

Water & Sewer Cost of Service Rate Study



Final Draft Report for
City of Greenfield, CA
May 24, 2016



May 24, 2016

Susan Stanton
City Manager
City of Greenfield
599 El Camino Real
Greenfield CA 93927

Re: Water & Sewer Cost of Service Rate Study

Dear Ms. Stanton:

Hawksley Consulting is pleased to present this Final Draft Report of the Water & Sewer Cost of Service Rate Study that we performed for the City's Water & Sewer Enterprise Funds. Please distribute this Final Draft Report to the appropriate members of City staff for their review and comment in addition to your own.

We appreciate the fine assistance provided by you and all of the members of City staff who participated in the analysis. If you or others at the City have any questions, please do not hesitate to call me in our Tampa, Florida office at (813) 443-5138, or Mark Hildebrand in our Walnut Creek, California office at (510) 316-0621.

Sincerely,

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

Andrew J. Burnham
Director of Financial, Commercial, & Risk Services

Enclosure

E1. INTRODUCTION

This Executive Summary presents an overview of the results of the Water and Sewer Cost of Service Rate Study (Study) that was conducted for the water and sewer systems (collectively the “Utility”) of the City of Greenfield (City) by Burton & Associates, Inc., a subsidiary of Hawksley Consulting.

E.1.1 OBJECTIVES

The primary objectives of this Study are to:

- i. Develop a multi-year financial management plan for each fund that integrates the capital funding needs per the City’s ongoing master planning efforts for the Utility;
- ii. Identify future rate adjustments to water and sewer rates that will ensure adequate revenues to meet the ongoing financial requirements of each fund;
- iii. Determine the cost of providing water and sewer service to each identified customer class using industry accepted methodologies; and
- iv. Recommend specific rate structures that equitably recover the cost of service from each customer class and comport with industry practices and legal requirements.

E.1.2 GENERAL METHODOLOGY

The following phases were used to conduct this Study:

Perform a Revenue Sufficiency Analysis (RSA) – Develop and populate a multi-year forecasting model for each of the City’s water and sewer funds that will determine the level of annual revenue required to satisfy projected annual operating costs, debt service expenses, and capital cost requirements as well as maintain adequate reserves.

Cost of Service Analysis (COSA) – Using the revenue requirements from the revenue sufficiency analysis for Fiscal Year (FY) ending 2017, we performed a detailed cost of service allocation based upon principles outlined by the American Water Works Association (AWWA), Water Environment Federation (WEF) and other generally accepted industry practices in order to determine the proper distribution of costs and corresponding revenue requirements between the respective customer classes of each fund.

Rate Structure Analysis – The rate structure analysis phase developed specific rates that would recover the identified level of required revenue from each customer class. The recommended rate schedules were designed to ensure that the City’s water and sewer rates conform to accepted industry practices and reflect the appropriate distribution of system costs, while achieving the City’s policy objectives, such as fiscal stability, affordability, and conservation, to the greatest extent possible.

E2. REVENUE SUFFICIENCY ANALYSIS

The RSA evaluated the sufficiency of the Utility's revenues to meet all of its current and projected financial requirements over a ten-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 of its cost requirements. With City staff, we thoroughly discussed the base data and assumptions of the analysis, and reviewed several alternative scenarios for the water and sewer funds. Through this process, we identified the recommended financial management plan and associated plan of annual water and sewer rate revenue increases presented herein to address the current and projected cost requirements of the Utility.

The recommended financial management plan and corresponding plan of water and sewer rate revenue adjustments are based upon the revenue and expense information, beginning balances, and assumptions as described in the full report. The specific five-year rate revenue adjustment plan recommended herein is presented in the following table. It is important to note that the FY 2017 revenue increases are achieved within recommended rate structure adjustments identified in the cost of service and rate design phases of the Study.

Table E.1: Recommended Plan of Water & Sewer Rate Revenue Increases

	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
Effective Date:	8/1/16	7/1/17	7/1/18	7/1/19	7/1/20
Water Rate Revenue Increases	7.056%	5.00%	5.00%	5.00%	5.00%
Sewer Rate Revenue Increases	16.00%	16.00%	3.50%	3.50%	3.50%

E3. COST OF SERVICE ANALYSIS

The purpose of a COSA is to determine the cost differences in serving each respective customer class so that the revenue requirements of the Utility may then be distributed accordingly. The Study employed the "base-extra capacity" cost-of-service method promulgated in AWWA's Manual M1: Principles of Water Rates, Fees, and Charges (M1) for the water system, whereby costs are first allocated to individual functions or activities then the cost of each function are distributed to appropriate system parameters to calculate unit costs. The unit costs are then used to distributed system costs to each Customer Classes based on their system usage profile. The Study employed a similar but simpler methodology for the sewer system based upon number of customers and estimates of volume by class as measured in equivalent units.

The COSA included the following steps:

- ▶ Step 1: Allocate the costs of each system to the appropriate activities/functions
- ▶ Step 2: Allocate the costs of each function to specific system parameters and calculate unit costs
- ▶ Step 3: Identify customer classes
- ▶ Step 4: Quantify units of service for each customer class for each defined system parameter
- ▶ Step 5: Distribute costs to customer classes based upon the unit costs for each system parameter and the units of service for each respective class
- ▶ Step 6: Credit non-rate revenue to customer classes
- ▶ Step 7: Calculate private fire protection service cost allocation

The following two tables compare the revenue distribution from the City's current rates to the results of the cost of service analysis performed in this Study. The shifting of cost responsibilities between customer classes is a normal phenomenon as utility service use patterns change and better data becomes available over time.

Water FY 2017 Revenue and COS Comparison

Customer Class	Current Revenue		Cost of Service	
	Dollars	Percent	Dollars	Percent
Single-Family Residential	\$1,238,248	74.3%	\$1,253,483	75.3%
Multi-Family Residential	\$194,212	11.7%	\$182,145	10.9%
Commercial/Institutional	\$130,423	7.8%	\$113,887	6.8%
Industrial	\$11,796	0.7%	\$9,456	0.6%
Landscape/Irrigation/Agriculture	\$76,407	4.6%	\$88,615	5.3%
Private Fire Protection	\$14,351	0.9%	\$17,851	1.1%
Total	\$1,665,437	100.0%	\$1,665,437	100.0%

Sewer FY 2017 Revenue and COS Comparison

Customer Class	Current Revenue		Cost of Service	
	Dollars	Percent	Dollars	Percent
Single-Family Residential	\$1,117,344	74.0%	\$1,112,433	74.0%
Multi-Family Residential	\$237,520	15.7%	\$218,436	14.4%
Commercial/Institutional	\$88,794	5.9%	\$85,651	5.7%
Motel/Hotel/RV Park	\$48,841	3.2%	\$25,090	1.6%
Schools	\$16,626	1.1%	\$67,515	4.4%
Total	\$1,509,126	100.0%	\$1,509,126	100.0%

E4. RATE STRUCTURE ANALYSIS

Upon completion of the COSA, a rate structure analysis was performed to identify potential rate structure modifications and specific rate schedules for implementation in FY 2017 that would:

- i. Fairly and equitably recover each fund's current cost of service and revenue requirements for each customer class;
- ii. Conform to accepted industry practice and legal requirements;
- iii. Provide fiscal stability and recovery of fixed costs of the system;
- iv. Maintain affordability to low volume and average users to the extent possible; and
- v. Promote water conservation.

Sewer Rates

The proposed rate structure is comprised of (1) a fixed charge per account for customer-related costs and (2) a fixed charge per equivalent unit based upon updated equivalency factors for each customer class. The recommended sewer rates are summarized in the table below and embody the recommended rate revenue increase of 16% identified in the RSA.

Recommended Sewer Rates for FY 2017 (effective 8/1/16)

Monthly Rate (per Account): \$3.18		
Fixed Meter Charge (per equivalent unit): \$26.58		
Customer Class	Basis	Equivalency Factor
Single-Family Residential	per Home	1.0
Multi-Family Residential	per Dwelling Unit	.75
Commercial/Institutional	Various	1.0
Motel/Hotel/RV Park	per Room/Space	.25
Schools	per 20 Students	1.0

Water Rates

Fixed Charges - The Study proposes to establish a “Fixed Monthly Account Charge” that will be charged on a per-account basis for customer-related costs, and a “Fixed Monthly Meter Charge” which will be charged by meter and in proportion to the meter size to recover a portion of the capacity related costs of the system.

Variable Charges – The Study recommends that tiered variable consumption rates only be applied to the single family residential class. All other customers shall be charged a single, uniform variable consumption rate recognizing the potential for large differences in the water usage patterns within each of these classes.

Tier Thresholds for Single Family Residential Customers

	Existing	Proposed
Tier 1	5 TGAL	8 TGAL
Tier 2	10 TGAL	15 TGAL
Tier 3	15 TGAL	> 15 TGAL
Tier 4	20 TGAL	NA
Tier 5	25 TGAL	NA
Tier 6	> 25 TGAL	NA

The recommended water rates summarized in the following tables are intended for implementation on 8/1/16 and embody the recommended rate revenue increase of 7.056% identified in the RSA. The full report provides a complete schedule of water (and sewer) rates for the period of FY 2017 to FY 2021.

Recommended Water Rates for FY 2017

Water Service Rate Schedule (with 7.056% rate increase)

Monthly Account Charge: \$10.67

Monthly Meter Charge:	
Meter Size	Monthly Charge
5/8"	\$13.42
3/4"	\$14.80
1"	\$17.55
1 1/2"	\$24.42
2"	\$32.67
3"	\$54.68
4"	\$79.44
6"	\$148.20

Tiered Variable Consumptive Rates (Single Family Residential Only)

Tier	Threshold (gallons)	Rate (\$ per TGAL)
Tier 1	0 - 8000	\$1.17
Tier 2	8000 - 15000	\$1.75
Tier 3	> 15000	\$3.35

Uniform Variable Consumptive Rates

Customer Class	Rate (\$ per TGAL)
Multifamily Residential	\$1.73
Commercial / Institutional	\$1.68
Industrial	\$1.65
Irrigation/Landscape/Agriculture	\$2.38

E.5 UTILITY RATE SURVEY

A survey of local utilities revealed that the City's current cost of service and recommended level of future rate adjustments are among the lowest in the region. The figure below presents a bill comparison of combined water and sewer monthly bills for a typical residential user with a 5/8" meter.

FY 2016 Residential Water & Sewer Monthly Bill Survey

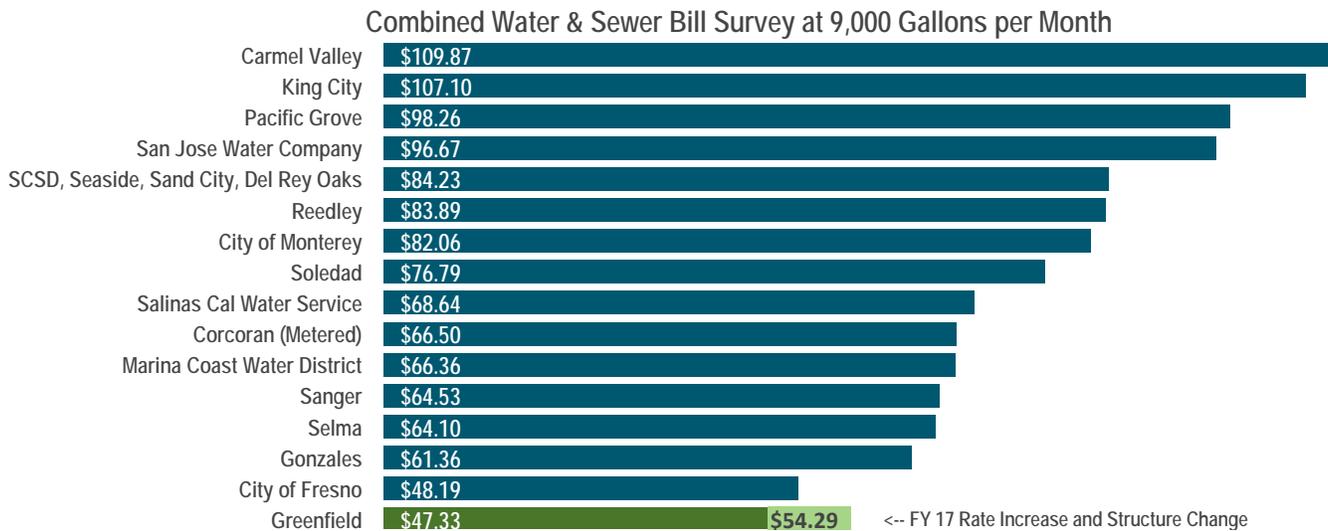


TABLE OF CONTENTS

1. INTRODUCTION	3
1.1 OBJECTIVES	3
1.2 GENERAL METHODOLOGY	3
1.3 ACRONYMS	4
2. REVENUE SUFFICIENCY ANALYSIS	5
2.1 DATA & ASSUMPTIONS	5
2.1.1 <i>Beginning Fund Balances</i>	5
2.1.2 <i>Growth</i>	5
2.1.3 <i>Revenues</i>	6
2.1.4 <i>Operating Expenses & Existing Debt</i>	6
2.1.5 <i>Cost Escalation</i>	6
2.1.6 <i>Capital Improvement Program</i>	6
2.1.7 <i>Interest Earnings on Invested Funds</i>	7
2.1.8 <i>Minimum Operating Reserve Balance</i>	7
2.1.9 <i>Future Borrowing Assumptions</i>	8
2.1.10 <i>Debt Service and Coverage</i>	8
2.1.11 <i>Summary of Assumptions</i>	8
2.2 ANALYSIS	8
2.3 FINANCIAL PLAN RESULTS	9
2.3.1 <i>Recommended Rate Increases</i>	9
2.3.2 <i>Capital Financing</i>	10
2.4 COMPARISON TO NATIONAL & LOCAL TRENDS	10
3. COST-OF-SERVICE ALLOCATION	13
3.1 PROCESS	13
3.2 COMPONENTS OF THE ANALYSIS	13
3.2.1 <i>Step 1: Functional Cost Allocations</i>	14
3.2.2 <i>Step 2: Distribute Function Costs to System Parameters</i>	15
3.2.3 <i>Distribution of Water Costs to System Parameters</i>	15
3.2.4 <i>Distribution of Sewer Costs to System Parameters</i>	17
3.2.5 <i>Step 3: Determination of Customer Classes</i>	17
3.2.6 <i>Step 4: Quantify Units of Service by Customer Class</i>	18
3.2.7 <i>Step 5: Allocate Service Costs to Customer Classes</i>	19
3.2.8 <i>Step 6: Credit Non-Rate Revenue to Customer Classes</i>	19

3.2.9	Step 7: Calculate Private Fire Cost Allocation.....	20
3.3	COST-OF-SERVICE RESULTS.....	23
4.	RATE STRUCTURE ANALYSIS	24
4.1	SEWER RATES	24
4.2	WATER RATES	25
4.2.1	Current Water Rates	25
4.2.2	Proposed Changes to Water Rate Structure.....	25
4.3	RECOMMENDED WATER RATES	26
4.3.1	Fixed Monthly Account Charge Methodology.....	26
4.3.2	Fixed Monthly Meter Charge Methodology	26
4.3.3	Variable Consumptive Rate Methodology.....	27
4.3.4	Recommended Water Rates	30
4.3.5	Customer Impact Analysis.....	30
APPENDIX A:	REVENUE SUFFICIENCY ANALYSIS SCHEDULES.....	32
APPENDIX B:	COST-OF-SERVICE SCHEDULES	58
APPENDIX C:	PROPOSED RATE SCHEDULES & BILL IMPACT ANALYSIS.....	72

1. INTRODUCTION

Burton & Associates, Inc., a subsidiary of Hawksley Consulting, has been retained by the City of Greenfield (City) to conduct a comprehensive Water & Sewer Cost of Service Rate Study (Study) for the Water and Sewer Enterprise Funds that comprise the City's combined utility system (Utility). This report describes in detail the assumptions, procedures, and results of the Study, including our conclusions and recommendations.

1.1 OBJECTIVES

The primary objectives of this Study is to:

- v. Develop a multi-year financial management plan for each fund that integrates the capital funding needs per the City's ongoing master planning efforts for the Utility;
- vi. Identify future rate adjustments to water and sewer rates that will ensure adequate revenues to meet the ongoing financial requirements of each fund;
- vii. Determine the cost of providing water and sewer service to each identified customer class using industry accepted methodologies; and
- viii. Recommend specific rate structures that equitably recover the cost of service from each customer class and comport with industry practices and legal requirements.

1.2 GENERAL METHODOLOGY

This section presents our methodology used to conduct the Study. To begin the Study, we first developed a multi-year financial management plan for each fund that determined the level of annual revenue required to satisfy projected annual operating, debt service (including coverage), and capital cost requirements as well as maintain adequate reserves. This portion of the Study was conducted using the revenue sufficiency and financial planning module of our proprietary FAMS-XL modeling system. We customized two separate versions of our module to reflect the financial dynamics and most current data available for the water and sewer funds, respectively, in order to develop a long-term financial management plan, inclusive of projected annual revenue requirements and corresponding annual rate adjustments, for each respective fund.

Using the cost of service and net revenue requirements from the revenue sufficiency analysis for Fiscal Year (FY) ending 2017, we then performed a detailed cost-of-service allocation (COSA) analysis based upon principles as outlined by the American Water Works Association (AWWA), Water Environment Federation (WEF) and other generally accepted industry practices in order to determine the proper allocation of costs and corresponding revenue requirements between the respective customer classes of each fund.

