,678,845</b>	<b>42,208,450</b>	<b>47,449,257</b>	<b>43,463,453</b>	<b>37,305,099</b>	<b>42,848,015</b>	<b>48,697,115</b>	<b>38,699,870</b>	<b>40,288,142</b>	<b>40,378,620</b>	<b>40,471,361</b>	<b>\$ 455,488,226</b>		
122 Capital Improvement Plan Total	\$ 31,897,624	\$ 39,123,300	\$ 44,304,000	\$ 40,249,000	\$ 34,013,500	\$ 39,484,000	\$ 45,249,000	\$ 35,169,000	\$ 36,669,000	\$ 36,669,000	\$ 36,669,000	\$ 419,496,424		
123 Capital Outlay Total	\$ 1,781,221	\$ 3,085,150	\$ 3,145,257	\$ 3,214,453	\$ 3,291,599	\$ 3,364,015	\$ 3,448,115	\$ 3,530,870	\$ 3,619,142	\$ 3,709,620	\$ 3,802,361	\$ 35,991,802		
124 Sewer Project Costs	\$ 32,630,794	38,540,201	46,061,885	42,165,578	32,210,516	34,612,440	30,813,776	37,503,971	37,578,845	37,655,592	37,734,256	\$ 407,507,855		
<b>125 Reclaimed Projects Costs</b>	<b>\$ 1,048,051</b>	<b>3,668,249</b>	<b>1,387,372</b>	<b>1,297,874</b>	<b>5,094,583</b>	<b>8,235,574</b>	<b>17,883,339</b>	<b>1,195,899</b>	<b>2,709,296</b>	<b>2,723,029</b>	<b>2,737,104</b>	<b>\$ 47,980,370</b>		
												<b>\$ 455,488,226</b>		
Portion Attributed to Reclaimed:	3.11%	8.69%	2.92%	2.99%	13.66%	19.22%	36.72%	3.09%	6.72%	6.74%	6.76%	10.53%		



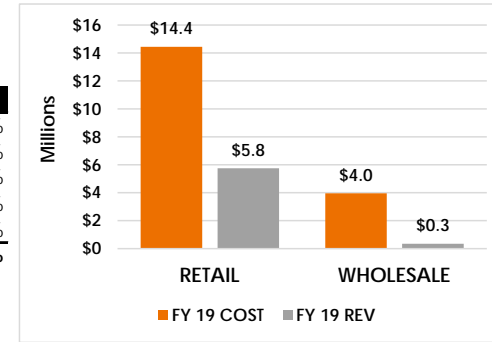
	<b>As of 9/30/2017</b>	
Fixed Assets	185,248,502	
Less: Estimated Grant Funding/Contributed Capital <sup>(1)</sup>	\$ (29,030,703)	16%
<b>Total Historical Investment</b>	<b>156,217,799</b>	
	<u>% Bond Funded</u>	<u>% Cash Funded</u>
Allocation %	80%	20%
Assumed Term of the Debt (Years)	30	50
Assumed Interest Rate	3.00%	N/A
Annual Debt Service	\$ 6,376,093	N/A
Annual Depreciation	N/A	\$ 624,871
<b>Total Annual Amortization</b>		<b>\$ 7,000,964</b>

(1) Represents reimbursements from Southwest Florida Water Management District, Indian Rocks Beach, Bay Pines, and estimated contributed capital.

	FY 2019 Test Year	Allocation Factor	Customer	Treatment/Production	Transmission	Distribution	HSP & Storage	Total Allocation	\$ Customers	\$ Treatment/Production	\$ Transmission	\$ Distribution	\$ HSP & Storage
<b>OPERATING &amp; MAINTENANCE EXPENSES:</b>													
431250 Maintenance North & South	\$ 873,704	Production	0%	75%	0%	0%	25%	100%	\$ -	655,278	-	-	218,426
431330 SCADA	75,135	LF of Pipe	0%	0%	30%	70%	0%	100%	-	-	22,749	52,386	-
431340 Laboratories	169,330	Production	0%	75%	0%	0%	25%	100%	-	126,997	-	-	42,332
431350 Monitoring	169,233	Production	0%	75%	0%	0%	25%	100%	-	126,925	-	-	42,308
431360 South Operations (South Cross)	2,636,635	Production	0%	75%	0%	0%	25%	100%	-	1,977,476	-	-	659,159
431370 Code Enforcement	69,442	Customer	100%	0%	0%	0%	0%	100%	69,442	-	-	-	-
435110 Wholesale Wastewater	-	Production	0%	75%	0%	0%	25%	100%	-	-	-	-	-
435120 North Operations (Dunn)	961,339	Production	0%	75%	0%	0%	25%	100%	-	721,004	-	-	240,335
435130 Purchase of Reclaim (Water)	87,300	Production	0%	75%	0%	0%	25%	100%	-	65,475	-	-	21,825
431330 SCADA	186,493	LF of Pipe	0%	0%	30%	70%	0%	100%	-	-	56,466	130,027	-
431350 Monitoring	51,697	LF of Pipe	0%	0%	30%	70%	0%	100%	-	-	15,653	36,044	-
<b>TOTAL RECLAIMED O&amp;M EXPENSES</b>	<b>\$ 5,280,308</b>								<b>\$ 69,442</b>	<b>\$ 3,673,155</b>	<b>\$ 94,868</b>	<b>\$ 218,457</b>	<b>\$ 1,224,385</b>
									1%	70%	2%	4%	23%
<b>GENERAL &amp; ADMINISTRATIVE EXPENSES:</b>													
431040 Facility Maintenance	\$ 117,107	Weighted	13%	30%	19%	21%	17%	100%	\$ 15,283	34,860	22,479	24,555	19,930
431130 Water & Sewer Administration	981,026	Weighted	13%	30%	19%	21%	17%	100%	128,031	292,027	188,310	205,698	166,960
431010 DEI Administrative Support	-	Weighted	13%	30%	19%	21%	17%	100%	-	-	-	-	-
431020 Financial Reporting	-	Weighted	13%	30%	19%	21%	17%	100%	-	-	-	-	-
431030 Information Management	-	Weighted	13%	30%	19%	21%	17%	100%	-	-	-	-	-
431065 Human Resources	-	Weighted	13%	30%	19%	21%	17%	100%	-	-	-	-	-
431080 Revenue Management	-	Weighted	13%	30%	19%	21%	17%	100%	-	-	-	-	-
431050 - Utilities Engineering	441,873	CIP	34%	23%	4%	8%	31%	100%	149,450	102,124	16,938	34,872	138,490
431085 - Customer Service	781,648	Customer	100%	0%	0%	0%	0%	100%	781,648	-	-	-	-
OPEB Contribution	134,756	Weighted	13%	30%	19%	21%	17%	100%	17,587	40,114	25,867	28,255	22,934
<b>TOTAL GENERAL &amp; ADMINISTRATIVE EXPENSES</b>	<b>\$ 2,456,410</b>								<b>\$ 1,091,999</b>	<b>\$ 469,124</b>	<b>\$ 253,594</b>	<b>\$ 293,379</b>	<b>\$ 348,314</b>
<b>CAPITAL COSTS:</b>													
New Capital	\$ 3,668,249	CIP	34%	23%	4%	8%	31%	100%	\$ 1,240,671	847,792	140,609	289,490	1,149,688
Historical Capital	7,000,964	Fixed Assets	0%	7%	43%	44%	6%	100%	-	488,911	3,043,996	3,057,958	410,099
<b>TOTAL CAPITAL COSTS</b>	<b>\$ 10,669,214</b>								<b>\$ 1,240,671</b>	<b>\$ 1,336,703</b>	<b>\$ 3,184,606</b>	<b>\$ 3,347,448</b>	<b>\$ 1,559,787</b>
<b>Total Expenditures</b>	<b>\$ 18,405,931</b>								<b>\$ 2,402,112</b>	<b>\$ 5,478,982</b>	<b>\$ 3,533,068</b>	<b>\$ 3,859,284</b>	<b>\$ 3,132,486</b>
% Allocation by Function									13.1%	29.8%	19.2%	21.0%	17.0%