Once all FY 2017 costs and revenue requirements were properly allocated to each customer class, we then developed specific rates that would recover the identified level of required revenue from each customer class. The recommended rate schedules presented herein are designed to ensure that the City's water and sewer

rates conform to accepted industry practice and reflect the appropriate distribution of system costs, while achieving the City's policy objectives, such as fiscal stability, affordability, and conservation, to the greatest extent possible. Using this approach, we were able to clearly identify and review the impacts of the results of the rate structure presented herein for each customer class.

1.3 ACRONYMS

ADA	average daily attendance (students)
AWWA	American Water Works Association
CIEDB	California Infrastructure & Economic Development Bank
CIMIS	California Irrigation Management Information System
CIP	capital improvement plan
COSA	cost of service allocation
ERU	equivalent residential unit
FAMS-XL	Financial Analysis and Management System model
FTE	full time equivalent (employee)
FY	fiscal year ending June 30
GPCD	gallons per capita per day
TGAL	thousands of gallons
TGPD	thousands of gallons per day
MGD	millions of gallons per day
O&M	operation and maintenance
RSA	revenue sufficiency analysis
RV	recreational vehicle

2. REVENUE SUFFICIENCY ANALYSIS

This section 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. This section presents a description of the source data, assumptions, and policies reflected in the RSA, as well as the results of the RSA. **Appendix A** includes detailed schedules supporting the financial management plan identified herein for each respective fund.

During the RSA we reviewed alternative multi-year financial management plans and corresponding water and sewer rate revenue adjustment plans through several interactive work sessions with City staff. As an outcome to this process, the Study has produced a recommended financial management plan and corresponding plan of annual rate revenue adjustments that will allow each fund to meet its respective revenue requirements and financial performance objectives throughout the projection period.

2.1 DATA & ASSUMPTIONS

The City provided historical and budgeted financial information regarding the operation of the water and sewer utilities, including each fund's multi-year capital improvement programs (CIP) and current debt service obligations and covenants. City staff also assisted in providing other assumptions and policies, such as demands and customer growth, debt coverage levels, levels of operating reserves, earnings on invested funds, and escalation rates for operating costs. The following presents the key source data relied upon in conducting the RSA.

2.1.1 BEGINNING FUND BALANCES

The ending balances for FY 2015 was used to establish the beginning FY 2016 balances for both the Water Fund and the Sewer Fund¹. The basis of the FY 2016 beginning balances used in the RSA are provided in **Schedule 1-W** (for water) and **Schedule 1-S** (for sewer).

2.1.2 GROWTH

Based upon a review of recent historical trends, master plan projections, and discussions with City staff, the RSA reflects the following growth assumptions (expressed in equivalent single-family residential units, or ERUs) for both the water and sewer funds:

- ▶ 75 new ERUs in FY 2016;
- ▶ 100 new ERUs in FY 2017;
- ▶ 125 new ERUs in FY 2018; and
- ▶ 150 ERUs thereafter.

¹ File source: 2015 Unaudited Trial Balance.xlsx

2.1.3 REVENUES

The revenues utilized in the RSA reflect an evaluation of multiple years of historical results from FY 2011 through FY 2015, FY 2016 Budget amounts, and historical billing information by customer class. Revenues consist of rate revenue, interest income, and other minor revenue from miscellaneous service charges. Rate revenue is based upon FY 2015 billing statistics and the recommended rate structure presented herein, adjusted to reflect changes in revenue based upon assumed customer growth. Projections of all other revenues were based upon the FY 2016 Budget, excluding interest income (which was calculated annually based upon projected average fund balances and assumed interest rates). The FY 2016 estimated rate revenue, as well as forecasts for all other non-rate revenues are provided in **Schedule 2-W** (for water) and **Schedule 2-S** (for sewer).

2.1.4 OPERATING EXPENSES & EXISTING DEBT

The water and sewer utilities' operating expenses include all operating and maintenance expenses, transfers, debt service requirements, and minor capital outlay. Future operating expenses were projected based upon the individual expense categories and expense amounts in the FY 2016 Budget, adjusted per discussions with City staff to reflect known and measurable changes (such as additional staffing requirements, estimates for future minor capital outlay, and impacts of energy efficiency and meter replacement programs), as well as expected inflation (see Section 2.1.5).

The Water Fund and Sewer Fund both have existing loans from the California Infrastructure & Economic Development Bank (CIEDB) that will be repaid by 2037. The remaining annual debt service expenses for these loans were included in the RSA and are identified in **Schedule 3-W** (for water) and **Schedule 3-S** (for sewer).

2.1.5 COST ESCALATION

Annual cost escalation factors for the various types of operating and maintenance expenses were developed based upon a review of historical trends, our industry experience, and detailed discussions with City staff. The specific escalation factors assumed for the various categories of expenses are provided in **Schedule 4-W** (for water) and **Schedule 4-S** (for sewer) of Appendix A.

2.1.6 CAPITAL IMPROVEMENT PROGRAM

City staff provided the multi-year CIP from FY 2017 through FY 2026, reflecting the capital improvement needs identified in the current master plans² being conducted for each respective fund. Beginning in FY 2017, the RSA includes an annual cost inflation factor of 3.0% (based upon recent increases observed in the Engineering News Record Construction Cost Index) to account for the inflation in the future cost of construction.

² The CIP was based upon memorandums provided by the Wallace Group, the City's consulting engineer dated February 25, 2016 (water) and March 14, 2016 (sewer). The City did include an additional future cost allowance in the RSA for miscellaneous improvements on the sewer system in FY 2021 through FY 2026 to provide a funding allowance for unspecified but anticipated additional future needs.

In total, the CIP (including inflation) from FY 2017 – FY 2026 is slightly more than \$19.4 million for the Water Fund and is slightly more than \$9.4 million for the Sewer Fund. A detailed list of projects and costs by year are provided in **Schedule 5-W** (for water) and **Schedule 5-S** (for sewer) in Appendix A.

2.1.7 INTEREST EARNINGS ON INVESTED FUNDS

The RSA reflects interest earnings on invested funds at a rate of 0.50% in FY 2016, 0.75% in FY 2017, 1.00% in FY 2018, 1.25% in FY 2019, and 1.50% each year thereafter.

2.1.8 MINIMUM OPERATING RESERVE BALANCE

Reserve balances for utility systems are funds set aside for a specific cash flow requirement, financial need, project, task, or legal covenant. These balances are maintained in order 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 conditions. The level of reserves maintained by a utility is an important component and consideration of developing a multi-year financial plan.

Many utilities, rating agencies, and the investment community as a whole 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 as a result of natural disasters or unanticipated system failures.

Financial policies should articulate how these balances are established, their use, and how to determine the adequacy of the reserve fund balances. It is important to note that once reserve targets are established, they should be reviewed annually during the budgeting process to monitor current levels and assure conformance with stated policies and practices. Decisions can be made to maintain, increase, or spend down the reserve balances, as appropriate, depending upon the impact of such decisions to the upcoming budget period.

Moreover, a utility should review the approach used to establish reserve balances every three to five years. This time frame is appropriate given that debt levels and capital infrastructure activity can vary during this time, which would have an effect on the appropriate level of reserve balances. This type of review allows for the philosophy of establishing reserve targets to be modified to better reflect existing conditions and issues.

The financial management plans presented in this report assumes that the Utility will maintain a minimum operating reserve balance equal to at least 2 months of annual O&M expenses for each fund, as well as a separate minimum capital reserve amount of \$0.5 million (approximately equal to one-year's average annual cash-funded CIP) for each fund. These levels of operating and capital reserves are very consistent with 1) our industry experience for similar systems, 2) the findings of reserve studies conducted by the AWWA, and 3) a healthy level of reserves for a municipal utility system per the evaluation criteria published by the municipal utility rating agencies (Fitch, Moody's, and Standard & Poor's).

2.1.9 FUTURE BORROWING ASSUMPTIONS

Based upon discussions with City staff, any new debt anticipated to be issued during the projection period is assumed to carry the following terms:

- 15 year term, level debt service
- 2.0% cost of issuance
- Fixed interest rate of 3.25% for debt issued in FY 2016, 3.50% in FY 2017, 3.75% in FY 2018, 4.00% in FY 2019, 4.25% in FY 2020, and 4.50% for debt issued in FY 2021 and each subsequent year of the projection period.
- No debt service reserve

2.1.10 DEBT SERVICE AND COVERAGE

The Utility must maintain the following minimum debt service coverage requirements:

- Net revenue (gross revenue minus operating expenses) that is at least 1.10 times greater than the annual debt service requirement (i.e. the annual principal and interest payments) on its outstanding senior-lien debt.

This coverage requirement is a minimum requirement. To the extent the Utility is unable to meet this requirement, it could be found in technical default resulting in the Utility having its credit rating downgraded, which would affect the interest rate and terms of future financing initiatives. As a policy decision, utilities often measure revenue sufficiency and set rates based upon a higher coverage level so as to ensure compliance with these covenants in the event future projections of revenue and expenses do not occur as predicted. To ensure the Utility maintains its current rating, the financial management plans presented in this report was designed to achieve target debt service coverage of at least 1.50 times net revenue. Per recently published guidance from Fitch Ratings³, the municipal utility ratings agency, utility systems with *Midrange* financial profiles maintain debt service coverage greater than 1.50 times net revenue and those with *Stronger* financial profiles maintain debt coverage greater than 2.00 times net revenue.

2.1.11 SUMMARY OF ASSUMPTIONS

A summary of annual assumptions regarding growth rates, interest earnings, capital spending inflation rate, and reserve targets are provided in **Schedule 6-W** (for water) and **Schedule 6-S** (for sewer) in Appendix A.

2.2 ANALYSIS

All of the above information was entered into two separate versions (one for each fund) of the financial module of our proprietary Financial Analysis and Management System (FAMS-XL) interactive modeling system. This module of FAMS-XL produced a ten-year projection of the sufficiency of each fund's revenues to meet all

³ As published on July 31, 2013.

current and projected financial requirements, and determined the level of rate revenue increases necessary in each year of the projection period to provide sufficient revenues for each fund's cost requirements.

The revenue sufficiency and financial planning module of FAMS-XL utilizes all projected available funds in each year of the projection period to pay for capital projects. The model is set up to reflect the rules of cash application as defined and applied by City staff, and it produces a detailed summary of the funding sources to be used for each project in the CIP. To the extent that current revenues and unrestricted reserves are not adequate to fund all capital projects in any year of the projection period, the model identifies a borrowing requirement to fund those projects, or portions thereof that are determined to be eligible for borrowing. As such, the FAMS-XL model is also used to develop a borrowing program that includes the required borrowing amount by year and the resultant annual debt service requirements for each year in the projection period.

2.3 FINANCIAL PLAN RESULTS

Based upon the data, assumptions, and policies presented herein, the current water and sewer rates will not provide sufficient revenue to meet each fund's respective revenue requirements. As such, the RSA developed a financial plan for each fund that uses a combination of rate increases and debt issuance to satisfy the Utility's revenue requirements (including capital funding needs) while minimizing the impact on rate payers.

2.3.1 RECOMMENDED RATE INCREASES

Table 1 summarizes the recommended water and sewer rate increases identified over the next five years per the RSA that was conducted as described herein.

Table 1: Recommended Water and Sewer Rate Revenue Increase

	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
Effective Date:	8/1/16	7/1/17	7/1/18	7/1/19	7/1/20
Water Rate Revenue Increases	7.056%	5.00%	5.00%	5.00%	5.00%
Sewer Rate Revenue Increases	16.00%	16.00%	3.50%	3.50%	3.50%

Appendix A of this report includes the following detailed schedules presenting components of the financial management plan developed for the Utility.

- Cash flow Pro Forma - **Schedule 7-W** (for water) and **Schedule 7-S** (for sewer)
 - Revenues
 - Expenses
 - Cash balances
 - Debt service coverage
- FAMS model Control Panel - **Schedule 8-W** (water) and **Schedule 8-S** (sewer)
 - Summary of rate increases, debt coverage, and graphs of financial results
- Capital Funding Summary - **Schedule 9-W** (water) and **Schedule 9-S** (sewer)

2.3.2 CAPITAL FINANCING

This Study recommends that both funds utilize a combination of cash and debt to pay for future capital needs. The recommended strategy for funding capital projects between FY 2017 and FY 2026 is summarized **Schedule 9-W** (water) and **Schedule 9-S** (sewer).

The RSA reflects an assumed borrowing by the Water Fund during the following years:

FY 2017 - \$5.3 million of proceeds for the Automatic Meter Reading project (\$2.9 million) and the Solar Energy Improvements (\$2.4 million)

FY 2021 - \$4.0 million of proceeds, with \$1.0 million towards the cost of a new 1.5 million gallon storage tank (Project 1-5 in the CIP) and \$3.0 million for the full cost of a new water supply well (Project 1-6 in the CIP)

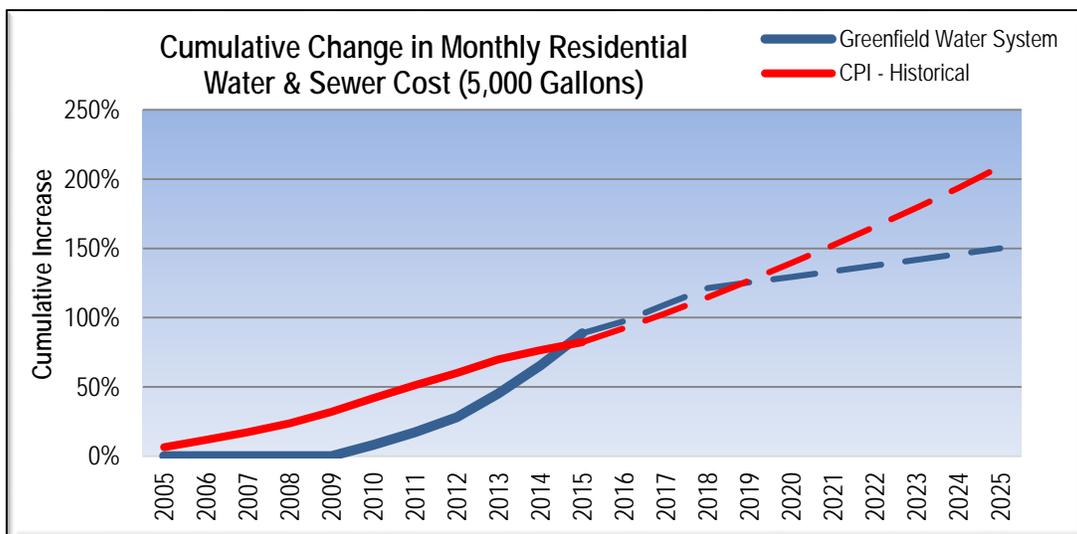
The RSA reflects an assumed borrowing by the Sewer Fund during the following years:

FY 2017 - \$4.3 million of proceeds for the Solar Energy Improvements (\$1.1 million), sludge drying beds (\$0.7 million, referred to as WWTP-1 in the CIP), upgrades to the head-works (\$1.4 million, referred to as WWTP-2 in the CIP), and a new admin/laboratory facility (\$1.1 million, referred to as WWTP-3 in the CIP).

The details of each of the long-term borrowings projected in the RSA for each fund are summarized in **Schedule 10-W** (water) and **Schedule 10-S** (sewer).

2.4 COMPARISON TO NATIONAL & LOCAL TRENDS

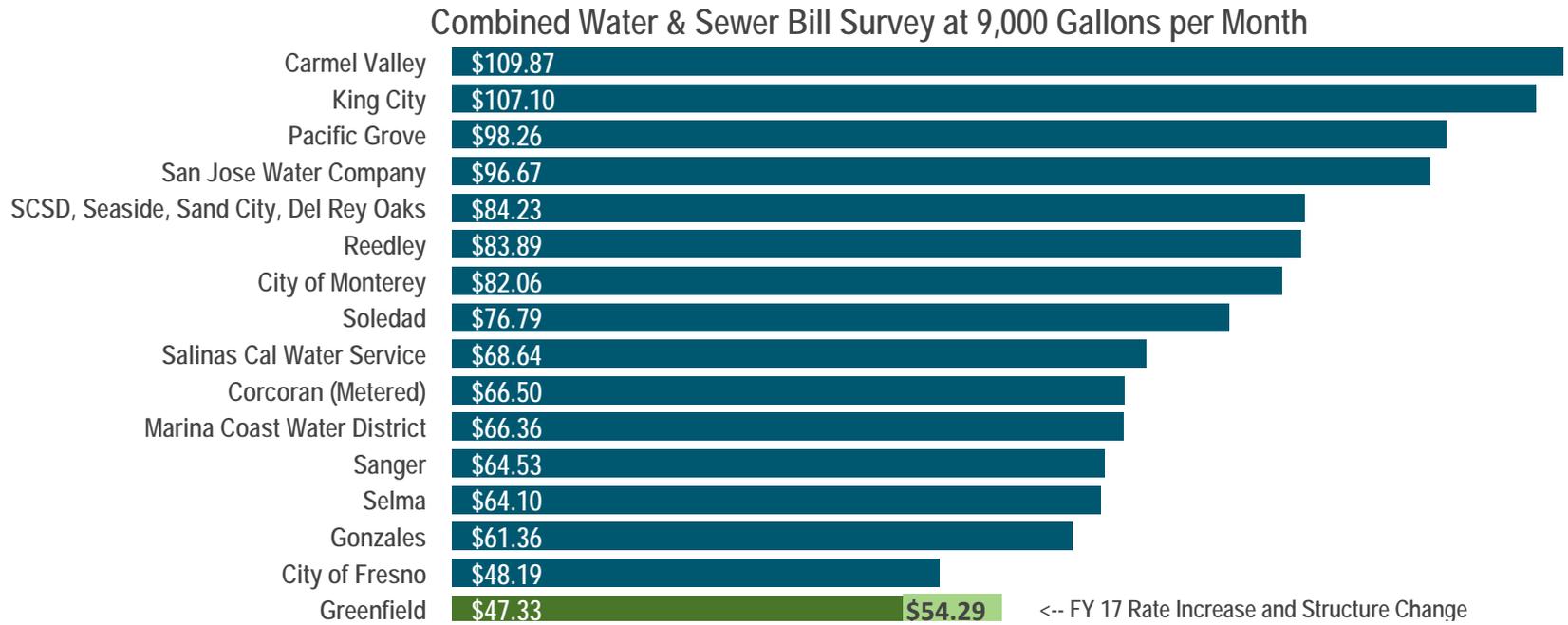
As indicated, annual rate adjustments are needed in order to meet the Utility's cost requirements during the projection period. However, it is important to note that the identified plan of annual rate revenue adjustments is significantly less than the average annual change in the US CPI – Water & Sewerage Maintenance Series of approximately 5%. As can be seen in the following graph, the Utility's rate adjustments have been and are expected to continue to be substantially less than national trends.



Moreover, based upon our experience, the Utility's current cost of service and level of future rate increases are among the lowest of other neighboring communities in the area. In that regard, **Figure 1** included on the following page presents a local cost comparison to neighboring communities for a typical residential user. The results of the survey indicate that the City charges a combined water and sewer monthly bill that is among the lowest in the area.

It is important to note that each monthly bill in the survey was calculated based upon current FY 2016 water and sewer rates. It is very likely that the majority of entities surveyed will be implementing rate increases. Therefore, as the City implements the rate adjustments identified herein, it is reasonable to expect that the City would remain at the same position in the survey as other communities implement their own rate adjustments.

Figure 1 - FY 2016 Residential Water & Sewer Monthly Bill Survey



3. COST-OF-SERVICE ALLOCATION

The Cost-of-Service Allocation (COSA) identifies the cost of providing service to each individual customer class. The following section of this Report presents a detailed description of the COSA methodology utilized in the Study and corresponding results.

The purpose of a COSA is to determine the cost differences in serving each respective customer class so that the revenue requirements of the Utility may then be distributed accordingly. This Study employed well-established industry practices for these types of studies as recognized by the American Water Works Association (AWWA), the Water Environment Federation (WEF), and other accepted industry practices.

Namely, this Study employed the “base-extra capacity” cost-of-service method promulgated in AWWA’s Manual M1: Principles of Water Rates, Fees, and Charges (M1) for the water system, whereby costs are first allocated to individual functions or activities (such as supply, treatment, distribution, meters/services, etc.) then the cost of each function are distributed to appropriate system parameters (such as average day demands, max day demands, peak hour demands, customers, etc.) to calculate unit costs. The unit costs are then used to distributed system costs to each customer class based on their system usage profile. After costs are allocated to the various types of customers, specific rates can be developed for each classification of customer. Similarly, the Study employed a similar but much simpler methodology for the sewer system based upon number of customers and estimates of volume by class as measured in equivalent units.

3.1 PROCESS

The COSA was based upon each fund’s FY 2017 annualized expenditure and revenue requirements per the RSA, and included the following steps:

- ▶ Step 1: Allocate the costs of each system to the appropriate activities/functions
- ▶ Step 2: Allocate the costs of each function to specific system parameters and calculate unit costs
- ▶ Step 3: Identify customer classes
- ▶ Step 4: Quantify units of service for each customer class for each defined system parameter
- ▶ Step 5: Distribute costs to customer classes based upon the unit costs for each system parameter and the units of service for each respective class
- ▶ Step 6: Credit non-rate revenue to customer classes
- ▶ Step 7: Calculate private fire protection service cost allocation

The following sub-sections present the COSA results, while **Appendix B** includes detailed schedules that support the recommended water and sewer revenue requirement allocations to each customer class.

3.2 COMPONENTS OF THE ANALYSIS

As the City maintains separate enterprise funds for the water and sewer systems, no initial separation of expenses or revenue between systems was necessary for this Study. Therefore, the following presents the

key components or steps that were performed to distribute the expenses and revenue requirements of each respective system to each identified customer class.

3.2.1 STEP 1: FUNCTIONAL COST ALLOCATIONS

The operating expenses, debt service, and cash-funded capital requirements within each system (water and sewer) was distributed to specific activities or functional components of service. The functional components of the **water system** were identified as:

- ▶ Source of Supply
- ▶ Treatment
- ▶ Distribution
- ▶ Meters/Customer Services
- ▶ Fire Protection (public and private services)

The functional components of the **sewer system** were identified as:

- ▶ Meters/Services
- ▶ Collection System
- ▶ Treatment (including disposal)

A detailed process was followed for assigning expenses to the respective functional components that was reviewed extensively with City staff. The results are detailed in Schedule 11-W (water) and Schedule 11-S (sewer) of Appendix B. The column in those respective schedules labelled "Allocation Basis" indicates the basis for how each individual line item was allocated to the identified functional components of each system. The support for those allocation factors are explained in Table 2 (water) and Table 4 (sewer) and the resulting allocations are summarized in Table 3 (water) and Table 5 (sewer).

Table 2: Basis of budget category allocations to water functional components

Meter/Services	Direct allocation to Meter/Services
Water Production FTE	Based on estimate of FTEs serving each respective function
Treatment	Direct allocation to Treatment function
Supply	Direct allocation to Supply function (water only)
Distribution	Direct allocation to Distribution function
Staff Estimate	Based on staff estimate
Debt Split	Based upon the types of projects funded from each issuance
CIP Projects	Based upon the types of projects funded by the cash
Fire Protection	Direct allocation to Fire Protection function
Indirect	Allocated to each functions in proportion to the total operation and maintenance costs allocated to each function.

Table 3: Budget category allocations to water functional components

	Supply	Treatment	Distribution	Meters/Customer Service	Fire Protection
Basis/Factor	% Allocation				
Meter/Services	0.0%	0.0%	0.0%	100.0%	0.0%
Indirect	28.6%	2.1%	38.6%	28.7%	2.1%
Water Production FTE	20.0%	4.0%	64.0%	8.0%	4.0%
Treatment	0.0%	100.0%	0.0%	0.0%	0.0%
Supply	100.0%	0.0%	0.0%	0.0%	0.0%
Distribution	0.0%	0.0%	100.0%	0.0%	0.0%
Staff Estimate (1)	80.0%	0.0%	20.0%	0.0%	0.0%
Debt Split	44.8%	0.0%	0.0%	55.2%	0.0%
CIP Projects	42.3%	0.0%	33.0%	24.6%	0.0%
Fire Protection	0.0%	0.0%	0.0%	0.0%	100.0%

Table 4: Basis of budget category allocations to sewer functional components

Treatment	Direct allocation to Treatment function
Collection	Direct allocation to Collection function (sewer only)
Customer	Direct allocation to Customer function (sewer only)
FTE	Based on estimate of FTEs serving each respective function
CIP Projects	Based upon the types of projects funded by the cash
Indirect	Allocated to each functions in proportion to the total operation and maintenance costs allocated to each function.

Table 5: Budget category allocations to sewer functional components

	Meters/Customer Service	Collection	Treatment
Basis/Factor	% Allocation		
Customer	100.0%	0.0%	0.0%
Collection	0.0%	100.0%	0.0%
Treatment	0.0%	0.0%	100.0%
FTE	28.5%	44.1%	27.4%
Indirect	12.9%	50.3%	36.8%
CIP Projects	0.0%	16.6%	83.4%

3.2.2 STEP 2: DISTRIBUTE FUNCTION COSTS TO SYSTEM PARAMETERS

Next the costs of each functional component were distributed to system parameters.

3.2.3 DISTRIBUTION OF WATER COSTS TO SYSTEM PARAMETERS

As shown in Table 6, the water system's Supply costs are allocated entirely to the system's Base Capacity (as measured by the Average Day, see Table 7), Meter/Services costs are assigned to the Customer

parameter (as measured by the number of accounts), and Fire Protection is assigned to the Fire Protection parameter (as measured by hydraulic capacity).

Treatment costs are split between the Base Capacity and Extra Capacity – Max Day. This split is calculated based on the relative volume of an Average Day as compared to a Maximum Day⁴ (see Table 7). The logic is that the treatment system has been sized to be able to meet the demands associated with the average flows during a maximum day event.

Distribution costs are split between the system's Base Capacity, Extra Capacity – Max Day, and Extra Capacity – Max Hour as the distribution system has been sized to meet all system demands (i.e. average day, maximum day, and peak hour). The allocation percentages shown in Table 6 are calculated based on the relationship of the system demand values shown in Table 7 identified as part of the City's master plan efforts.

Table 6: Water System: Mapping Functional Components to System Parameters

Functional Component	System Parameters				
	Base Capacity (Average Day)	Extra Capacity (Max Day)	Extra Capacity (Peak Hour)	Fire Protection	Customers
Source of Supply	100%				
Treatment	33%	67%			
Distribution	22%	45%	33%		
Meters/Services					100%
Fire Protection				100%	

Table 7: Water System Peaking Profile⁵

	Average Day (MGD)	Max Month (MGD)	Max Day (MGD)	Max Hour (MGD)
Water System Demands	1.731	2.218	5.292	7.937

Next the water system's functionalized costs for operating, debt service and cash-funded capital spending from Step 1 are allocated to system parameters based on the values shown in Table 6. The results are summarized in **Schedule 12-W**. For example at the top of Schedule 12-W, the \$222,396 in Supply operating expenses are allocated 100% to the Base Capacity parameter. The total operating expenses allocated to the Base Capacity parameter (\$293,203) are then converted to unit costs by dividing by relevant system metric as listed at the top of Schedule 12-W. In the case of the Base Capacity parameter, the relevant system metric is the water system's total annual water usage (439,469,000 gallons) and the resultant unit metric is \$0.59 per thousand gallons (TGAL). It is important to note that the division of fire protection costs between private and public fire protection is explained in detail in Step 7.

⁴ Peak hour and max day demands are not recorded by class because all customers are metered monthly and peak hour and max day usage specificity by customer class is not determinable from historical empirical usage data and has to be imputed from other available data and industry sources.

⁵ Peaking values derived from memo "Water and Sewer Demand Information in Support of Rate Study" Feb. 8, 2016 Steven Tanaka, Wallace Group

3.2.4 DISTRIBUTION OF SEWER COSTS TO SYSTEM PARAMETERS

Relative to sewer system costs, Table 8 shows that the Meters/Customer Service costs are allocated the Customer parameter (as measured by the number of accounts) and the Collection System as well as Treatment costs were allocated to the Volume parameter (as measured by estimated sewer volumes expressed in equivalent residential/service units).

Table 8: Sewer System: Mapping Functional Components to System Parameters

Functional Component	System Parameters	
	Volume	Customer
Meters/Customer Service		100%
Collection	100%	
Treatment	100%	

As such, the sewer system's functionalized costs for operating, debt service and cash-funded capital spending from Step 1 are directly allocated to the system parameters based on the values shown in Table 8 (the results are summarized in **Schedule 12-S**). For example at the top of Schedule 12-S, the \$137,291 in Meter/Customer Service operating expenses are allocated 100% to the Customer parameter. The total operating expenses allocated to the Customer parameter are then converted to unit costs by dividing by relevant system metric as listed at the top of Schedule 12-S. In the case of the Customer parameter, the relevant system metric is the sewer system's total number of annual bills (43,128 bills) and the resultant unit metric is \$3.18 per bill.

3.2.5 STEP 3: DETERMINATION OF CUSTOMER CLASSES

A customer class consists of a group of customers, with similar characteristics, who share responsibility for certain costs incurred by the Utility. Joint costs are shared among all customers in the system proportionately based on their service requirements that drive costs; some specific costs are borne by specific classes based on the characteristics of that group alone. In summary, the Study proposes the following customer classes based upon consideration of the characteristics, service patterns, and existing classifications of the City:

Water Service

- Single Family Residential
- Multifamily Residential (incl. mobile home & trailer parks w/permanent units)
- Commercial/Institutional (incl. hotel/motel/RV parks)
- Industrial
- Landscape/Irrigation (including agriculture)
- Private Fire Protection

Sewer Service

- Single Family Residential
- Multifamily Residential (incl. mobile home & trailer parks w/permanent units)
- Commercial/Institutional
- Hotel/Motel/RV Parks
- Schools

3.2.6 STEP 4: QUANTIFY UNITS OF SERVICE BY CUSTOMER CLASS

Once functionalized and distributed to parameters, system costs are then allocated among customer classes based on their respective service requirements, as measured by units of service for each respective system parameter. The units of service utilized for this analysis by customer class are summarized in Table 9 (water customers) and Table 10 (sewer customers).

Table 9: Water System Units of Service

	Accounts (count)	Annual Use (TGAL)	Max Day (TGPLD)	Max Hour (TGPLD)	Fire Protection (TGAL)	Bills (count per year)
Single-Family Residential	3,582	355,787	2,934	1,955	429,840	42,984
Multi-Family Residential	326	67,956	432	309	117,360	3,912
Commercial/Institutional	160	42,052	347	231	57,600	1,920
Industrial	11	4,277	34	0	9,240	132
Landscape/Irrigation	71	23,397	472	322	0	852
Totals	4,150	493,469	4,220	2,817	614,040	49,800

Table 10: Sewer System Units of Service

	Accounts (count)	Units (count)		Equivalency Scale	Equivalent Units (count)	Total Bills (per year)
Single-Family Residential	3,124	3,125	Units	1	3,125	37,488
Multi-Family Residential	289	860	Units	1	645	3,468
Commercial/Institutional	160	248	ERUs*	1	248	1,920
Motel/Hotel/RV Park	13	304	Rooms	0	76	156
Schools	8	207	ADA**	1	207	96
Totals	3594	4,744			4,301	43,128

* Commercial/Institutional ERU values assigned by the City based on factors such as fixtures counts and business size.

** ADA - Average daily attendance, which is divided by 20 to convert to ERUs (ADA was 4,142 in 2015)

As it relates to the sewer units of service, the basis for the equivalency factors and calculated number of equivalent units for each customer class is as follows:

Single-Family Residential – When speaking of “equivalent units”, this refers to the number of single family residential accounts each customer represents based upon their estimated sewer volume. Per the detailed billing records of the City, single-family residential accounts have a winter⁶ average monthly billed water volume of 7,370 gallons (of which 100% is assumed to return to the sewer system).

Multi-Family Residential – The equivalency factor and associated number of equivalent units for this customer class is determined based on the number of dwelling units. Per the City’s billing records, the winter average monthly billed water volume per dwelling unit is 5,619 gallons, which is 76% of the average for single family accounts. Therefore an equivalency factor of 0.75 (rounded) was assigned per dwelling unit to this customer class.

⁶ Based upon the months of Dec. – Feb.

Commercial/Institutional – The number of equivalent units for the accounts within this class are assigned on a case-by-case basis, and consider factors such as number of fixtures, number of seats in a restaurant, etc. As such, no adjustments to the number of equivalent units identified in the City’s billing system was identified for this customer class.

Motel/Hotel/RV Park – The equivalent units for this class is based on the number of rooms and RV spaces. The observed winter average monthly billed water volume per room/space is 1,778 gallons, which is 24% of the single family average. Therefore an equivalency factor of 0.25 (rounded) was assigned per room/space to this customer class.

Schools – The equivalent units for this customer class are determined based upon average daily attendance (ADA) of students. Per the City’s ordinance, each 20 students of ADA is equivalent to a single-family home. Per City staff, the ADA for all schools within the City in 2015 was 4,142 which yields a total of 207 equivalent units for this class.

3.2.7 STEP 5: ALLOCATE SERVICE COSTS TO CUSTOMER CLASSES

Next each customer class is allocated service costs based on the respective units of service shown in Step 4 and the unit costs calculated in Step 2. Results are shown in Table 11 (water) and Table 12 (sewer). By way of example, the \$522,903 allocated to Single-Family Residential for Base Capacity was calculated by multiplying the unit cost for Base Capacity listed in Schedule 12-W (\$0.59 per TGAL) by the Base Capacity units of service for Single-Family Residential customers (355,787 TGAL Annual Use).