FY 19 Revenue vs Expenses	Revenues	Expenses	% Recovery
Reclaimed Water	\$ 6,097,642	\$ 18,405,931	33.1%
<b>Total</b>	<b>\$ 6,097,642</b>	<b>\$ 18,405,931</b>	

RECLAIMED COST ALLOCATION	O&M	Capital	Total	COS %
Customer	\$ 1,161,441	1,240,671	\$ 2,402,112	13.1%
Treatment/ Production	4,142,279	1,336,703	5,478,982	29.8%
Transmission	348,462	3,184,606	3,533,068	19.2%
Distribution	511,836	3,347,448	3,859,284	21.0%
HSP & Storage	1,572,699	1,559,787	3,132,486	17.0%
<b>Total Cost Allocation</b>	<b>\$ 7,736,717</b>	<b>10,669,214</b>	<b>\$ 18,405,931</b>	<b>100.0%</b>



Units of Service	UNITS OF SERVICE					TOTAL
	TREATMENT 1,000 gals	TRANSMISSION 1,000 gals	DISTRIBUTION 1,000 gals	HSP & STORAGE 1,000 gals	CUSTOMER BILLS	
Retail	4,896,588	4,896,588	4,896,588	4,896,588	137,250	
Wholesale	3,837,862	3,837,862			24	
<b>Retail Allocation</b>	\$ 3,071,552	\$ 1,980,660	\$ 3,859,284	\$ 3,132,486	\$ 2,401,692	\$ 14,445,674
<b>Wholesale Allocation</b>	\$ 2,407,430	\$ 1,552,408	\$ -	\$ -	\$ 420	\$ 3,960,258
<b>Total Allocation</b>						\$ 18,405,931
<b>Unit Cost of Service (COS)</b>	per kgal \$0.63	per kgal \$0.40	per kgal \$0.79	per kgal \$0.64	per bi-monthly bill \$17.50	

## APPENDIX F: SUPPORTING SCHEDULES FOR RATE DESIGN

**Schedule 1 Recommended Water and Sewer Rate Schedules: FY 2020 – FY 2023**

**Schedule 2 Recommended Reclaimed Water Rate Schedule: FY 2020 – FY 2023**

**Schedule 3 FY 2020 Residential Customer Water & Sewer Bill Impacts**

**Schedule 4 FY 2020 Commercial Customer Water & Sewer Bill Impacts**

**Schedule 5 Reclaimed Water Customer Bill Impacts**

**Recommended Water Rates****FY 2020 FY 2021 FY 2022 FY 2023****Retail Water Rates**

Base Rate (per customer per month):

3/4"	\$ 6.80	\$ 6.80	\$ 6.80	\$ 6.80
1"	\$ 9.35	\$ 11.90	\$ 14.45	\$ 17.00
1 1/2"	\$ 13.60	\$ 20.40	\$ 27.20	\$ 34.00
2"	\$ 18.70	\$ 30.60	\$ 42.50	\$ 54.40
3"	\$ 32.30	\$ 57.80	\$ 83.30	\$ 108.80
4"	\$ 47.60	\$ 88.40	\$ 129.20	\$ 170.00
6"	\$ 90.10	\$ 173.40	\$ 256.70	\$ 340.00
8"	\$ 141.10	\$ 275.40	\$ 409.70	\$ 544.00

Volumetric Rate (per 1,000 Gallons)	\$ 5.13	\$ 5.13	\$ 5.13	\$ 5.13
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**Wholesale Water Rates**

Volumetric Rate (per 1,000 Gallons)	\$ 4.1742	\$ 4.2159	\$ 4.2581	\$ 4.3007
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**Recommended Sewer Rates****FY 2020 FY 2021 FY 2022 FY 2023****Retail Sewer Rates**

Base Rate (per month) (1)	\$ 14.96	\$ 16.38	\$ 17.94	\$ 19.64
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(1) Per customer per month for residential customers, and per 5,000 gallons per month for commercial accounts.

Volumetric Rate (per 1,000 Gallons) (2)	\$ 5.46	\$ 5.98	\$ 6.55	\$ 7.17
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(2) Residential billed volume is capped at 10,000 gallons per month.