Table 11: Water - Customer Class Cost Allocation

	Total	Single-Family Residential	Multi-Family Residential	Commercial/ Institutional	Industrial	Landscape/ Irrigation
Base Capacity	\$ 766,865	\$ 552,904	\$ 105,606	\$ 65,350	\$ 6,647	\$ 36,360
Extra Capacity - Max Day	\$ 296,296	\$ 206,030	\$ 30,347	\$ 24,360	\$ 2,388	\$ 33,173
Extra Capacity - Max Hour	\$ 211,920	\$ 147,051	\$ 23,263	\$ 17,385	\$ -	\$ 24,221
Public Fire Protection	\$ 29,103	\$ 20,375	\$ 5,563	\$ 2,730	\$ 438	\$ -
Customer	\$ 643,663	\$ 555,566	\$ 50,562	\$ 24,816	\$ 1,706	\$ 11,012
Total Cost Allocation	\$ 1,947,847	\$ 1,481,927	\$ 215,341	\$ 134,642	\$ 11,179	\$ 104,765

Table 12: Sewer - Customer Class Cost Allocation

	Total	Single-Family Residential	Multi-Family Residential	Commercial/ Institutional	Motel/Hotel/ RV Park	Schools
Volume	\$ 1,711,052	\$ 1,243,146	\$ 256,496	\$ 98,791	\$ 30,233	\$ 82,386
Customer	\$ 137,291	\$ 119,337	\$ 11,040	\$ 6,112	\$ 497	\$ 306
Total Cost Allocation	\$ 1,848,343	\$ 1,362,483	\$ 267,536	\$ 104,903	\$ 30,730	\$ 82,691

3.2.8 STEP 6: CREDIT NON-RATE REVENUE TO CUSTOMER CLASSES

Non-rate revenue is used to offset the annual cost of service otherwise that would otherwise need to be recovered in rates or service charges. Non-rate revenue includes interest income, other operating revenue (such as miscellaneous fees), and use of reserves. Non-rate revenue is allocated equitability among customer classes using the same distribution proportions used when allocating costs, as summarized by Table 11 and Table 12. The non-rate revenue is credited to each customer class as shown in Table 13 (water) and Table 14 (sewer) and yields the total rate revenue requirement by customer class.

Table 13: Water System Total Rate Revenue Requirement⁷

	Total	Single-Family Residential	Multi-Family Residential	Commercial/ Institutional	Industrial	Landscape/ Irrigation
Total Cost Allocation	\$ 1,947,847	\$ 1,481,927	\$ 215,341	\$ 134,642	\$ 11,179	\$ 104,765
Less: Non-Rate Revenue	\$ 300,261	\$ 228,437	\$ 33,194	\$ 20,755	\$ 1,723	\$ 16,149
Applied Proportionately by System Parameter						
Base Capacity	\$ 648,656	\$ 467,672	\$ 89,326	\$ 55,276	\$ 5,622	\$ 30,755
Extra Capacity - Max Day	\$ 250,623	\$ 174,270	\$ 25,669	\$ 20,605	\$ 2,020	\$ 28,059
Extra Capacity - Max Hour	\$ 179,254	\$ 124,383	\$ 19,677	\$ 14,705	\$ -	\$ 20,487
Public Fire Protection	\$ 24,617	\$ 17,234	\$ 4,706	\$ 2,309	\$ 370	\$ -
Customer	\$ 544,445	\$ 469,924	\$ 42,768	\$ 20,990	\$ 1,443	\$ 9,315
Rate Revenue Requirement	\$ 1,647,586	\$ 1,253,490	\$ 182,147	\$ 113,887	\$ 9,456	\$ 88,616

Table 14: Sewer System Units of Service⁸

	Total	Single-Family Residential	Multi-Family Residential	Commercial/ Institutional	Motel/Hotel/ RV Park	Schools
Total Cost Allocation	\$ 1,848,343	\$ 1,362,483	\$ 267,536	\$ 104,903	\$ 30,730	\$ 82,691
Less: Non-Rate Revenue	\$ 339,218	\$ 250,050	\$ 49,100	\$ 19,252	\$ 5,640	\$ 15,176
Applied Proportionately by System Parameter						
Volume	\$ 1,397,031	\$ 1,014,997	\$ 209,422	\$ 80,661	\$ 24,685	\$ 67,266
Customer	\$ 112,095	\$ 97,436	\$ 9,014	\$ 4,990	\$ 405	\$ 250
Rate Revenue Requirement	\$ 1,509,126	\$ 1,112,433	\$ 218,436	\$ 85,651	\$ 25,090	\$ 67,515

3.2.9 STEP 7: CALCULATE PRIVATE FIRE COST ALLOCATION

In Schedule 11-W, it was identified that \$46,995 of water system costs are directly allocable to fire protection. In Schedule 12-W, those fire protection costs were further allocated into \$29,107 for public fire protection and \$17,851 for private fire protection. The following provides a more detailed explanation for the fire protection cost of service determination and subsequent split between public and private fire protection services. It is important to note that the total fire protection value listed in Schedule 11-W are only the costs that are directly allocable to fire protection. There are additional costs associated with the capacity that is embedded within the system's Base Capacity and Extra Capacity. Those costs are estimated by first measuring the capacity requirement of fire protection.

Base Capacity Costs – The AWWA M-1 Manual estimates that water that is used for fire-fighting, pressure testing, C-Value tests, and flushing is typically equal to up to 1% of a system's flows. Given that the system has average of 1.731 MGD, one percent of the annual flows is 6,317,712 gallons. At a unit cost of \$1.55 per TGAL for Base Capacity (see Schedule 12-W), this equates to a cost of \$9,818.

⁷ Note that the total rate revenue requirement in this table does not match the rate revenue requirement shown in Schedule 7-W for two reasons: (1) this table does not include private fire charge revenue and (2) Schedule 7-W is missing one month of increased rates for FY 2017 since the rate increase is effective on August 1.

⁸ Note that the total rate revenue requirement in this table does not match the rate revenue requirement shown in Schedule 7-S because Schedule 7-S is missing one month of increased rates for FY 2017 since the rate increase is effective on August 1.

Extra Capacity Costs – Peak Day – The fire system capacity has been sized to flow at 1000 gallons per minute (GPM) for residential building fires and 2000 gallons per minute (GPM) for commercial building fires (both for a three hour duration). Assuming that the system experiences one residential fire and one commercial fire on the same day, the water flow for that day (“max day”) would be 540,000 gallons. At a unit cost of \$70.21 per thousands of gallons per day (TGPD) for Peak Day Capacity (see Schedule 12-W), this equates to a cost of \$37,914.

Extra Capacity Costs – Peak Hour – Assuming that both fires described above occur simultaneously, the water flow rate during those hours (“max hour”) would be 4,320,000 GPD. At a unit cost of \$75.23 per TGPD for Peak Hour Capacity (see Schedule 12-W), this equates to a cost of \$325,007.

Together with the direct costs identified in Schedule 11-W, these costs add up to \$419,696. As shown in Table 15, the private fire system accounts for 4.3% of the total fire system capacity, while the public fire system accounts for the remaining 95.7% (based upon the hydraulic capacity of the respective connection sizes for each service). This yields a cost allocation of \$17,891 to the private fire system (as shown in Schedule 12-W), which needs to be collected through private fire protection fees to those customers with such service.

Table 15: Private vs. Public Fire Capacity Usage

	Current Number of Services	Demand Factor (1)	Equivalent Connections
PRIVATE FIRE SERVICE			
Size of Connection			
5/8"	7	0.29	2.03
3/4"	1	0.47	0.47
1.5"	0	2.90	0.00
2"	0	6.19	0.00
3"	18	17.98	323.67
4"	22	38.32	843.03
6"	5	111.31	556.55
Private Totals	53		1725.8
		Percent of Total	4.3%
PUBLIC FIRE SERVICE			
Hydrants	349	111.31	38,847.5
		Percent of Total	95.7%
Totals	402		40,573.3

(1) Based on AWWA's practice of estimating the relative flow through pressure conduits as the diameter raised to power of 2.63.

As shown in Table 15, the total number of equivalent connection for private fire accounts is 1,726 (rounded). As such, the cost per equivalent connection is \$10.37 (\$17,891 divided by 1,726). The proposed schedule for fixed private fire monthly charges in FY 2017 is presented in Table 16. A complete schedule of private fire rates through FY 2021 is provided in Appendix C.

Table 16: Private Fire Proposed Rates – FY 2017

Service Connection Size	Fixed Monthly Rate
5/8"	\$0.25
3/4"	\$0.40
1"	\$0.86
1.5"	\$2.50
2"	\$5.34
3"	\$15.50
4"	\$33.03
6"	\$95.94

3.3 COST-OF-SERVICE RESULTS

Table 17 and Table 18 compare the revenue distribution from the City's current rates to the results of the cost of service analysis performed in this Study. The shifting of cost responsibilities between customer classes is a normal phenomenon as utility service use patterns change and better data becomes available over time.

Table 17: Water FY 2017 Revenue and COS Comparison

Customer Class	Current Revenue		Cost of Service	
	Dollars	Percent	Dollars	Percent
Single-Family Residential	\$1,238,248	74.3%	\$1,253,483	75.3%
Multi-Family Residential	\$194,212	11.7%	\$182,145	10.9%
Commercial/Institutional	\$130,423	7.8%	\$113,887	6.8%
Industrial	\$11,796	0.7%	\$9,456	0.6%
Landscape/Irrigation/Agriculture	\$76,407	4.6%	\$88,615	5.3%
Private Fire Protection	\$14,351	0.9%	\$17,851	1.1%
Total	\$1,665,437	100.0%	\$1,665,437	100.0%

Table 18: Sewer FY 2017 Revenue and COS Comparison

Customer Class	Current Revenue		Cost of Service	
	Dollars	Percent	Dollars	Percent
Single-Family Residential	\$1,117,344	74.0%	\$1,112,433	74.0%
Multi-Family Residential	\$237,520	15.7%	\$218,436	14.4%
Commercial/Institutional	\$88,794	5.9%	\$85,651	5.7%
Motel/Hotel/RV Park	\$48,841	3.2%	\$25,090	1.6%
Schools	\$16,626	1.1%	\$67,515	4.4%
Total	\$1,509,126	100.0%	\$1,509,126	100.0%

4. RATE STRUCTURE ANALYSIS

Upon completion of the COSA, a rate structure analysis was performed to identify potential rate structure modifications and specific rate schedules for implementation in FY 2017 that would:

- vi. Fairly and equitably recover each fund's current cost of service and revenue requirements for each customer class;
- vii. Conform to accepted industry practice and legal requirements;
- viii. Provide fiscal stability and recovery of fixed costs of the system;
- ix. Maintain affordability to low volume and average users to the extent possible; and
- x. Promote water conservation.

The following sub-sections present a description of the basis of the recommended rate structure, specific rate schedules based upon the rate structure recommendations for implementation in FY 2017, as well as the customer impacts of the specific rates recommended for FY 2017.

4.1 SEWER RATES

The current sewer rate structure is comprised of a single fixed fee of \$24.80 per month that is applied based upon the number of equivalent units determined for each customer. The proposed rate structure presented herein is also comprised of fixed charges, however it includes a separate fixed rate per account for customer related costs, as well as a fixed rate for each equivalent unit for remaining system costs (based upon updated equivalency factors for each customer class). The basis for how equivalent units are calculated for each customer class is described in Section 3.2.6. The account charges (\$3.18 per month) were calculated by dividing the total Customer costs (\$137,291, see Schedule 12-S) by the total number of accounts (3,594, see Table 10) and divided by 12 (months). The meters charges (\$26.58 per month per ERU) were calculated by subtracting the anticipated account charge revenue (\$137,291, see above) from the rate revenue requirement (\$1,509,126, see Table 14) and dividing by the total number of equivalent units (4,301, see Table 10).

The recommended sewer rates are summarized in Table 19 and are intended for implementation on 8/1/16 and embody the recommended rate revenue increase of 16% identified in the RSA presented in Section 2.

Table 19: Recommended Sewer Rates for FY 2017 (with 16% rate increase)

Monthly Rate (per Account): \$3.18		
Fixed Meter Charge (per equivalent unit): \$26.58		
Customer Class	Basis	Equivalency Factor
Single-Family Residential	per Home	1.0
Multi-Family Residential	per Dwelling Unit	.75
Commercial/Institutional	Various	1.0
Motel/Hotel/RV Park	per Room/Space	.25
Schools	per 20 Students	1.0

4.2 WATER RATES

The following explains how the recommended water rates were designed in a manner such that they comply with the cost-of-service results and address the aforementioned rate structure objectives. The recommended rate schedules are designed such that each customer class pays its own proportionate share of the cost of service of the Utility.

4.2.1 CURRENT WATER RATES

Common industry practice for water utilities is a two-part rate structure comprised of both fixed and variable charges. Generally accepted practice recovers a portion of the costs of the system in a fixed monthly readiness-to-serve charge, recognizing that utilities have substantial investments in capacity-related costs and other fixed costs that are incurred year-round to maintain a state of readiness to meet peak demands when they occur. The amount of cost recovery in fixed versus variable charges is unique to each community's balance of fiscal stability, philosophy regarding cost recovery, and level of fixed costs.

Consistent with standard industry practice, the Utility currently applies a rate structure which is made up of two parts:

1. Monthly Base Service Charge; and
2. Tiered Variable Consumption Rates

The Monthly Base Service Charge is a fixed charge that is the same for all customer classes and is assessed based on meter size. The Monthly Service Charge current recovers 51% of the Fund's rate revenue, which is a portion of the fixed costs of providing water service.

The Tiered Variable Consumption Rates are designed to recover the remainder of the Water Fund's fixed costs as well as its variable costs. The Tiered Variable Consumption Rates are such that the rates increase (every 5,000 gallons per month) as more water is consumed (up to 25,000 gallons per month after which point the rates no longer increase).

4.2.2 PROPOSED CHANGES TO WATER RATE STRUCTURE

The following presents the proposed changes to both the fixed and volumetric portions of the City's existing water rate structure.

4.2.2.1 Fixed Charges

Fixed costs are costs that the utility will incur, regardless of whether water is actually delivered to an account or not. In a sense, these are akin to "readiness-to-serve" costs. This Study considers two general categories of fixed costs: (1) the fixed costs associated with managing each water account (customer service, billing, administration) and (2) the fixed costs associated with the infrastructure needed to serve the account (distribution pipe, pumps, treatment facilities, etc.). As such, this Study proposes to establish a "Fixed Monthly Account Charge" that will be charged on a per-account basis, and a "Fixed Monthly Meter Charge" which will be charged by meter and in proportion to the meter size (since the meter size reflects the amount of capacity that is prepared to serve the account).

4.2.2 Volumetric Charges

One of the challenges associated with tiered water rates is identifying equitable “tier thresholds” (consumption points which trigger higher unit rates). Assigning the same tier thresholds to all customers implies that all customers generally have the same water needs, which is not the case. Given the challenges with estimating the water needs of most customers, this Study recommends that tier rates only be applied to the single family residential customer class. All other customer classes shall be charged a single, uniform Variable Consumption Rate recognizing the potential for large differences in the water usage patterns within each of these classes.

4.3 RECOMMENDED WATER RATES

The following explains how the cost-of-service results were used to calculate the proposed rates for each respective customer class.

4.3.1 FIXED MONTHLY ACCOUNT CHARGE METHODOLOGY

The Fixed Monthly Account Charge (\$10.67 per month per account) was calculated by simply dividing the total Customer Service/Metering costs (\$544,444, see Table 11) by the total number of accounts (4,325, see Table 9 plus assumed growth of 75 ERUs during FY 2016 and 100 ERUs in FY 2017) divided by 12 (months). Results are summarized in Table 25 and in **Appendix C**.

4.3.2 FIXED MONTHLY METER CHARGE METHODOLOGY

The costs assigned to the fixed meter charge were extracted from the remaining costs as shown in Table 20.

Table 20: Allocation of System Parameter Costs to Fixed Meter Charge

System Parameter Costs	Percent Allocated to Meter Charge	Basis	Total COS Allocation	Meter Charge Allocation
Base Capacity	0.0%	Base capacity costs are to provide basic water service, such as source of supply, which is best charged through volumetric rates.	\$648,656	\$0
Extra Capacity - Max Day	50.0%	The extra capacity benefits both users of the system and potential users of the system	\$250,623	\$125,312
Extra Capacity - Max Hour	50.0%	The extra capacity benefits both users of the system and potential users of the system	\$179,254	\$89,627
Public Fire Protection	100.0%	All accounts benefit from fire protection, regardless of whether they use water	\$24,617	\$24,617
Total:			\$1,103,150	\$239,556

The purpose of the meter charge is to recover costs associated with the system capacity available to serve customers. As such, the Fixed Monthly Meter Charge is scaled by meter size based upon maximum flow capacity data published by AWWA that represents the proportional demand of a meter based on its hydraulic capacity. This allows us to express all meter sizes in terms of multiples of a 5/8” meter and then calculate the

number of ERUs by customer class as summarized in Table 21⁹. The ERU count includes the estimated growth of 75 ERUs during FY 2016 and 100 ERUs in FY 2017.

Table 21: Meter Count and Equivalency by Size and by Customer Class

Customer Class	Count of Meters by Size								Meter Count	Meter Equivalency
	5/8"	3/4"	1"	1 1/2"	2"	3"	4"	6"	Total	Total
Single Family Residential	2,401	16	1,165	0	0	0	0	0	3,582	5,337
Multifamily Residential	253	2	72	1	0	0	3	0	331	516
Commercial/Institutional	87	3	22	15	19	5	3	1	155	579
Industrial	9	0	1	0	1	0	0	0	11	20
Irrigation/Landscape	6	0	12	10	19	23	1	0	71	631
Total Meter Count	2,756	21	1,272	26	39	28	7	1	4,150	
Meter Equivalency Ratio	1.0	1.5	2.5	5.0	8.0	16.0	25.0	50.0		
Total Meter Equivalency	2,756	32	3,180	130	312	448	175	50		7,082

The Fixed Monthly Meter Charge (\$2.75 per month per equivalent meter) was calculated by dividing the total fixed meter costs (\$239,556, see Table 20) by the total number of equivalent units (7,258, see Table 21 plus growth of 175 ERUs) divided by 12 (months). Results are summarized in Table 25 and in **Appendix C**.

4.3.3 VARIABLE CONSUMPTIVE RATE METHODOLOGY

After the fixed charges have been calculated, the remaining cost to provide service is collected through the volumetric rates ("Variable Consumptive Rate"). As explained in Section 4.2.2.2, only the single family residential customers will have tiered rates, while all other customer will be charged uniform rates.

4.3.3.1 Single Family Customer Tier Thresholds

The proposed tier thresholds for the Single Family Residential customers are compared to the existing tier thresholds in Table 22.

Table 22: Tier Thresholds for Single Family Residential Customers

	Existing	Proposed
Tier 1	5 TGAL	8 TGAL
Tier 2	10 TGAL	15 TGAL
Tier 3	15 TGAL	> 15 TGAL
Tier 4	20 TGAL	NA
Tier 5	25 TGAL	NA
Tier 6	> 25 TGAL	NA

⁹ Each meter size is assigned a factor relative to a 5/8" meter, which has a value of 1.00. This establishes the "base" meter size. A given meter size's ratio of meter servicing costs relative to the base (that of a 5/8" meter) determines the *meter equivalency*. Summation of all meter equivalencies for a given size yields total equivalent meters.

The justification for the proposed tier thresholds are as follows:

Tier 1 – The 8,000 gallon per month threshold for Tier 1 provides about 55 gallons of water per capita per day (GPCD), assuming that the average single family home houses 4.7¹⁰ people. This is equal to the State of California’s indoor efficient water usage standard of 55 GPCD. At the projected usage levels for FY 2017¹¹, the Tier 1 threshold results in approximately 265,782 gallons of usage by Single Family customers in Tier 1.

Tier 2 – The Tier 2 thresholds of 15,000 gallons per month is based on approximate outdoor water needs. Outdoor water needs are measured with the following formula:

$$\text{Water Requirement} = LA \times (ET - BRF) \times \frac{Kc}{IE}$$

Where:

LA = Landscaped area (in square feet)

ET = Evapotranspiration (measure in inches of water)

BRF = Beneficial rainfall (in inches)

Kc = Crop Coefficient (measures the water requirements of specific crops)

IE = Irrigation Efficiency (coefficient to account for imperfect irrigation coverage)

This Study assumed that typical residential parcels are 7,500 square feet and are 33% landscaped. The reference ET for CIMIS¹² Zone 12 is 53.4 inches and the annual rainfall in Greenfield is 11.3 inches, of which 25% is assumed to be beneficial (most rain falls during the winter when ET rates are very low). The crop coefficient for turf is 0.7¹³ and the assumed irrigation efficiency was 70%.

All of these values yield an outdoor “water budget” of 7,000 gallons per month. At the projected usage levels for FY 2017¹⁴, the Tier 2 threshold results in approximately 89,533 gallons of usage by Single Family customers in Tier 2.

Tier 3 – Tier 3 does not have a threshold since there are only three tiers. Any usage beyond Tier 2 is considered to be Tier 3 water.

¹⁰ Source: 02 Land Use Final GP August 2005.pdf - pg. 42 / Census Data

¹¹ Projected water usage for FY 2017 based on FY 2015 actual usage plus two years of growth (at 1.69% in FY 2016 and 2.22% in FY 2017) in addition to an assumed 5% rebound in water usage.

¹² CIMIS = California Irrigation Management Information System, see <http://www.cimis.water.ca.gov/>

¹³Source:http://ucanr.edu/sites/UrbanHort/Water_Use_of_Turfgrass_and_Landscape_Plant_Materials/Turfgrass_Crop_Coefficients_Kc/

¹⁴ See Footnote ¹¹

A summary of the forecasted water consumption by tier is provided in Table 23.

Table 23: Tier Thresholds for Single Family Residential Customers

	Tier 1	Tier 2	Tier 3	Total
SF Residential	265,782	89,533	40,157	395,472
MF Residential	70,637	0	0	70,637
Commercial/Institutional	43,711	0	0	43,711
Industrial	4,446	0	0	4,446
Irrigation/Landscape	24,320	0	0	24,320
Total	408,897	89,533	40,157	538,587
	75.92%	16.62%	7.46%	100.00%

4.3.3.2 Calculating Single Family Residential Tier 1 Rates

After calculating the Fixed Account Charge and Fixed Meter Charge revenue, the remaining revenue requirement for Base Capacity, Extra Capacity – Max Day, and Extra Capacity – Max Hour are collected from each tier. The proposed volumetric are incrementally more expensive by tier in order to reflect costs associated with peak demand since the cost of peaking is driven by those users that create the greatest demand on the water utility's infrastructure. Base Capacity costs are allocated across the three tiers proportionally to the water volumes in each respective tier (67% in Tier 1, 23% in Tier 2, 10% in Tier 3). Extra Capacity costs (both Max Day and Max-Hour) are allocated across the three tiers based on a peaking factor that was calculated by comparing the ratio of each tiers' peak month volume to that of its minimum month. This yielded ratios of 1.4, 4.6, and 13.5 for Tiers, 1, 2, & 3 respectively. Those ratios were multiplied by the total water volume in each respective tier (see Table 24). The results were used to allocate the Max Day and Max Hour costs to each respective tier, as summarized in Table 24.

Table 24: Tier Thresholds for Single Family Residential Customers

	Volumetric Revenue Requirement	Tier 1	Tier 2	Tier 3
Base Capacity	\$368,043	67.2%	22.6%	10.2%
Extra Capacity - Max Day	\$137,144	27.4%	31.2%	41.4%
Extra Capacity - Max Hou	\$97,885	27.4%	31.2%	41.4%
Base Capacity	-	\$247,348	\$83,323	\$37,372
Extra Capacity - Max Day	-	\$37,591	\$42,801	\$56,752
Extra Capacity - Max Hou	-	\$26,831	\$30,549	\$40,506
	Tier Allocation:	\$311,770	\$156,673	\$134,630

Finally, the rates for each tier were calculated by dividing the allocated costs to the respective tier by the forecasted water use in each tier. For example, the \$311,747 allocated to Tier 1 (see Table 24) was divided by the 265,782 gallons in Tier 1 (see Table 23) to yield a rate of \$1.17 per TGAL. Complete results are summarized in Table 25 and in **Appendix C**.

4.3.3.3 Calculating the Remaining Uniform Rates

The respective uniform rates for Multifamily Residential, Commercial/Institutional, Industrial, and Irrigation/Landscape were calculated by dividing the allocated costs to the respective customer class by the forecasted water use. For example, the \$182,147 allocated to Multifamily Residential (see Table 13) was reduced by the anticipated account charge revenue (\$42,769) and the anticipated meter charge revenue (\$17,453) and then divided by 70,637 gallons (see Table 23) to yield a rate of \$1.73 per TGAL. Complete results are summarized in Table 25 and in **Appendix C**.

4.3.4 RECOMMENDED WATER RATES

Based upon the results of the COSA, the features of the recommended rate structure described herein, as well as the FY 2017 revenue requirements of the water fund, we have prepared the following schedule of water rates for FY 2017. The recommended rates are summarized in Table 25 and are intended for implementation on 8/1/16 and embody the recommended rate revenue increase of 7.06% identified in the RSA presented in Section 2. **Appendix C** provides a complete schedule of water (and sewer) rates for the period of FY 2017 to FY 2021.

Table 25: Recommended Water Rates for FY 2017

Water Service Rate Schedule (with 7.056% rate increase)

Monthly Account Charge:		\$10.67
Monthly Meter Charge:		
<u>Meter Size</u>	<u>Monthly Charge</u>	
5/8"	\$13.42	
3/4"	\$14.80	
1"	\$17.55	
1 1/2"	\$24.42	
2"	\$32.67	
3"	\$54.68	
4"	\$79.44	
6"	\$148.20	
Tiered Variable Consumptive Rates (Single Family Residential Only)		
<u>Tier</u>	<u>Threshold (gallons)</u>	<u>Rate (\$ per TGAL)</u>
Tier 1	0 - 8000	\$1.17
Tier 2	8000 - 15000	\$1.75
Tier 3	> 15000	\$3.35
Uniform Variable Consumptive Rates		
<u>Customer Class</u>		<u>Rate (\$ per TGAL)</u>
Multifamily Residential		\$1.73
Commercial / Institutional		\$1.68
Industrial		\$1.65
Irrigation/Landscape/Agriculture		\$2.38

4.3.5 CUSTOMER IMPACT ANALYSIS

As part of this Study, a bill impact analysis was conducted to better understand the changes that the recommended rate modifications would have on the monthly bills of various types of customers. In Table 26 below, a bill impact analysis is shown for Single Family Residential customers with a 5/8" water meter and varying degrees of water usage. These values show the combined total of the water and sewer bills. **Appendix C** provides additional bill analyses for the other Customer Classes.

Table 26: Bill Impact Analysis, Single Family Residential with 5/8" Meter

Monthly Use (Gal)	# of Bills	% of Bills	Agg. %	Current Total	Proposed Total	\$ Chg.	% Chg.
0	5,143	17.9%	17.9%	\$38.83	\$43.18	\$4.35	11.2%
1,000	615	2.1%	20.0%	\$39.57	\$44.35	\$4.78	12.1%
2,000	722	2.5%	22.5%	\$40.31	\$45.52	\$5.21	12.9%
3,000	914	3.2%	25.7%	\$41.05	\$46.69	\$5.64	13.7%
4,000	1,363	4.7%	30.4%	\$41.79	\$47.86	\$6.07	14.5%
5,000	1,613	5.6%	36.0%	\$42.53	\$49.03	\$6.50	15.3%
6,000	1,826	6.3%	42.3%	\$43.73	\$50.20	\$6.47	14.8%
7,000	1,936	6.7%	49.1%	\$44.93	\$51.37	\$6.44	14.3%
8,000	1,880	6.5%	55.6%	\$46.13	\$52.54	\$6.41	13.9%
9,000	1,749	6.1%	61.7%	\$47.33	\$54.29	\$6.96	14.7%
10,000	1,632	5.7%	67.3%	\$48.53	\$56.04	\$7.51	15.5%
15,000	796	2.8%	86.2%	\$56.03	\$64.79	\$8.76	15.6%
20,000	301	1.0%	94.1%	\$64.83	\$81.54	\$16.71	25.8%
40,000	11	0.0%	99.7%	\$115.63	\$148.54	\$32.91	28.5%
60,000	2	0.0%	99.9%	\$171.03	\$215.54	\$44.51	26.0%

APPENDIX A: REVENUE SUFFICIENCY ANALYSIS SCHEDULES

Water Fund - Beginning Balances as of June 30, 2015

Schedule 1-W

FUND BALANCES

Revenue Fund	\$ 1,970,652
Restricted Reserves	-
Water Impact Fees	2,476,552
TOTAL CONSOLIDATED FUND BALANCE	\$ 4,447,204

FUND BALANCE DETAIL	Revenue Fund	Water Impact Fees
CURRENT UNRESTRICTED ASSETS		
Cash and Investments	\$ 1,977,016	2,476,552
Accounts receivable, net	142,929	-
TOTAL CURRENT UNRESTRICTED ASSETS	\$ 2,119,945	2,476,552
Less: Accounts Payable	\$ (34,898)	-
Less: Accrued Payroll	(3,231)	-
Less: Service Deposits	(111,164)	-
TOTAL CURRENT LIABILITIES	\$ (149,293)	-
NET UNRESTRICTED FUND BALANCE	\$ 1,970,652	2,476,552

Sewer Fund - Beginning Balances as of June 30, 2015

Schedule 1-S

FUND BALANCES

Revenue Fund	\$ 921,099
Restricted Reserves	-
Sewer Impact Fees	1,235,802
TOTAL CONSOLIDATED FUND BALANCE	\$ 2,156,901

FUND BALANCE DETAIL	Revenue Fund	Sewer Impact Fees
CURRENT UNRESTRICTED ASSETS		
Cash and Investments	\$ 938,235	1,235,802
Accounts receivable, net	76,795	-
Due from other funds	17,681	-
TOTAL CURRENT UNRESTRICTED ASSETS	\$ 1,032,711	1,235,802
Less: Accounts Payable	\$ (11,346)	-
Less: Accrued Payroll	(4,983)	-
Less: Service Deposits	(95,284)	-
TOTAL CURRENT LIABILITIES	\$ (111,612)	-
NET UNRESTRICTED FUND BALANCE	\$ 921,099	1,235,802

Water Fund - Projection of Cash Inflows

Schedule 2-W

	<u>FY 2016</u> ⁽¹⁾	<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>	<u>FY 2025</u>	<u>FY 2026</u>
1 Rate Revenue Growth Assumptions											
2 Growth in Water ERUs	NA	2.22%	2.71%	3.17%	3.07%	2.98%	2.89%	2.81%	2.73%	2.66%	2.59%
3 Growth in Water Usage	NA	7.33%	2.71%	3.17%	3.07%	2.98%	2.89%	2.81%	2.73%	2.66%	2.59%
4 Assumed Rate Revenue Adjustments											
5 Assumed Rate Adjustment	NA	7.06%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
6 Water Rate Revenue ⁽²⁾											
7 Base Facility Charges	\$ 773,400	841,594	912,743	988,739	1,070,054	1,157,028	1,250,024	1,349,427	1,455,646	1,569,113	1,690,288
8 Usage Charges	712,881	814,525	883,386	956,939	1,035,638	1,119,814	1,209,820	1,306,026	1,408,828	1,518,646	1,635,923
9 Total Rate Revenue	\$ 1,486,281	1,656,119	1,796,129	1,945,678	2,105,692	2,276,842	2,459,844	2,655,453	2,864,474	3,087,759	3,326,211
10 Other Operating Revenue											
11 Water Conservation Surcharge	\$ 297,470	-	-	-	-	-	-	-	-	-	-
18 Total Other Operating Revenue	\$ 297,470	-	-	-	-	-	-	-	-	-	-
19 Interest Earnings Revenue	\$ 4,909	9,031	10,416	10,573	11,526	12,180	11,815	11,556	12,314	14,525	17,300
20 Impact Fees											
21 Water Impact Fees	\$ 233,250	311,000	388,750	466,500	466,500	466,500	466,500	466,500	466,500	466,500	466,500
22 Total Impact Fees	\$ 233,250	311,000	388,750	466,500	466,500	466,500	466,500	466,500	466,500	466,500	466,500
26 Total Cash Inflows	\$ 2,021,910	1,976,150	2,195,295	2,422,751	2,583,718	2,755,523	2,938,159	3,133,509	3,343,288	3,568,783	3,810,011

(1) Increases in billed accounts and growth in volume are based upon the City's "Utility Rate Study Projections" and discussions with City Staff.

(2) FY 2016 Rate revenues were based upon the FY 2015 actual results, adjusted for assumed growth and rate revenue adjustments.

Sewer Fund - Projection of Cash Inflows

Schedule 2-S

	<u>FY 2016 ⁽¹⁾</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>	<u>FY 2025</u>	<u>FY 2026</u>
1 Rate Revenue Growth Assumptions											
2 Growth in Sewer ERUs	NA	2.34%	2.86%	3.34%	3.23%	3.13%	3.03%	2.94%	2.86%	2.78%	2.70%
3 Growth in Sewer Usage	NA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4 Assumed Rate Revenue Adjustments											
5 Assumed Rate Adjustment	NA	16.00%	16.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
6 Sewer Rate Revenue ⁽²⁾											
7 Base Facility Charges	\$ 1,271,210	1,491,447	1,800,642	1,925,834	2,057,584	2,196,198	2,341,994	2,495,305	2,656,479	2,825,879	3,003,882
9 Total Rate Revenue	\$ 1,271,210	1,491,447	1,800,642	1,925,834	2,057,584	2,196,198	2,341,994	2,495,305	2,656,479	2,825,879	3,003,882
10 Other Operating Revenue											
11 Rental Income	\$ 1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
15 Total Other Operating Revenue	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
16 Interest Earnings Revenue	2,143	3,398	3,658	4,504	7,169	9,649	10,124	11,977	14,557	17,939	22,568
20 Impact Fees											
21 Sewer Impact Fees	\$ 513,612	357,368	446,710	536,052	536,052	536,052	536,052	536,052	536,052	536,052	536,052
22 Total Impact Fees	\$ 513,612	357,368	446,710	536,052	536,052	536,052	536,052	536,052	536,052	536,052	536,052
23 Total Cash Inflows	\$ 1,788,765	1,854,013	2,252,810	2,468,190	2,602,605	2,743,699	2,889,970	3,045,134	3,208,888	3,381,670	3,564,301

(1) Increases in billed accounts and growth in volume are based upon the City's "Utility Rate Study Projections".

(2) FY 2016 Rate revenues were based upon the FY 2015 actual results, adjusted for assumed growth and rate revenue adjustments.