**Wholesale Sewer Rates**

Volumetric Rate (per 1,000 Gallons)	\$ 4.7139	\$ 5.1617	\$ 5.6521	\$ 6.1890
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Description	Rate Types	FY 2020	FY 2021	FY 2022	FY 2023
<b>Retail</b>					
<b>Funded/Un-Metered</b>	Monthly User Fee	\$ 22.00	\$ 22.00	\$ 22.00	\$ 22.00
	Bi-Monthly Billing Charge	\$ 3.75	\$ 3.75	\$ 3.75	\$ 3.75
<b>Unfunded/Un-Metered</b>	Monthly User Fee	\$ 17.50	\$ 19.00	\$ 20.50	\$ 22.00
	Monthly Availability Charge	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00
	Bi-Monthly Billing Charge	\$ 3.75	\$ 3.75	\$ 3.75	\$ 3.75
	Volumetric Rate (per KGAL) >15kgal per month	\$ 1.47	\$ 1.47	\$ 1.47	\$ 1.47
	Monthly Base Charge	\$ 22.00	\$ 22.00	\$ 22.00	\$ 22.00
	Bi-Monthly Billing Charge	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50
	Metered Interruptible (per KGAL)	\$ 0.139	\$ 0.160	\$ 0.184	\$ 0.212
	Volumetric Rate (per KGAL) >15kgal per month	\$ 1.47	\$ 1.47	\$ 1.47	\$ 1.47
	Monthly Base Charge	\$ 22.00	\$ 22.00	\$ 22.00	\$ 22.00
	Bi-Monthly Billing Charge	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50
	Monthly Availability Charge	\$ 7.00	\$ 7.00	\$ 7.00	\$ 7.00
	<b>Wholesale</b>				
<b>Belleair</b>	Metered Interruptible (per KGAL)	\$ 0.139	\$ 0.160	\$ 0.184	\$ 0.212
<b>Pinellas Park</b>	Volumetric Rate (per KGAL)	\$ 0.3031	\$ 0.3688	\$ 0.4344	\$ 0.5000
<b>South Pasadena</b>	Volumetric Rate (per MGAL)	\$ 212.05	\$ 308.03	\$ 404.02	\$ 500.00
<b>St. Pete Beach</b>	Volumetric Rate (per MGAL)	\$ 212.05	\$ 308.03	\$ 404.02	\$ 500.00

<b>3/4" Meter Water and Sewer Bill Calculations</b>				
<b>Monthly Use (Gal)</b>	<b>FY 2019 Rates</b>	<b>Proposed FY 2020 Rates</b>	<b>\$ Chg.</b>	<b>% Chg.</b>
< 1,000	\$20.46	\$21.76	\$1.30	6.3%
1,000	\$30.58	\$32.35	\$1.77	5.8%
2,000	\$40.70	\$42.95	\$2.25	5.5%
3,000	\$50.82	\$53.54	\$2.72	5.4%
4,000	\$60.94	\$64.13	\$3.19	5.2%
<b>5,000</b>	<b>\$71.06</b>	<b>\$74.73</b>	<b>\$3.67</b>	<b>5.2%</b>
6,000	\$81.18	\$85.32	\$4.14	5.1%
7,000	\$91.30	\$95.92	\$4.62	5.1%
8,000	\$101.42	\$106.51	\$5.09	5.0%
9,000	\$111.54	\$117.10	\$5.56	5.0%
10,000	\$121.66	\$127.70	\$6.04	5.0%
11,000	\$126.79	\$132.83	\$6.04	4.8%
12,000	\$131.92	\$137.96	\$6.04	4.6%
13,000	\$137.05	\$143.09	\$6.04	4.4%
14,000	\$142.18	\$148.22	\$6.04	4.2%
15,000	\$147.31	\$153.35	\$6.04	4.1%
16,000	\$152.44	\$158.48	\$6.04	4.0%
17,000	\$157.57	\$163.61	\$6.04	3.8%
18,000	\$162.70	\$168.74	\$6.04	3.7%
19,000	\$167.83	\$173.87	\$6.04	3.6%
20,000	\$172.96	\$179.00	\$6.04	3.5%

<b>3/4" Meter Customer</b>				
	<b>Monthly Usage (Gallons)</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>% Change</b>
Low Usage	2,000	\$40.70	\$42.94	6%
Medium Usage	5,000	\$71.06	\$74.71	5%
High Usage	10,000	\$135.32	\$142.62	5%

<b>1" Meter Customer</b>				
	<b>Monthly Usage (Gallons)</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>% Change</b>
Low Usage	5,000	\$71.06	\$77.26	9%
Medium Usage	15,000	\$199.58	\$213.08	7%
High Usage	25,000	\$328.10	\$348.90	6%

<b>2" Meter Customer</b>				
	<b>Monthly Usage (Gallons)</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>% Change</b>
Low Usage	20,000	\$263.84	\$290.34	10%
Medium Usage	50,000	\$649.40	\$697.80	7%
High Usage	100,000	\$1,292.00	\$1,376.90	7%

<b>6" Meter Customer</b>				
	<b>Monthly Usage (Gallons)</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>% Change</b>
Low Usage	150,000	\$1,934.60	\$2,127.40	10%
Medium Usage	500,000	\$6,432.80	\$6,881.10	7%
High Usage	1,500,000	\$19,284.80	\$20,463.10	6%



## Bill Comparison Based on 20,000 Gallons per Month (1)

	FY 2019 (Adopted)	FY 2020 (Proposed)	FY 2021 (Proposed)	FY 2022 (Proposed)	FY 2023 (Proposed)
Funded/Un-Metered	\$22.00	\$22.00	\$22.00	\$22.00	\$22.00
\$ Change		\$0.00	\$0.00	\$0.00	\$0.00
Funded/Metered (2)	\$23.20	\$29.35	\$29.35	\$29.35	\$29.35
\$ Change		\$6.15	\$0.00	\$0.00	\$0.00
Unfunded/Un-Metered (3)	\$23.00	\$24.50	\$26.00	\$27.50	\$29.00
\$ Change		\$1.50	\$1.50	\$1.50	\$1.50
Unfunded/Metered (2) (3)	\$30.20	\$36.35	\$36.35	\$36.35	\$36.35
\$ Change		\$6.15	\$0.00	\$0.00	\$0.00

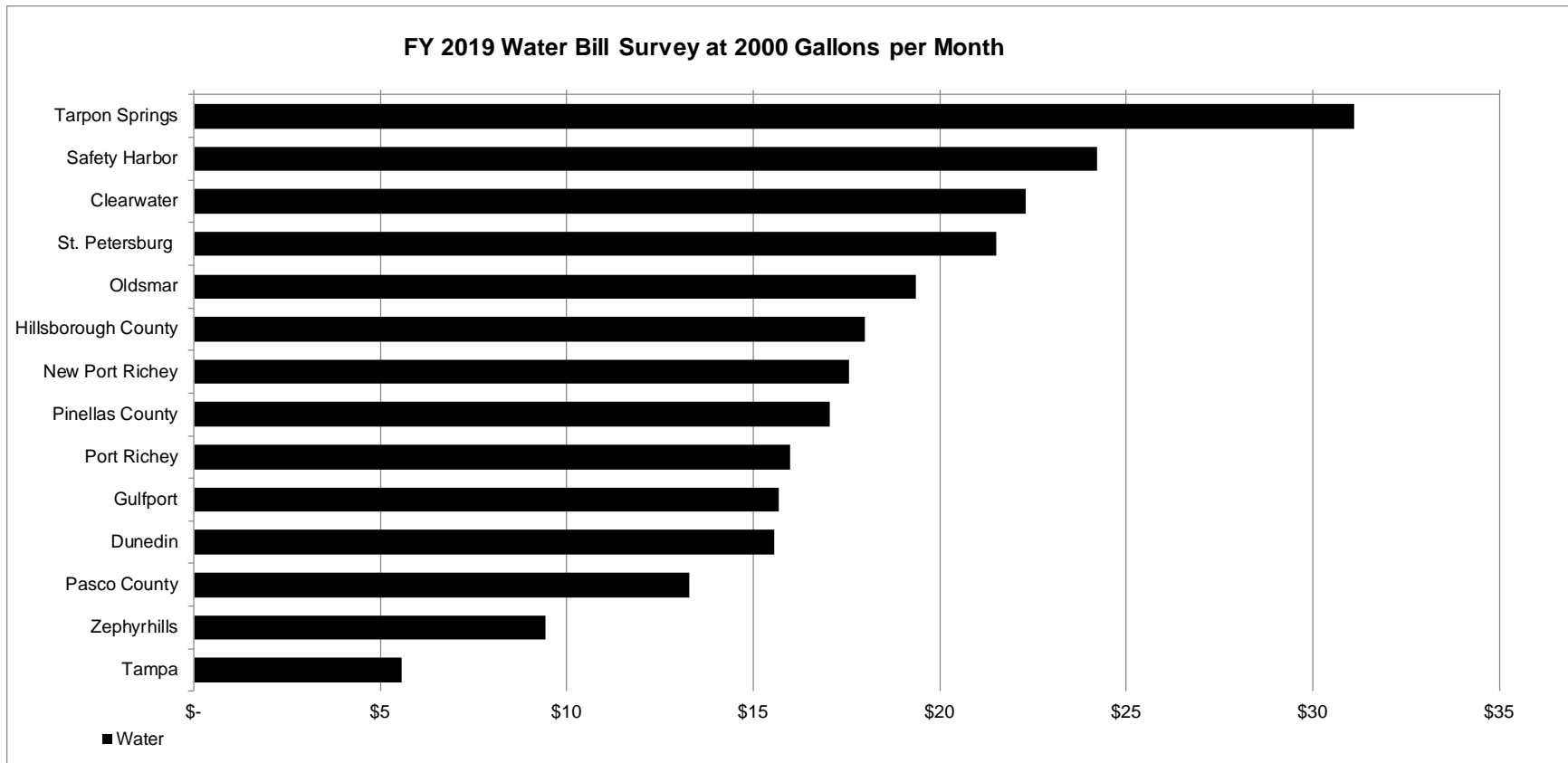
(1) Assumes customer also has water/sewer service

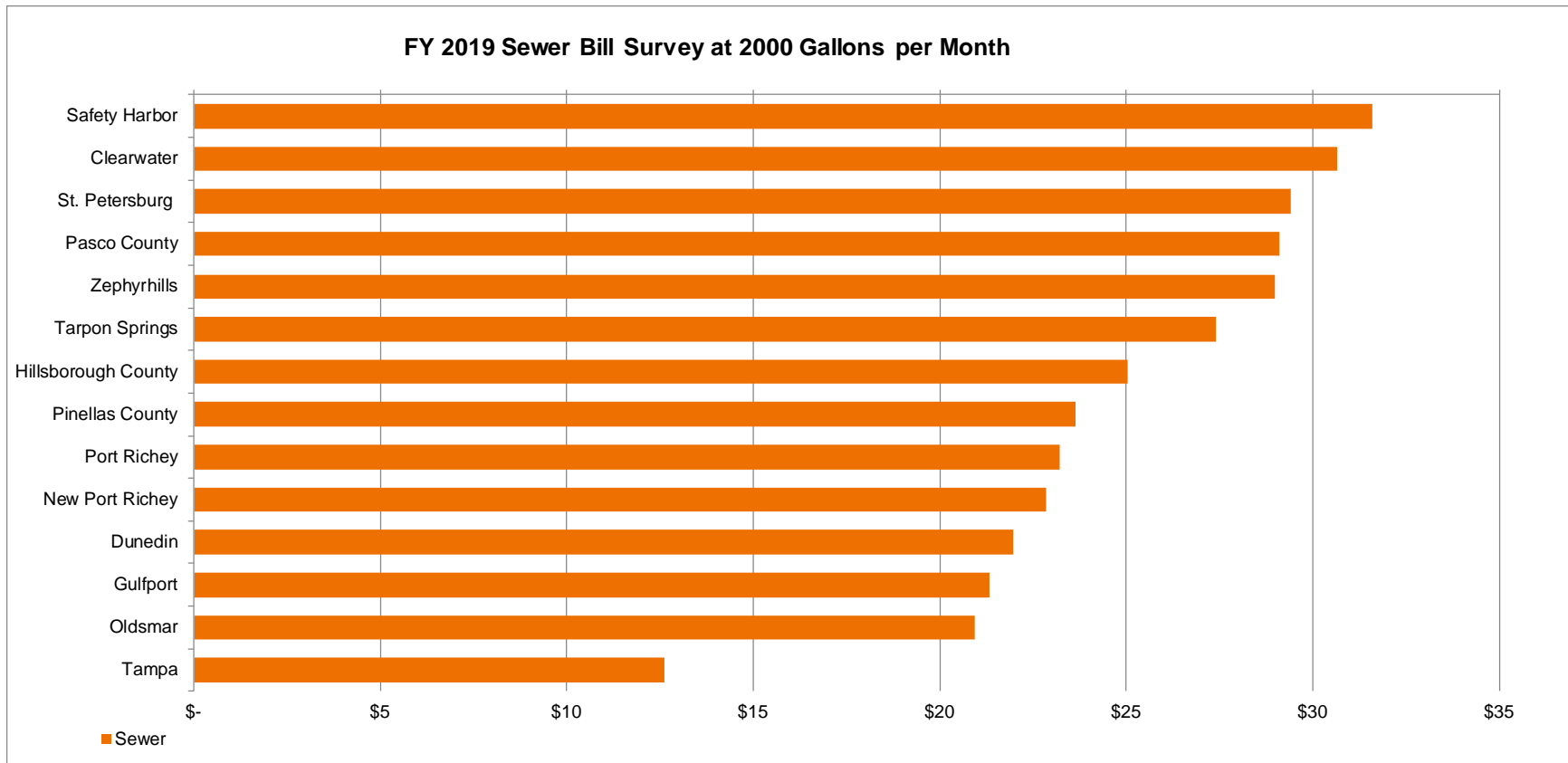
(2) Metered customer's base charge includes 15,000 gallons per month