Water Fund - Projection of Cash Outflows

Schedule 3-W 1 of 4

	<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>	<u>FY 2025</u>	<u>FY 2026</u>
1 Department: 191 - Utility Billing											
2 Personnel Services											
3 Salaries	\$ 39,900	41,496	43,571	45,749	48,037	50,439	52,961	55,609	58,389	61,308	64,374
4 Bilingual Pay	1,600	1,664	1,747	1,835	1,926	2,023	2,124	2,230	2,341	2,458	2,581
5 Leave Payoff	200	208	218	229	241	253	265	279	293	307	323
6 Social Security	2,300	2,392	2,512	2,637	2,769	2,907	3,053	3,206	3,366	3,534	3,711
7 Medicare	600	624	655	688	722	758	796	836	878	922	968
8 Workers' Compensation	2,700	2,808	2,948	3,096	3,251	3,413	3,584	3,763	3,951	4,149	4,356
9 PERS - Misc	8,000	8,320	8,736	9,173	9,631	10,113	10,619	11,150	11,707	12,292	12,907
10 Health Insurance	14,100	15,369	16,752	18,260	19,903	21,695	23,647	25,775	28,095	30,624	33,380
11 Dental/Vision Insurance	300	327	356	389	423	462	503	548	598	652	710
12 Long-Term Disability Insurance	200	218	238	259	282	308	335	366	399	434	473
13 Sub-Total: Personnel Services Department: 191 - Utility Billing	\$ 69,900	73,426	77,734	82,314	87,186	92,370	97,887	103,761	110,017	116,681	123,783
14 Operations and Maintenance (Fixed)											
15 Postage	\$ 8,500	8,691	8,887	9,087	9,291	9,500	9,714	9,933	10,156	10,385	10,618
16 Printing and Copying	7,500	7,669	7,841	8,018	8,198	8,383	8,571	8,764	8,961	9,163	9,369
17 Office Supplies	200	205	209	214	219	224	229	234	239	244	250
18 Software Maintenance Charges	500	511	523	535	547	559	571	584	597	611	625
19 Utility Billing Financial Services	6,500	6,646	6,796	6,949	7,105	7,265	7,428	7,596	7,766	7,941	8,120
20 Utility Bill Services	5,400	5,522	5,646	5,773	5,903	6,035	6,171	6,310	6,452	6,597	6,746
21 Sub-Total: O&M (Fixed) Department: 191 - Utility Billing	\$ 28,600	29,244	29,901	30,574	31,262	31,966	32,685	33,420	34,172	34,941	35,727
22 Minor Capital Outlay											
23 Customer Service Station Remodel	\$ 32,500	-	-	-	-	-	-	-	-	-	-
24 Sub-Total: Minor Capital Outlay Department: 191 - Utility Billing	\$ 32,500	-	-	-	-	-	-	-	-	-	-
25 Department: 340 - Water Administration											
26 Personnel Services											
27 Salaries	\$ 33,200	49,800	52,290	54,905	57,650	60,532	63,559	66,737	70,074	73,577	77,256
28 Overtime	200	300	315	331	347	365	383	402	422	443	465
29 Bilingual Pay	400	600	630	662	695	729	766	804	844	886	931
30 Social Security	1,900	2,850	2,993	3,142	3,299	3,464	3,637	3,819	4,010	4,211	4,421
31 Medicare	500	750	788	827	868	912	957	1,005	1,055	1,108	1,163
32 Workers' Compensation	2,500	3,750	3,938	4,134	4,341	4,558	4,786	5,025	5,277	5,540	5,817
33 PERS - Misc	2,800	4,200	4,410	4,631	4,862	5,105	5,360	5,628	5,910	6,205	6,516
34 PERS - PEPR Misc	1,200	1,800	1,841	1,882	1,924	1,968	2,012	2,057	2,103	2,151	2,199
35 Health Insurance	7,800	11,700	12,753	13,901	15,152	16,516	18,002	19,622	21,388	23,313	25,411
36 Dental/Vision Insurance	200	300	327	356	389	423	462	503	548	598	652
37 Long-Term Disability Insurance	100	150	164	178	194	212	231	252	274	299	326
38 Deferred Comp Employer Match	200	300	315	331	347	365	383	402	422	443	465
39 Sub-Total: Personnel Services Department: 340 - Water Administration	\$ 51,000	76,500	80,762	85,279	90,068	95,148	100,538	106,257	112,328	118,775	125,623

Water Fund - Projection of Cash Outflows

Schedule 3-W 2 of 4

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
40 Operations and Maintenance (Fixed)											
41 Postage	\$ 200	205	209	214	219	224	229	234	239	244	250
42 Printing and Copying	200	205	209	214	219	224	229	234	239	244	250
43 Advertising	100	102	105	107	109	112	114	117	119	122	125
44 Office Supplies	400	409	418	428	437	447	457	467	478	489	500
45 Financial Services	8,800	8,998	9,200	9,407	9,619	9,836	10,057	10,283	10,515	10,751	10,993
46 Sewer & Water Services	2,900	2,965	3,032	3,100	3,170	3,241	3,314	3,389	3,465	3,543	3,623
47 Phone Charges	800	818	836	855	874	894	914	935	956	977	999
48 Cell Phone Charges	300	307	314	321	328	335	343	351	358	367	375
49 General Operating Supplies	100	102	105	107	109	112	114	117	119	122	125
50 Uniforms / Personnel Equipment	400	409	418	428	437	447	457	467	478	489	500
51 Janitorial Supplies	100	102	105	107	109	112	114	117	119	122	125
52 Permits & Inspections	5,100	5,215	5,332	5,452	5,575	5,700	5,828	5,960	6,094	6,231	6,371
53 Building Maintenance Supplies	500	511	523	535	547	559	571	584	597	611	625
54 Vehicle Maintenance	2,200	2,250	2,300	2,352	2,405	2,459	2,514	2,571	2,629	2,688	2,748
55 General Operations Equipment	2,000	2,045	2,091	2,138	2,186	2,235	2,286	2,337	2,390	2,443	2,498
56 Meetings & Conferences	500	511	523	535	547	559	571	584	597	611	625
57 Other Training	800	818	836	855	874	894	914	935	956	977	999
58 Certifications	1,800	1,841	1,882	1,924	1,968	2,012	2,057	2,103	2,151	2,199	2,249
59 Publications	300	307	314	321	328	335	343	351	358	367	375
60 Memberships	1,100	2,000	2,045	2,091	2,138	2,186	2,235	2,286	2,337	2,390	2,443
61 Property Taxes	1,400	1,432	1,464	1,497	1,530	1,565	1,600	1,636	1,673	1,710	1,749
62 Water Revenue Sufficiency Analysis	30,000	-	-	-	-	40,000	-	-	-	-	50,000
63 Sub-Total: O&M (Fixed) Department: 340 - Water Administration	\$ 87,806	51,550	52,710	53,896	55,109	56,349	57,617	58,913	60,238	61,594	62,980
64 Operations and Maintenance (Variable)											
65 Gas Utility	\$ 100	102	105	107	109	112	114	117	119	122	125
66 Water Utility	100	102	105	107	109	112	114	117	119	122	125
67 Waste Disposal	1,300	1,329	1,359	1,390	1,421	1,453	1,486	1,519	1,553	1,588	1,624
68 Other Utilities	600	614	627	641	656	671	686	701	717	733	750
69 Gasoline & Oil	6,500	6,630	6,763	6,898	7,036	7,177	7,320	7,466	7,616	7,768	7,923
70 Sub-Total: O&M (Variable) Department: 340 - Water Administration	\$ 8,600	8,777	8,958	9,143	9,331	9,524	9,720	9,920	10,125	10,334	10,547
71 Department: 345 - Water Production											
72 Personnel Services											
73 Salaries	\$ 78,200	130,333	136,850	143,693	150,877	158,421	166,342	174,659	183,392	192,562	202,190
74 Overtime	700	1,167	1,225	1,286	1,351	1,418	1,489	1,563	1,642	1,724	1,810
75 Bilingual Pay	500	833	875	919	965	1,013	1,064	1,117	1,173	1,231	1,293
76 Leave Payoff	300	500	525	551	579	608	638	670	704	743	776
77 Certification Stipend	2,300	3,833	4,025	4,226	4,438	4,659	4,892	5,137	5,394	5,664	5,947
78 Social Security	4,700	7,833	8,225	8,636	9,068	9,521	9,998	10,497	11,022	11,573	12,152
79 Medicare	1,200	2,000	2,100	2,205	2,315	2,431	2,553	2,680	2,814	2,955	3,103
80 Workers' Compensator	11,600	19,333	20,300	21,315	22,381	23,500	24,675	25,909	27,204	28,564	29,992
81 PERS - Misc	14,300	23,833	25,025	26,276	27,590	28,970	30,418	31,939	33,536	35,213	36,973
82 PERS - PEPR Misc	400	667	682	697	713	729	745	762	779	797	814
83 Health Insurance	16,900	28,167	30,702	33,465	36,477	39,760	43,338	47,238	51,490	56,124	61,175
84 Dental/Vision Insurance	500	833	908	990	1,079	1,176	1,282	1,398	1,523	1,660	1,810
85 Long-Term Disability Insurance	300	500	545	594	648	706	769	839	914	996	1,086
86 Deferred Comp Employer Match	200	333	350	368	386	405	425	447	469	492	517
87 Sub-Total: Personnel Services Department: 345 - Water Production	\$ 132,100	220,167	232,337	245,221	258,865	273,317	288,628	304,855	322,055	340,294	359,638

Water Fund - Projection of Cash Outflows

Schedule 3-W 3 of 4

	<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>	<u>FY 2025</u>	<u>FY 2026</u>
88 Operations and Maintenance (Fixed)											
89 Software Maintenance Charges	\$ 400	409	418	428	437	447	457	467	478	489	500
90 Water Production Services	40,000	40,900	41,820	42,761	43,723	44,707	45,713	46,742	47,793	48,869	49,968
91 Water Production Supplies	40,600	41,412	42,240	43,085	43,947	44,826	45,722	46,637	47,569	48,521	49,491
92 Water Operations Equipment	2,700	2,754	2,809	2,865	2,923	2,981	3,041	3,101	3,163	3,227	3,291
93 Water Equipment	1,500	1,530	1,561	1,592	1,624	1,656	1,689	1,723	1,757	1,793	1,828
94 Sustainable Groundwater Management Act (Compliance Cost)	-	10,000	10,250	10,506	10,769	11,038	11,314	11,597	11,887	12,184	12,489
94 Sub-Total: O&M (Fixed) Department: 345 - Water Production	85,200	97,005	99,098	101,237	103,422	105,655	107,936	110,267	112,648	115,081	117,567
95 Operations and Maintenance (Variable)											
96 Electricity	\$ 205,000	-	-	-	-	-	-	-	-	-	-
97 Sub-Total: O&M (Variable) Department: 345 - Water Production	\$ 205,000	-	-	-	-	-	-	-	-	-	-
98 Department: 950 - Enterprise Capital											
99 Minor Capital Outlay											
100 Chlorimeter	\$ 800	-	-	-	-	-	-	-	-	-	-
101 Chlorine Free Analyzer	4,000	-	-	-	-	-	-	-	-	-	-
102 Chlorine Pumps	1,000	-	-	-	-	-	-	-	-	-	-
103 Well Meters	6,000	-	-	-	-	-	-	-	-	-	-
104 Closed Quarter Compactor	3,000	-	-	-	-	-	-	-	-	-	-
105 Upright Rammer (Whacker)	4,000	-	-	-	-	-	-	-	-	-	-
106 Annual Meter Replacement	50,000	50,000	10,000	10,200	10,404	10,612	10,824	11,041	11,262	11,487	11,717
107 Annual Fire Hydrant Replacement	30,000	30,600	31,212	31,836	32,473	33,122	33,785	34,461	35,150	35,853	36,570
108 Radio Meter Equipment	-	-	-	-	-	-	-	-	-	-	-
109 Sub-Total: Minor Capital Outlay Department: 950 - Enterprise Capital	\$ 98,800	\$ 130,600	\$ 92,212	\$ 94,056	\$ 95,937	\$ 97,856	\$ 99,813	\$ 101,809	\$ 103,846	\$ 105,923	\$ 108,041
110 Expense Summary											
111 Operating Expense Execution Percentages											
112 Personnel Services	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
113 Operations and Maintenance (Fixed)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
114 Operations and Maintenance (Variable)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
115 Operating Expenses at Execution Percentages											
116 Personnel Services	253,000	370,093	390,832	412,814	436,120	460,835	487,053	514,872	544,400	575,750	609,044
117 Operations and Maintenance (Fixed)	201,606	177,799	181,710	185,708	189,793	233,969	198,238	202,600	207,059	211,616	266,274
118 Operations and Maintenance (Variable)	213,600	8,777	8,958	9,143	9,331	9,524	9,720	9,920	10,125	10,334	10,547
119 Total: Operating Expenses at Execution Percentages	\$ 668,206	556,669	581,500	607,664	635,244	704,328	695,010	727,393	761,584	797,700	885,865
120 Minor Minor Capital Outlay											
121 Minor Capital Outlay	\$ 131,300	130,600	92,212	94,056	95,937	97,856	99,813	101,809	103,846	105,923	108,041
122 Total: Minor Minor Capital Outlay	\$ 131,300	130,600	92,212	94,056	95,937	97,856	99,813	101,809	103,846	105,923	108,041

Water Fund - Projection of Cash Outflows

Schedule 3-W 4 of 4

	<u>FY 2016</u> ⁽¹⁾	<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>	<u>FY 2025</u>	<u>FY 2026</u>
123 <u>Debt Service Expenses</u>											
124 CIEDB Water Loan	\$ 188,413	188,093	187,762	187,421	187,070	186,707	186,333	185,947	185,549	185,138	184,714
125 Cumulative New Debt Service	-	471,928	471,928	471,928	471,928	853,038	853,038	853,038	853,038	853,038	853,038
126 Total: Debt Service Expenses	\$ 188,413	660,021	659,690	659,349	658,998	1,039,745	1,039,371	1,038,985	1,038,587	1,038,176	1,037,752
127 <u>Transfers Out</u> ⁽²⁾											
128 Transfer to General Fund	\$ 277,100	171,650	175,941	180,340	184,848	189,469	194,206	199,061	204,038	209,139	214,367
129 Transfer to CDBG Fund	21,000	-	-	-	-	-	-	-	-	-	-
130 Transfer to PW Equipment Debt Service Fund	16,800	-	-	-	-	-	-	-	-	-	-
131 Contribution to Renewal and Replacement	500,000	-	-	-	-	-	-	-	-	-	-
132 Contribution to Rate Stabilization	500,000	-	-	-	-	-	-	-	-	-	-
131 Total: Transfers Out	\$ 1,314,900	171,650	175,941	180,340	184,848	189,469	194,206	199,061	204,038	209,139	214,367
133 <u>Capital Project Funding Sources</u>											
133 Projects Paid from Impact Fees	\$ -	207,288	584,821	270,450	402,369	1,234,627	243,288	221,377	201,100	274,002	285,582
134 Projects Paid from Reserve Balances	-	-	-	-	168,826	-	-	-	-	-	-
135 Projects Paid from Cash	-	446,763	831,480	543,632	514,920	336,189	413,441	664,132	603,299	822,007	856,747
135 Total: Capital Project Funding Sources	\$ -	654,050	1,416,302	814,082	1,086,116	1,570,816	656,729	885,509	804,399	1,096,009	1,142,329
136 TOTAL CASH OUTFLOWS	\$ 2,302,819	2,172,989	2,925,645	2,355,491	2,661,143	3,602,215	2,685,129	2,952,758	2,912,453	3,246,947	3,388,355

(1) FY 2016 expenses are based on FY 2016 Budget. Beginning in FY 2017, expenses are based upon the FY 2016 estimates and cost escalation factors referenced on Schedule 6.

(2) Transfers Out are escalated based upon the default escalation factor contained on Schedule 6.