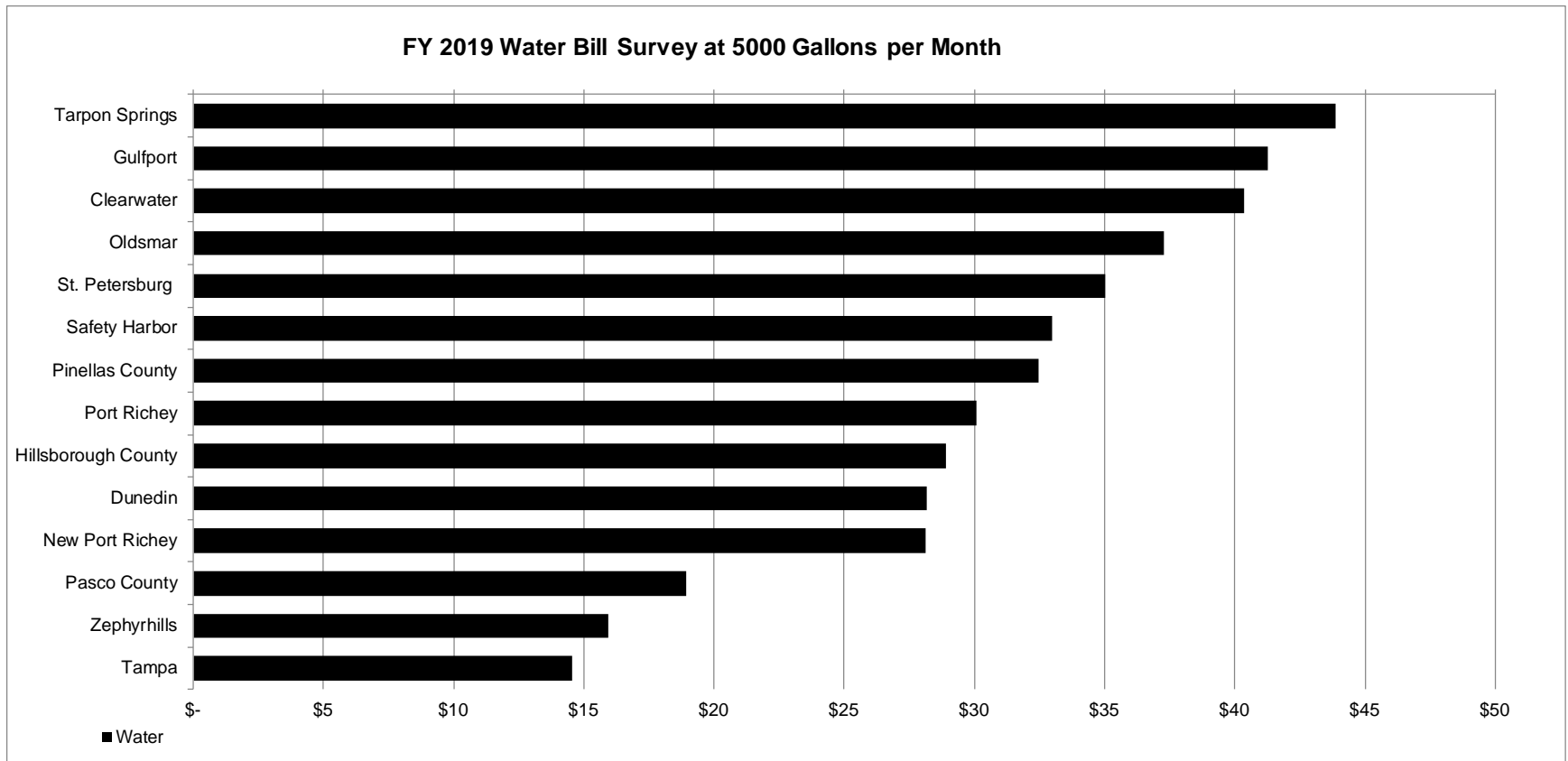
(3) Includes \$7.00 availability fee

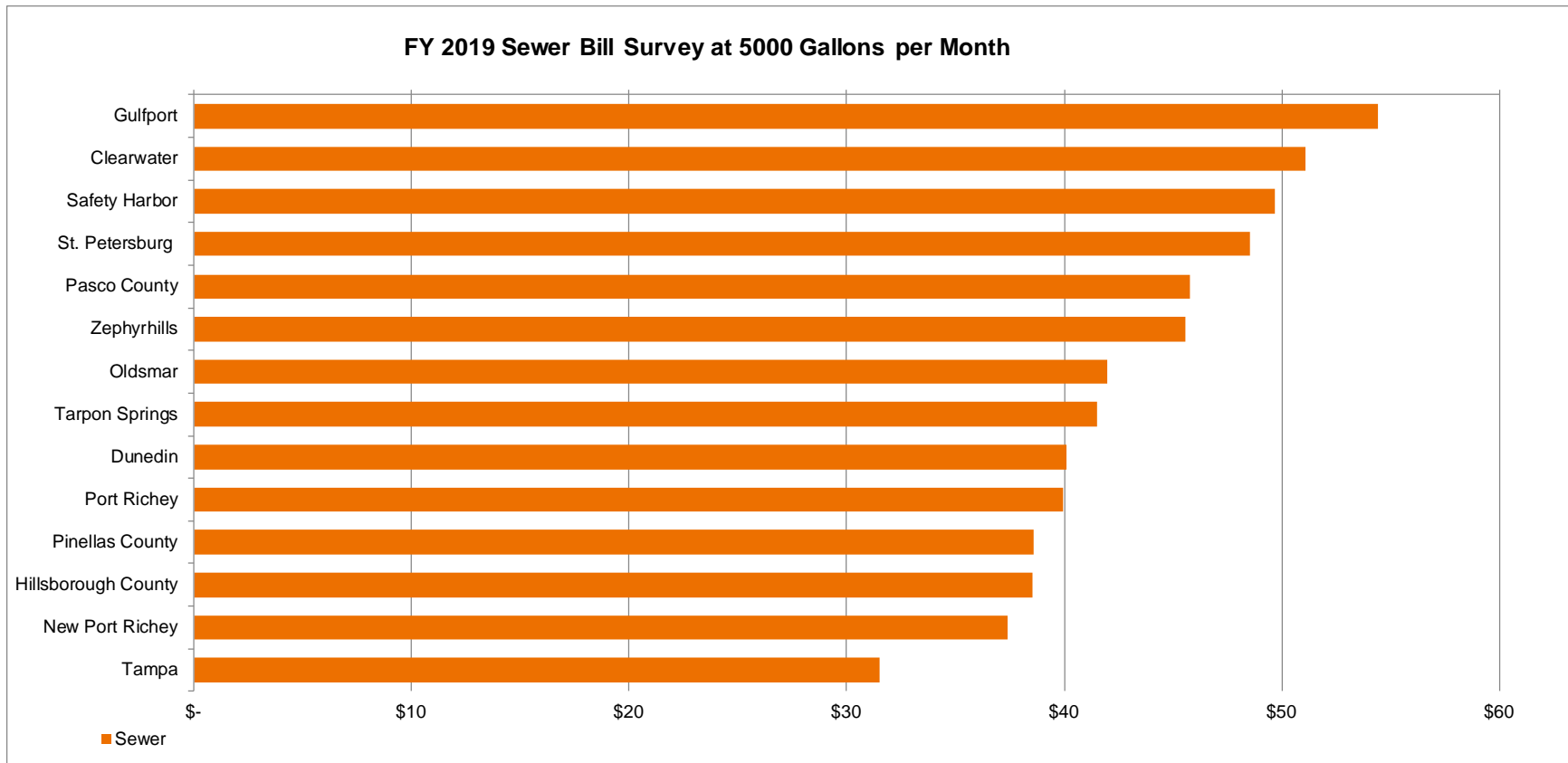
## APPENDIX G: BILL & RATE SURVEYS

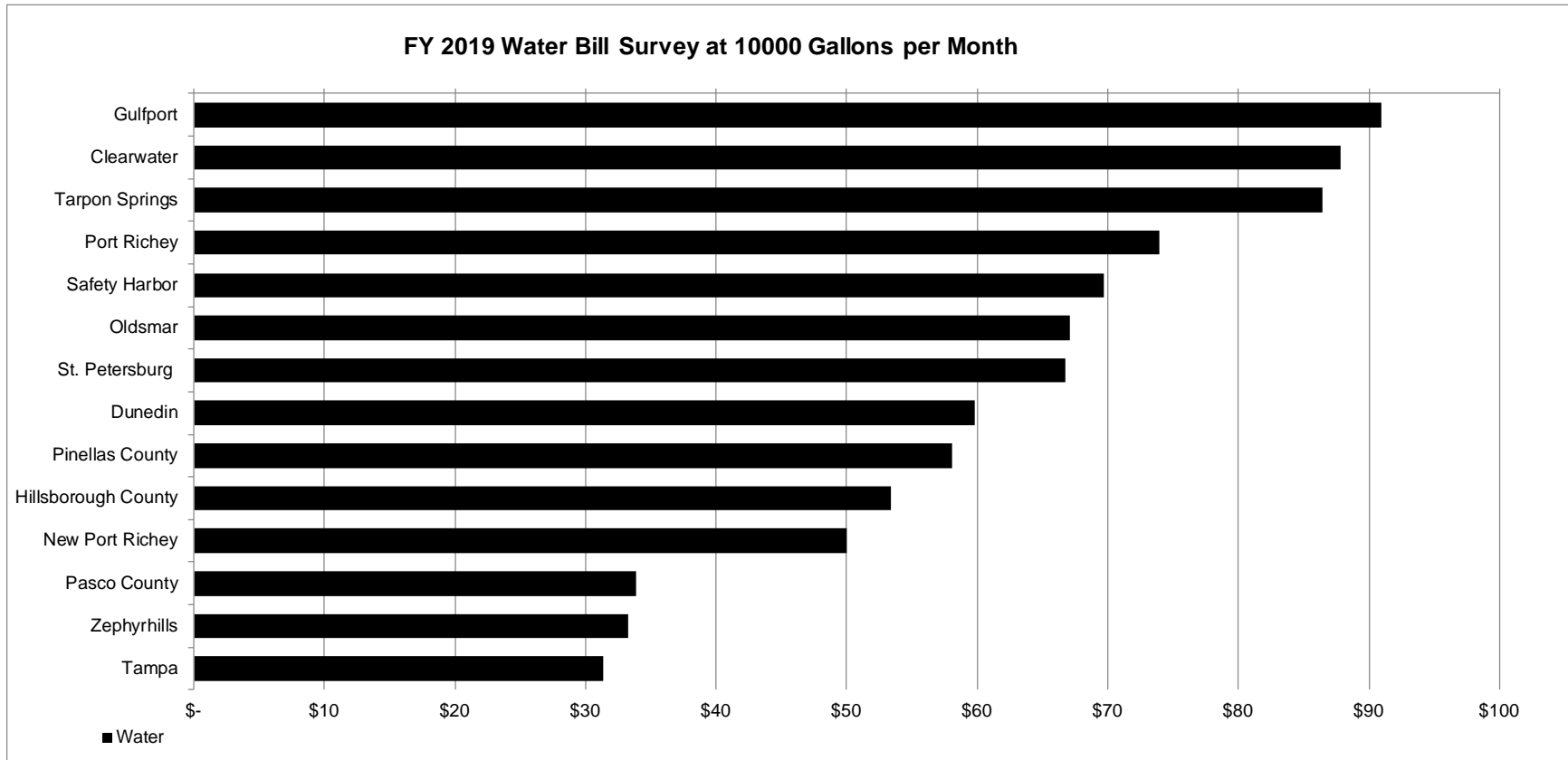
- Schedule 1** FY 2019 Monthly Residential Water & Sewer Bill Survey for 2,000 Gallons
- Schedule 2** FY 2019 Monthly Residential Water & Sewer Bill Survey for 5,000 Gallons
- Schedule 3** FY 2019 Monthly Residential Water & Sewer Bill Survey for 10,000 Gallons
- Schedule 4** FY 2019 Monthly Reclaimed Water Bill Survey for Unmetered Service
- Schedule 5** FY 2019 Monthly Reclaimed Water Bill Survey for Metered Service @ 20,000 Gallons

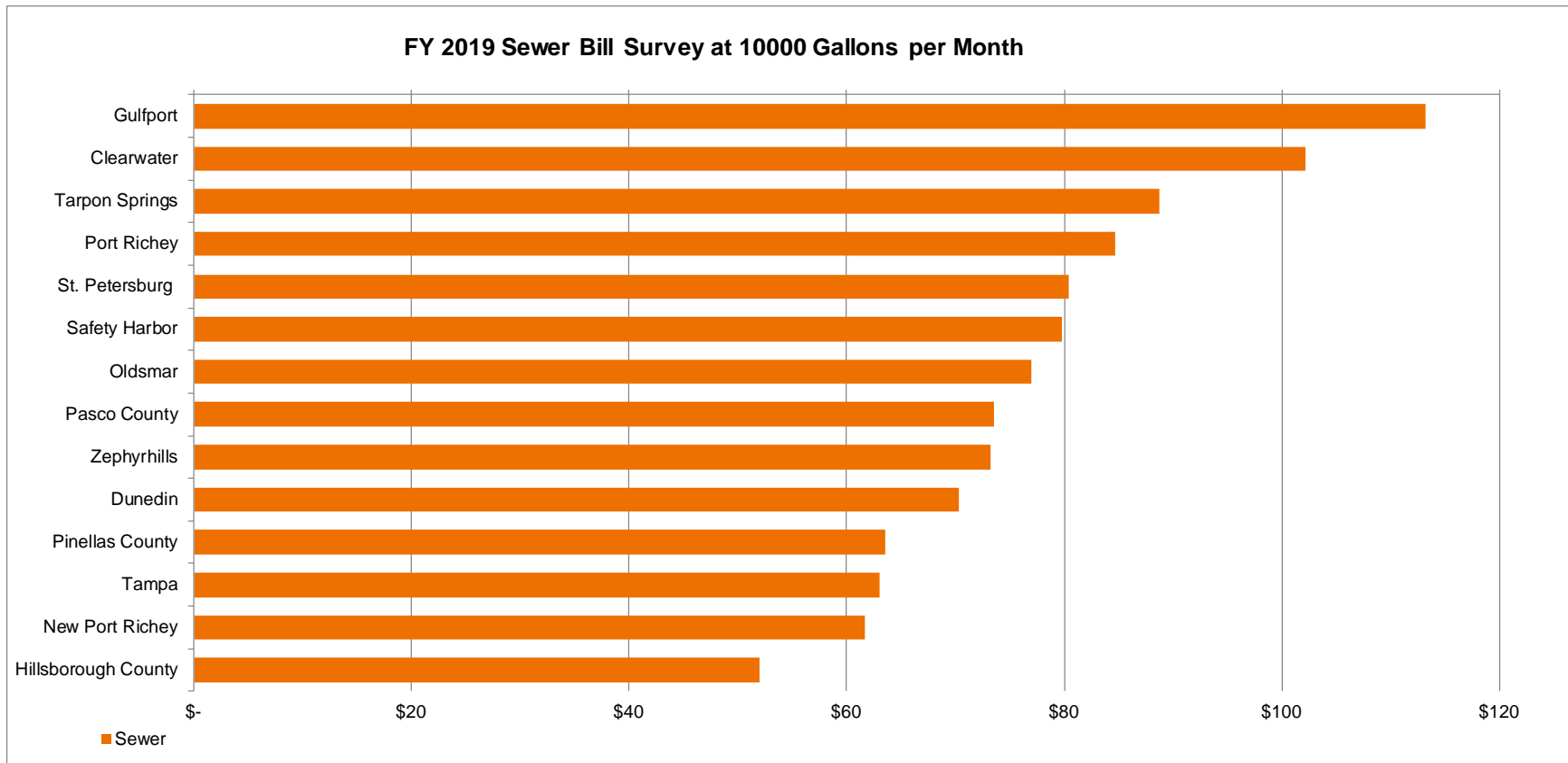




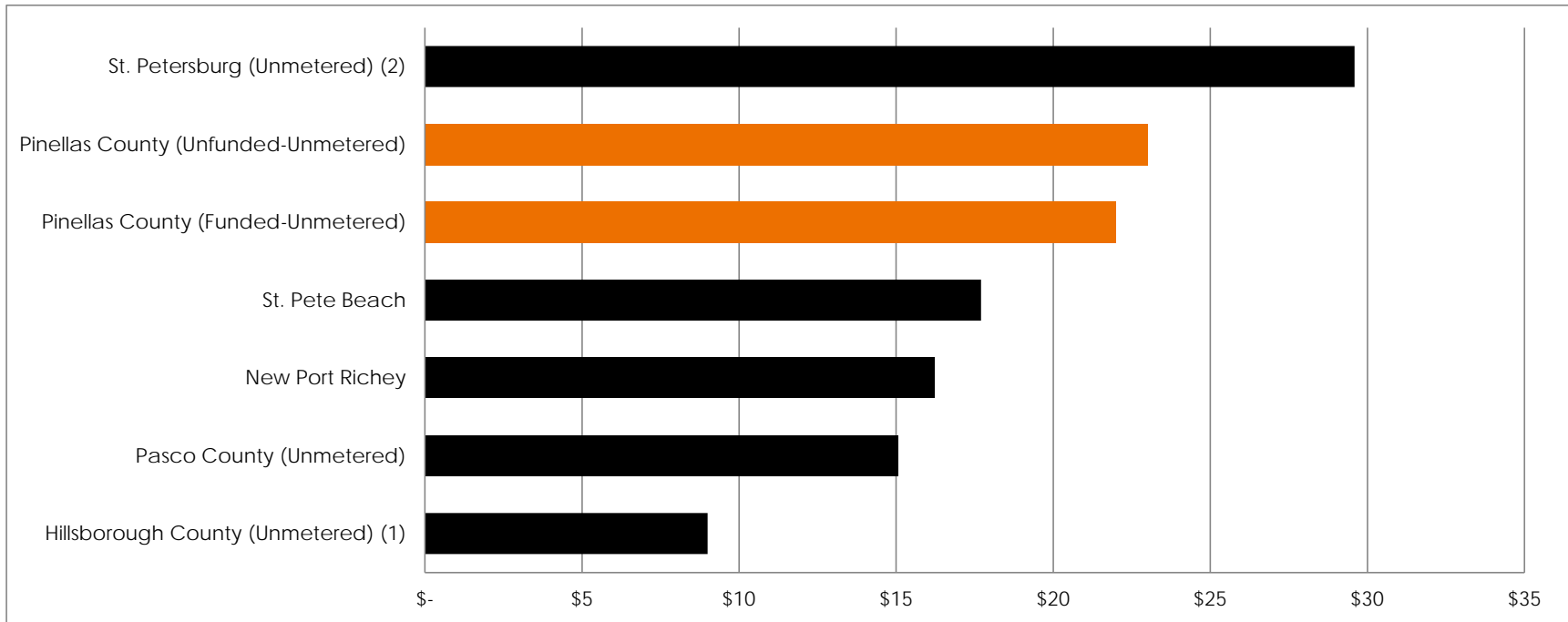








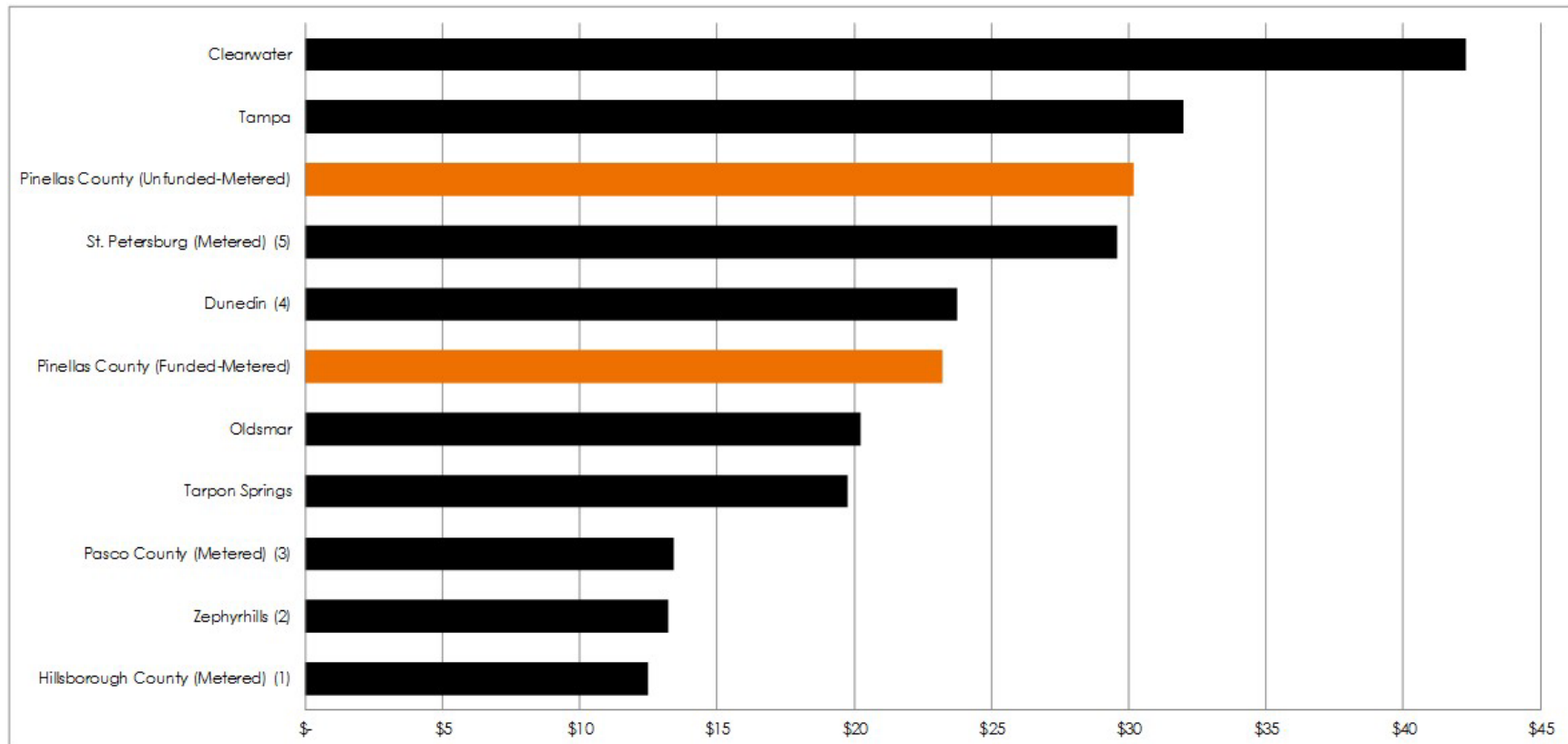




**Notes:**

Reclaimed water rates vary based upon the amount and availability of service throughout communities' service areas, age of the systems, and political factors. Stantec did not perform an analysis to determine what level of cost recovery these bills represent.

- (1) A flat monthly fee is charged to all connections 1" or smaller; while metered rates are applied to all connections greater than 1".
- (2) Monthly bill calculation is based upon assumed lot size of less than 1 acre.



Notes:

Reclaimed water rates vary based upon the amount and availability of service throughout communities' service areas, age of the systems, and political factors. Stantec did not perform an analysis to determine what level of cost recovery these bills represent.

- (1) A flat monthly fee is charged to all connections 1" or smaller; while metered rates are applied to all connections greater than 1".
- (2) Monthly bill calculation is based upon assumed lot size of less than 1 acre.
- (3) Pasco County monthly fixed charge includes charge of \$5.22 for backflow prevention device.
- (4) Monthly fixed charge component ranges between \$9.00 and \$15.00. This survey reflects monthly fixed charge of \$15. The City charges a monthly surcharge fee of \$2.00 per 1,000 gallons consumed in the months of February through July.
- (5) Minimum monthly bill charge of \$29.59 includes monthly usage of up to 40,000 gallons per month.