Sewer Fund - Projection of Cash Outflows

Schedule S-3 1 of 4

	FY 2016 ¹	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
1 Department: 191 - Utility Billing											
2 Personnel Services											
3 Salaries	\$ 39,900	41,496	43,571	45,749	48,037	50,439	52,961	55,609	58,389	61,308	64,374
4 Bilingual Pay	1,600	1,664	1,747	1,835	1,926	2,023	2,124	2,230	2,341	2,458	2,581
5 Leave Payoff	200	208	218	229	241	253	265	279	293	307	323
6 Social Security	2,300	2,392	2,512	2,637	2,769	2,907	3,053	3,206	3,366	3,534	3,711
7 Medicare	600	624	655	688	722	758	796	836	878	922	968
8 Workers' Compensation	2,700	2,808	2,948	3,096	3,251	3,413	3,584	3,763	3,951	4,149	4,356
9 PERS - Misc	8,000	8,320	8,736	9,173	9,631	10,113	10,619	11,150	11,707	12,292	12,907
10 Health Insurance	14,100	15,369	16,752	18,260	19,903	21,695	23,647	25,775	28,095	30,624	33,380
11 Dental/Vision Insurance	300	327	356	389	423	462	503	548	598	652	710
12 Long-Term Disability Insurance	200	218	238	259	282	308	335	366	399	434	473
13 Sub-Total: Personnel Services Department: 191 - Utility Billing	\$ 69,900	73,426	77,734	82,314	87,186	92,370	97,887	103,761	110,017	116,681	123,783
14 Operations and Maintenance (Fixed)											
15 Postage	\$ 8,500	8,691	8,887	9,087	9,291	9,500	9,714	9,933	10,156	10,385	10,618
16 Printing and Copying	7,500	7,669	7,841	8,018	8,198	8,383	8,571	8,764	8,961	9,163	9,369
17 Office Supplies	200	205	209	214	219	224	229	234	239	244	250
18 Software Maintenance Charges	500	511	523	535	547	559	571	584	597	611	625
19 Utility Billing Financial Services	6,500	6,646	6,796	6,949	7,105	7,265	7,428	7,596	7,766	7,941	8,120
20 Utility Bill Services	5,400	5,522	5,646	5,773	5,903	6,035	6,171	6,310	6,452	6,597	6,746
21 Sub-Total: Operations and Maintenance (Fixed) Department: 191 - Utility Billing	\$ 28,600	29,244	29,901	30,574	31,262	31,966	32,685	33,420	34,172	34,941	35,727
22 Minor Capital Outlay											
23 Customer Service Station Remodel	32,500	-	-	-	-	-	-	-	-	-	-
24 Sub-Total: Minor Capital Outlay Department: 191 - Utility Billing	\$ 32,500	-	-	-	-	-	-	-	-	-	-
25 Department: 330 - Wastewater Administration											
26 Personnel Services											
27 Salaries	\$ 33,200	49,800	52,290	54,905	57,650	60,532	63,559	66,737	70,074	73,577	77,256
28 Overtime	200	300	315	331	347	365	383	402	422	443	465
29 Bilingual Pay	500	750	788	827	868	912	957	1,005	1,055	1,108	1,163
30 Social Security	1,900	2,850	2,993	3,142	3,299	3,464	3,637	3,819	4,010	4,211	4,421
31 Medicare	500	750	788	827	868	912	957	1,005	1,055	1,108	1,163
32 Workers' Compensation	2,500	3,750	3,938	4,134	4,341	4,558	4,786	5,025	5,277	5,540	5,817
33 PERS - Misc	2,800	4,200	4,410	4,631	4,862	5,105	5,360	5,628	5,910	6,205	6,516
34 PERS - PEPRM Misc	1,200	1,800	1,841	1,882	1,924	1,968	2,012	2,057	2,103	2,151	2,199
35 Health Insurance	7,800	11,700	12,753	13,901	15,152	16,516	18,002	19,622	21,388	23,313	25,411
36 Dental/Vision Insurance	100	150	164	178	194	212	231	252	274	299	326
37 Long-Term Disability Insurance	100	150	164	178	194	212	231	252	274	299	326
38 Deferred Comp Employer Match	200	300	315	331	347	365	383	402	422	443	465
39 Sub-Total: Personnel Services Department: 330 - Wastewater Administration	\$ 51,000	76,500	80,756	85,266	90,048	95,119	100,498	106,206	112,265	118,698	125,530
40 Operations and Maintenance (Fixed)											
41 Advertising	\$ -	-	-	-	-	-	-	-	-	-	-
42 Office Supplies	1,000	1,023	1,046	1,069	1,093	1,118	1,143	1,169	1,195	1,222	1,249
43 Financial Services	6,100	6,237	6,378	6,521	6,668	6,818	6,971	7,128	7,288	7,452	7,620
44 Cell Phone Charges	700	716	732	748	765	782	800	818	836	855	874
45 Uniforms / Personnel Equipment	600	614	627	641	656	671	686	701	717	733	750
46 Janitorial Supplies	200	205	209	214	219	224	229	234	239	244	250
47 Public Works Supplies	1,100	1,125	1,150	1,176	1,202	1,229	1,257	1,285	1,314	1,344	1,374
48 Building Maintenance Supplies	1,000	1,023	1,046	1,069	1,093	1,118	1,143	1,169	1,195	1,222	1,249
49 Vehicle Maintenance	2,900	2,965	3,032	3,100	3,170	3,241	3,314	3,389	3,465	3,543	3,623
50 General Operations Equipment	300	307	314	321	328	335	343	351	358	367	375
51 Sewer Revenue Sufficiency Analysis	30,000	-	-	-	-	40,000	-	-	-	-	50,000
52 Sub-Total: Operations and Maintenance (Fixed) Department: 330 - Wastewater Administration	\$ 43,900	14,213	14,533	14,860	15,194	55,536	15,885	16,243	16,608	16,982	67,364

Sewer Fund - Projection of Cash Outflows

Schedule S-3 2 of 4

	FY 2016 ¹	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
53 Operations and Maintenance (Variable)											
54 Gas Utility	\$ 100	102	105	107	109	112	114	117	119	122	125
55 Water Utility	300	307	314	321	328	335	343	351	358	367	375
56 Waste Disposal	2,300	2,352	2,405	2,459	2,514	2,571	2,628	2,688	2,748	2,810	2,873
57 Other Utilities	500	510	520	531	541	552	563	574	586	598	609
58 Gasoline & Oil	2,700	2,754	2,809	2,865	2,923	2,981	3,041	3,101	3,163	3,227	3,291
59 Sub-Total: Operations and Maintenance (Variable) Department: 330 - Wastewater Administration	\$ 5,900	6,025	6,152	6,282	6,415	6,551	6,689	6,831	6,975	7,123	7,274
60 Department: 333 - Wastewater Collection											
61 Personnel Services											
62 Salaries	\$ 135,500	184,241	193,453	203,126	213,282	223,946	235,143	246,901	259,246	272,208	285,818
63 Overtime	2,500	3,399	3,569	3,748	3,935	4,132	4,338	4,555	4,783	5,022	5,273
64 Bilingual Pay	500	680	714	750	787	826	868	911	957	1,004	1,055
65 Leave Payoff	600	816	857	899	944	992	1,041	1,093	1,148	1,205	1,266
66 Certification Stipend	2,900	3,943	4,140	4,347	4,565	4,793	5,033	5,284	5,548	5,826	6,117
67 Social Security	8,200	11,150	11,707	12,292	12,907	13,552	14,230	14,942	15,689	16,473	17,297
68 Medicare	2,100	2,855	2,998	3,148	3,305	3,471	3,644	3,827	4,018	4,219	4,430
69 Workers' Compensation	20,300	27,602	28,982	30,431	31,953	33,551	35,228	36,990	38,839	40,781	42,820
70 PERS - Misc	21,100	28,690	30,124	31,631	33,212	34,873	36,616	38,447	40,370	42,388	44,507
71 PERS - PEPR Misc	1,900	2,583	2,642	2,701	2,762	2,824	2,887	2,952	3,019	3,087	3,156
72 Health Insurance	25,800	35,081	38,238	41,679	45,430	49,519	53,976	58,834	64,129	69,900	76,191
73 Dental/Vision Insurance	900	1,224	1,334	1,454	1,585	1,727	1,883	2,052	2,237	2,438	2,658
74 Long-Term Disability Insurance	500	680	741	808	880	960	1,046	1,140	1,243	1,355	1,477
75 Deferred Comp Employer Match	200	272	286	300	315	331	347	364	383	402	422
76 Sub-Total: Personnel Services Department: 333 - Wastewater Collection	\$ 223,000	303,216	319,785	337,314	355,863	375,496	396,282	418,292	441,607	466,309	492,487
77 Operations and Maintenance (Fixed)											
78 Public Works Supplies	\$ 5,100	5,215	5,332	5,452	5,575	5,700	5,828	5,960	6,094	6,231	6,371
79 Permits & Inspections	300	307	314	321	328	335	343	351	358	367	375
80 Sewer Operations Equipment	15,000	15,300	15,606	15,918	16,236	16,561	16,892	17,230	17,575	17,926	18,285
81 Other Training	500	511	523	535	547	559	571	584	597	611	625
82 Certifications	600	614	627	641	656	671	686	701	717	733	750
83 Memberships	400	409	418	428	437	447	457	467	478	489	500
84 Property Taxes	600	614	627	641	656	671	686	701	717	733	750
85 Lift Station Battery	2,000	2,040	2,081	2,122	2,165	2,208	2,252	2,297	2,343	2,390	2,438
86 Sewer Line Rotor	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
87 Inspection Mirror Kit	500	510	520	531	541	552	563	574	586	598	609
88 Gas Detectors	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
89 Sub-Total: Operations and Maintenance (Fixed) Department: 333 - Wastewater Collection	\$ 27,000	27,559	28,129	28,711	29,306	29,912	30,531	31,163	31,809	32,467	33,139
90 Operations and Maintenance (Variable)											
91 Sewer Collection Services	\$ 40,000	40,900	41,820	42,761	43,723	44,707	45,713	46,742	47,793	48,869	49,968
92 Electricity	7,800	7,956	8,115	8,277	8,443	8,612	8,784	8,960	9,139	9,322	9,508
93 Sub-Total: Operations and Maintenance (Variable) Department: 333 - Wastewater Collection	\$ 47,800	48,856	49,935	51,039	52,166	53,319	54,497	55,701	56,932	58,190	59,476

Sewer Fund - Projection of Cash Outflows

Schedule 3-S 3 of 4

	FY 2016 ¹¹	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
94 Department: 335 - Wastewater Treatment											
95 Personnel Services											
96 Salaries	\$ 79,600	82,784	86,923	91,269	95,833	100,624	105,656	110,938	116,485	122,310	128,425
97 Overtime	1,900	1,976	2,075	2,179	2,287	2,402	2,522	2,648	2,780	2,919	3,065
98 Bilingual Pay	500	520	546	573	602	632	664	697	732	768	807
99 Leave Payoff	200	208	218	229	241	253	265	279	293	307	323
100 Certification Pay	1,800	1,872	1,966	2,064	2,167	2,275	2,389	2,509	2,634	2,766	2,904
101 Social Security	4,900	5,096	5,351	5,618	5,899	6,194	6,504	6,829	7,171	7,529	7,906
102 Medicare	1,200	1,248	1,310	1,376	1,445	1,517	1,593	1,672	1,756	1,844	1,936
103 Workers' Compensation	12,000	12,480	13,104	13,759	14,447	15,170	15,928	16,724	17,561	18,439	19,361
104 PERS - Misc	8,600	8,944	9,391	9,861	10,354	10,871	11,415	11,986	12,585	13,214	13,875
105 PERS - PEPRM Misc	2,400	2,454	2,509	2,566	2,623	2,682	2,743	2,804	2,868	2,932	2,998
106 Health Insurance	10,800	11,772	12,831	13,986	15,245	16,617	18,113	19,743	21,520	23,456	25,568
107 Dental/Vision Insurance	600	654	713	777	847	923	1,006	1,097	1,196	1,303	1,420
108 Long-Term Disability Insurance	300	327	356	389	423	462	503	548	598	652	710
109 Deferred Comp Employer Match	200	208	218	229	241	253	265	279	293	307	323
110 Sub-Total: Personnel Services Department: 335 - Wastewater Treatment	\$ 125,000	130,543	137,513	144,875	152,655	160,876	169,566	178,754	188,470	198,747	209,620
111 Operations and Maintenance (Fixed)											
112 Bilingual Pay	\$ 500	520	546	573	602	632	664	697	732	768	807
113 Leave Payoff	200	208	218	229	241	253	265	279	293	307	323
114 Certification Pay	1,800	1,872	1,966	2,064	2,167	2,275	2,389	2,509	2,634	2,766	2,904
115 On-Call Pay	-	-	-	-	-	-	-	-	-	-	-
116 Social Security	4,900	5,096	5,351	5,618	5,899	6,194	6,504	6,829	7,171	7,529	7,906
117 Medicare	1,200	1,248	1,310	1,376	1,445	1,517	1,593	1,672	1,756	1,844	1,936
118 Workers' Compensation	12,000	12,480	13,104	13,759	14,447	15,170	15,928	16,724	17,561	18,439	19,361
119 General Services	5,000	5,113	5,228	5,345	5,465	5,588	5,714	5,843	5,974	6,109	6,246
120 Permits & Inspections	8,500	8,691	8,887	9,087	9,291	9,500	9,714	9,933	10,156	10,385	10,618
121 Building Maintenance Supplies	400	409	418	428	437	447	457	467	478	489	500
122 Sewer Operations Eq't Maint & Repair	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
123 Other Training	500	511	523	535	547	559	571	584	597	611	625
124 Certifications	900	920	941	962	984	1,006	1,029	1,052	1,075	1,100	1,124
125 Publications	600	615	630	646	662	679	696	713	731	749	768
126 Property Taxes	5,800	5,931	6,064	6,200	6,340	6,483	6,628	6,778	6,930	7,086	7,245
127 pH Probe	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
128 DO Probe	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
129 Round Debris Baskets	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
130 Microscope	500	510	520	531	541	552	563	574	586	598	609
131 Sub-Total: Operations and Maintenance (Fixed) Department: 335 - Wastewater Treatment	\$ 26,200	26,780	27,372	27,978	28,597	29,230	29,877	30,538	31,214	31,905	32,612
132 Operations and Maintenance (Variable)											
133 Sewer Treatment Services	\$ 31,200	31,902	32,620	33,354	34,104	34,872	35,656	36,458	37,279	38,118	38,975
134 Electricity	44,400	-	-	-	-	-	-	-	-	-	-
135 Sub-Total: Operations and Maintenance (Variable) Department: 335 - Wastewater Treatment	\$ 75,600	31,902	32,620	33,354	34,104	34,872	35,656	36,458	37,279	38,118	38,975

Sewer Fund - Projection of Cash Outflows

Schedule S-3 4 of 4

	FY 2016 ⁽¹⁾	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
136 Department: 950 - Enterprise Capital											
137 Minor Capital Outlay											
138 Lift Station Motor Pump	\$ 6,000	-	-	-	-	-	-	-	-	-	-
139 Clarifier #2 Scum Pump	10,000	-	-	-	-	-	-	-	-	-	-
140 Clarifier #3 Scum Pump	10,000	-	-	-	-	-	-	-	-	-	-
141 Root Cutter Kit	6,000	-	-	-	-	-	-	-	-	-	-
142 Backup Generators	150,000	-	-	-	-	-	-	-	-	-	-
143 Trailer Trash Pump	30,000	-	-	-	-	-	-	-	-	-	-
144 Install SCADA System	20,000	-	-	-	-	-	-	-	-	-	-
145 Install Headworks/Screening System	95,000	-	-	-	-	-	-	-	-	-	-
146 Miscellaneous Capital Equipment	-	180,000	184,500	189,113	193,840	198,686	203,653	208,745	213,963	219,313	224,795
147 Sub-Total: Minor Capital Outlay Department: 950 - Enterprise Capital	\$ 327,000	\$ 180,000	\$ 184,500	\$ 189,113	\$ 193,840	\$ 198,686	\$ 203,653	\$ 208,745	\$ 213,963	\$ 219,313	\$ 224,795
148 Expense Summary											
149 Operating Expense Execution Percentages											
150 Personnel Services	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
151 Operations and Maintenance (Fixed)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
152 Operations and Maintenance (Variable)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
153 Operating Expenses at Execution Percentages											
154 Personnel Services	\$ 468,900	583,685	615,787	649,770	685,752	723,861	764,233	807,013	852,358	900,435	951,421
155 Operations and Maintenance (Fixed)	125,700	97,795	99,935	102,123	104,359	146,644	108,979	111,365	113,803	116,295	168,842
156 Operations and Maintenance (Variable)	129,300	86,783	88,707	90,675	92,686	94,741	96,843	98,991	101,186	103,431	105,725
157 Total: Operating Expenses at Execution Percentages	\$ 723,900	768,262	804,430	842,568	882,796	965,246	970,054	1,017,369	1,067,348	1,120,161	1,225,988
158 Minor Minor Capital Outlay											
159 Minor Capital Outlay	\$ 359,500	180,000	184,500	189,113	193,840	198,686	203,653	208,745	213,963	219,313	224,795
160 Total: Minor Minor Capital Outlay	\$ 359,500	180,000	184,500	189,113	193,840	198,686	203,653	208,745	213,963	219,313	224,795
161 Debt Service Expenses											
162 CIEDB Sewer Loan	\$ 130,228	130,006	129,778	129,542	129,299	129,048	128,790	128,523	128,248	127,964	127,671
163 Cumulative New Debt Service	-	380,725	380,725	380,725	380,725	380,725	380,725	380,725	380,725	380,725	380,725
164 Total: Debt Service Expenses	\$ 130,228	510,731	510,502	510,267	510,024	509,773	509,514	509,248	508,973	508,689	508,396
165 Transfers Out⁽²⁾											
166 Transfer to General Fund	\$ 152,800	171,650	175,941	180,340	184,848	189,469	194,206	199,061	204,038	209,139	214,367
167 Transfer to CDBG Fund	20,000	-	-	-	-	-	-	-	-	-	-
168 Transfer to PW Equipment Debt Service Fund	16,800	-	-	-	-	-	-	-	-	-	-
169 Contribution to Renewal and Replacement	-	125,000	125,000	125,000	125,000	-	-	-	-	-	-
170 Total: Transfers Out	\$ 189,600	296,650	300,941	305,340	309,848	189,469	194,206	199,061	204,038	209,139	214,367
171 Capital Project Funding Sources											
172 Projects Designated To Be Paid With Cash	\$ -	92,700	287,992	127,225	131,417	368,582	389,016	415,082	494,040	521,909	503,969
173 Total: Capital Project Funding Sources	\$ -	92,700	287,992	127,225	131,417	368,582	389,016	415,082	494,040	521,909	503,969
174 TOTAL CASH OUTFLOWS	\$ 1,403,228	1,848,343	2,088,366	1,974,512	2,027,926	2,231,757	2,266,445	2,349,505	2,488,362	2,579,210	2,677,515

(1) FY 2016 expenses are based on FY 2016 Budget. Beginning in FY 2017, expenses are based upon the FY 2016 estimates and cost escalation factors referenced on Schedule 6.

(2) Transfers Out are escalated based upon the default escalation factor contained on Schedule 6.

Water Fund Cost Escalation Factors

Schedule 4-W 1 of 2

		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
1 Annual Cost Escalation Factors:	Code										
2 Personnel Services											
3 Salaries	504-191-51100.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
4 Overtime	504-191-51300.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
5 Bilingual Pay	504-191-51410.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
6 Leave Payoff	504-191-51415.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
7 Social Security	504-191-52110.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
8 Medicare	504-191-52120.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
9 Workers' Compensation	504-191-52300.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
10 PERS - Misc	504-191-52420.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
11 Health Insurance	504-191-52510.000	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
12 Dental/Vision Insurance	504-191-52515.000	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
13 Long-Term Disability Insurance	504-191-52530.000	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
14 Longevity Pay	504-191-52855.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
15 Postage	504-191-61100.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
16 Printing and Copying	504-191-61200.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
17 Office Supplies	504-191-61400.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
18 Software Maintenance Charges	504-191-61700.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
19 Utility Billing Financial Services	504-191-63300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
20 Utility Bill Services	504-191-63800.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
21 General Services	504-191-63900.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
22 Technology Supplies	504-191-65300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
23 Recruitment	504-191-68100.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
24 Customer Service Station Remodel	504-191-89501.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
25 Contractual Services	504-191-6390a.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
26 Operations and Maintenance (Fixed)											
27 Federal Taxes	504-191-52100.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
28 Unemployment Insurance	504-191-52200.000	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
29 Retirement Benefits	504-191-52400.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
30 Deferred Comp Employer Match	504-191-52820.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
31 Credit Card Fees	504-191-6330c.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
32 General Operating Supplies	504-191-65100.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
33 Education Training	504-191-6720a.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
34 Certifications	504-191-67400.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
35 Capital Expenditures	504-191-8901a.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
36 PERS - PEPRM Misc	504-340-52440.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
37 Advertising	504-340-61300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
38 Financial Services	504-340-63300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
39 Public Works Services	504-340-63700.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
40 Sewer & Water Services	504-340-63800.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
41 Gas Utility	504-340-64200.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
42 Water Utility	504-340-64300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
43 Waste Disposal	504-340-64400.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
44 Phone Charges	504-340-64500.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
45 Cell Phone Charges	504-340-64600.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
46 Other Utilities	504-340-64900.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
47 Water Conservation Supplies	504-340-65100.254	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
48 Uniforms / Personnel Equipment	504-340-65200.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
49 Janitorial Supplies	504-340-65600.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
50 Permits & Inspections	504-340-65800.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
51 Building Maintenance Supplies	504-340-65900.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
52 Gasoline & Oil	504-340-66100.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
53 Vehicle Maintenance	504-340-66200.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
54 General Operations Equipment	504-340-66300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
55 Meetings & Conferences	504-340-67100.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
56 Other Training	504-340-67200.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
57 Publications	504-340-67600.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
58 Water Conservation Rebates	504-340-68200.254	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
59 Memberships	504-340-68300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
60 Property Taxes	504-340-68700.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
61 Water Revenue Sufficiency Analysis	504-340-73605.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
62 Certification Pay	504-340-51420.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
63 Uniform Allowance	504-340-51470.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
64 Maintenance - Streets	504-340-6570b.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
65 Small Tools	504-340-6570c.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
66 Travel, Meetings & Conf	504-340-6710a.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
67 Membership & Dues	504-340-6830a.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
68 Workers' Comp Pay	504-340-54180.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
69 Insurance	504-340-62100.000	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
70 County Collection Fees	504-340-6330a.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
71 Certification Stipend	504-345-51420.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
72 On-Call Pay	504-345-51495.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%

Water Fund Cost Escalation Factors

Schedule 4-W 2 of 2

		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
1 Annual Cost Escalation Factors:	Code										
73 Operations and Maintenance (Variable)											
74 Workers' Compensation	504-345-52300.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
75 Water Production Services	504-345-63800.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
76 Electricity	504-345-64100.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
77 Water Production Supplies	504-345-65700.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
78 Water Operations Equipment	504-345-66500.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
79 Water Equipment	504-345-71800.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
80 Minor Capital Outlay											
81 Other Meals & Travel	504-345-67300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
82 Electronic Equipment	504-345-71300.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
83 Annual Water Meter Replacement	504-901-86101.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
84 Fire Hydrant Replacement	504-901-86105.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
85 Conversion - Paint Water Tank Exterior	504-901-8610a.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
86 Conversion - Extend Walnut Water Main	504-901-8610c.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
87 Conversion - Refurbish Oak Avenue Tank	504-901-8610e.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
88 Chlorimeter	504-950-81901.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
89 Chlorine Free Analyzer	504-950-81903.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
90 Chlorine Pumps	504-950-81905.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
91 Well Meters	504-950-81907.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
92 Closed Quarter Compactor	504-950-81911.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
93 Default Inflation Factor		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%

Sewer Fund Cost Escalation Factors											Schedule 4-S	
Annual Cost Escalation Factors:	Code	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
1 Salaries	503-191-51100.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
Overtime	503-191-51300.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
2 Bilingual Pay	503-191-51410.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
3 Leave Payoff	503-191-51415.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
4 Social Security	503-191-52110.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
5 Medicare	503-191-52120.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
6 Workers' Compensation	503-191-52300.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
7 PERS - Misc	503-191-52420.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
8 Health Insurance	503-191-52510.000	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	
9 Dental/Vision Insurance	503-191-52515.000	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	
10 Long-Term Disability Insurance	503-191-52530.000	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	
11 Longevity Pay	503-191-52855.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
12 Postage	503-191-61100.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
13 Printing and Copying	503-191-61200.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
14 Office Supplies	503-191-61400.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
15 Software Maintenance Charges	503-191-61700.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
16 Utility Billing Financial Services	503-191-63300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
17 Utility Bill Services	503-191-63800.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
18 General Services	503-191-63900.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
19 Technology Supplies	503-191-65300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
20 Recruitment	503-191-68100.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
21 Customer Service Station Remodel	503-191-89501.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
22 Contractual Services	503-191-6390a.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
23 Federal Taxes	503-330-52100.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
24 Unemployment Insurance	503-330-52200.000	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	
25 Retirement Benefits	503-330-52400.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
26 General Operating Supplies	503-330-65100.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
27 Education Training	503-330-6720a.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
28 Certifications	503-333-67400.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
29 Capital Expenditures	503-191-8901a.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
30 PERS - PEPRa Misc	503-330-52440.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
31 Advertising	503-330-61300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
32 Financial Services	503-330-63300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
33 Public Works Services	503-330-63700.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
34 Sewer & Water Services	503-330-63800.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
35 Gas Utility	503-330-64200.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
36 Water Utility	503-330-64300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
37 Waste Disposal	503-330-64400.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
38 Phone Charges	503-330-64500.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
39 Cell Phone Charges	503-330-64600.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
40 Uniforms / Personnel Equipment	503-330-65200.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
41 Janitorial Supplies	503-330-65600.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
42 Permits & Inspections	503-330-65800.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
43 Building Maintenance Supplies	503-330-65900.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
44 Gasoline & Oil	503-330-66100.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
45 Vehicle Maintenance	503-330-66200.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
46 General Operations Equipment	503-330-66300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
47 Meetings & Conferences	503-335-67100.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
48 Other Training	503-333-67200.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
49 Memberships	503-333-68300.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
50 Property Taxes	503-330-68700.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
51 Sewer Revenue Sufficiency Analysis	503-330-73605.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
52 Certification Pay	503-335-51420.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
53 Small Tools	503-330-6570c.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
54 Travel, Meetings & Conf	503-330-6710a.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
55 Membership & Dues	503-330-6830a.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
56 Workers' Comp Pay	503-330-54180.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
57 Insurance	503-330-62100.000	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	
58 County Collection Fees	503-330-6330a.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
59 Certification Stipend	503-330-51420.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
60 Lift Station Battery	503-333-71701.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
61 Sewer Line Rotor	503-333-71703.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
62 Inspection Mirror Kit	503-333-71705.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
63 Gas Detectors	503-333-71707.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
64 Uniforms/Personnel Equipment	503-333-65200.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
65 Vehicle Maintenance	503-333-66200.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
66 General Equipment Operations	503-333-66300.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
67 Deferred Comp Employer Match	503-191-52820.000	4.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
68 Long-Term Disability Insurane	503-330-52530.000	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	
69 Other Utilities	503-330-64900.000	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
70 Public Works Supplies	503-330-65700.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
71 Claim Settlement	503-330-79990.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
72 Uniform Allowance	503-330-51470.000	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	
73 Default Inflation Factor		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	

Water Capital Improvement Program

Schedule 5-W

PROJECT DESCRIPTION	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Water Distribution	-	-	-	-	-	-	-	-	-	-	-
1-1	-	170,000	830,000	-	-	-	-	-	-	-	-
1-2	-	-	40,000	220,000	-	-	-	-	-	-	-
1-3	-	-	-	25,000	135,000	-	-	-	-	-	-
1-4	-	-	-	-	30,000	160,000	-	-	-	-	-
2-1	-	-	-	-	-	45,000	265,000	-	-	-	-
2-2	-	-	-	-	-	-	20,000	120,000	-	-	-
2-3	-	-	-	-	-	-	15,000	85,000	-	-	-
2-4	-	-	-	-	-	-	-	15,000	85,000	-	-
2-5	-	-	-	-	-	-	-	-	50,000	280,000	-
2-6	-	-	-	-	-	-	-	-	-	60,000	350,000
3-1 to 3-11	-	465,000	465,000	500,000	500,000	250,000	250,000	500,000	500,000	500,000	500,000
Water Supply, Pumping, Storage	-	-	-	-	-	-	-	-	-	-	-
1-5	-	-	-	-	300,000	1,800,000	-	-	-	-	-
1-6	-	-	-	-	-	500,000	2,000,000	-	-	-	-
AMR (Optera)	-	2,856,465	-	-	-	-	-	-	-	-	-
Solar Energy Improvements	-	2,315,071	-	-	-	-	-	-	-	-	-
Total CIP Budget (in FY 2016 dollars)	\$ -	5,806,536	1,335,000	745,000	965,000	2,755,000	2,550,000	720,000	635,000	840,000	850,000
Compounded Annual Cost Escalation	0.0%	3.0%	6.1%	9.3%	12.6%	15.9%	19.4%	23.0%	26.7%	30.5%	34.4%
Annual Capital Spending Execution Percentage	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Final CIP Funding Level	\$ -	5,980,732	1,416,302	814,082	1,086,116	3,193,800	3,044,833	885,509	804,399	1,096,009	1,142,329

Sewer Capital Improvement Program

Schedule 5-S

PROJECT DESCRIPTION	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Gravity Sewers/Collection System											
1-1	-	15,000	25,000	-	-	-	-	-	-	-	-
1-2	-	-	88,000	112,000	-	-	-	-	-	-	-
1-3	-	-	-	74,500	175,500	-	-	-	-	-	-
1-4	-	-	-	-	28,750	61,250	-	-	-	-	-
1-5	-	-	-	-	-	21,500	38,500	-	-	-	-
1-6	-	-	-	-	-	-	-	-	15,000	25,000	-
Lift Stations/Wastewater Treatment Plant											
LS-1	-	100,000	250,000	-	-	-	-	-	-	-	-
LS-2	-	-	-	-	-	-	-	-	-	-	-
WWTP-1	-	700,000	-	-	-	-	-	-	-	-	-
WWTP-2	-	1,400,000	-	-	-	-	-	-	-	-	-
WWTP-3	-	1,050,000	-	-	-	-	-	-	-	-	-
WWTP - Pond Additional Cost	-	600,000	-	-	-	-	-	-	-	-	-
WWTP Miscellaneous Improvements											
	-	-	-	-	-	350,000	400,000	450,000	500,000	500,000	500,000
Solar Energy Improvements											
	-	1,022,102	-	-	-	-	-	-	-	-	-
Total CIP Budget (in FY 2015 dollars)	\$ -	4,887,102	363,000	186,500	204,250	432,750	438,500	450,000	515,000	525,000	500,000
Compounded Annual Cost Escalation	0.0%	3.0%	6.1%	9.3%	12.6%	15.9%	19.4%	23.0%	26.7%	30.5%	34.4%
Annual Capital Spending Execution Percentage	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Final CIP Funding Level	\$ -	5,033,715	385,107	203,794	229,885	501,676	523,592	553,443	652,387	685,006	671,958

Water Fund RSA Assumptions

Schedule 6-W

	<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>	<u>FY 2025</u>	<u>FY 2026</u>
<u>Annual Revenue Growth - Water:</u>											
Number of Billed ERUs	4,510	4,610	4,735	4,885	5,035	5,185	5,335	5,485	5,635	5,785	5,935
Projected Growth in New ERUs	75	100	125	150	150	150	150	150	150	150	150
Percent Increase in Billed Accounts (1)	1.69%	2.22%	2.71%	3.17%	3.07%	2.98%	2.89%	2.81%	2.73%	2.66%	2.59%
Projected Growth In Volume (1)	1.69%	7.33%	2.71%	3.17%	3.07%	2.98%	2.89%	2.81%	2.73%	2.66%	2.59%
<u>Average Annual Interest Earnings Rate:</u>											
Water Enterprise Fund	0.25%	0.50%	0.75%	1.00%	1.25%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
<u>CIP Budget Annual Cost Inflation:</u>											
Compounded Annual Cost Escalation (2)	0.00%	3.00%	6.09%	9.27%	12.55%	15.93%	19.41%	22.99%	26.68%	30.48%	34.39%
<u>Operating Fund Reserve Target:</u>											
Number of Months of Annual Operating Expense (3)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00

(1) Assumptions of increases in billed accounts and growth in volume are based upon the City's "Utility Rate Study Projections".

(2) Annual cost inflation rates are compounded at 3% annually starting in FY 2017, based upon the 5-year average increase in construction costs per Engineering News Record (ENR).

(3) Per the "Findings from the Water and Sewer Rate Study", a cash reserve equal to 60 days, or 16.4% of annual Operating Expenses is recommended.

Sewer Fund RSA Assumptions

Schedule 6-S

	<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>	<u>FY 2025</u>	<u>FY 2026</u>
<u>Annual Revenue Growth - Sewer:</u>											
Number of Billed ERUs	4,272	4,372	4,497	4,647	4,797	4,947	5,097	5,247	5,397	5,547	5,697
Projected Growth in New ERUs	144	100	125	150	150	150	150	150	150	150	150
Percent Increase in Billed Accounts (1)	3.48%	2.34%	2.86%	3.34%	3.23%	3.13%	3.03%	2.94%	2.86%	2.78%	2.70%
<u>Average Annual Interest Earnings Rate:</u>											
Sewer Enterprise Fund	0.25%	0.50%	0.75%	1.00%	1.25%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
<u>CIP Budget Annual Cost Inflation:</u>											
Compounded Annual Cost Escalation (2)	0.00%	3.00%	6.09%	9.27%	12.55%	15.93%	19.41%	22.99%	26.68%	30.48%	34.39%
<u>Operating Fund Reserve Target:</u>											
Number of Months of Annual Operating Expense (3)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00

(1) Assumptions of increases in billed accounts and growth in volume are based upon the City's "Utility Rate Study Projections".

(2) Annual cost inflation rates are compounded at 3% annually starting in FY 2017, based upon the 5-year average increase in construction costs per Engineering News Record (ENR).

(3) Per the "Findings from the Sewer and Sewer Rate Study", a cash reserve equal to 60 days, or 16.4% of annual Operating Expenses is recommended.

Water Fund Cash Flow Pro Forma

Schedule 7-W

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Proposed Rate Increase	0.00%	6.457%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
1 Rate Revenue Subject to Growth & Rate Adjustments											
2 Water Rate Revenue	\$ 1,486,281	1,486,281	1,656,119	1,796,129	1,945,678	2,105,692	2,276,842	2,459,844	2,655,453	2,864,474	3,087,759
3 Additional Revenue From Growth	-	69,388	45,157	56,898	59,743	62,730	65,866	69,159	72,617	76,248	80,061
5 Additional Rate Revenue From Rate Increase	-	100,450	85,530	92,651	100,271	108,421	117,135	126,450	136,404	147,036	158,391
6 Total Rate Revenue	\$ 1,486,281	1,656,119	1,796,129	1,945,678	2,105,692	2,276,842	2,459,844	2,655,453	2,864,474	3,087,759	3,326,211
7 Plus: Other Operating Revenues											
8 Other Operating Revenues	\$ 297,470	-	-	-	-	-	-	-	-	-	-
9 Equals: Total Operating Revenue	\$ 1,783,751	1,656,119	1,796,129	1,945,678	2,105,692	2,276,842	2,459,844	2,655,453	2,864,474	3,087,759	3,326,211
10 Less: Operating Expenses											
11 Personnel Services	\$ (253,000)	(370,093)	(390,832)	(412,814)	(436,120)	(460,835)	(487,053)	(514,872)	(544,400)	(575,750)	(609,044)
12 Operations and Maintenance (Fixed)	(201,606)	(177,799)	(181,710)	(185,708)	(189,793)	(233,969)	(198,238)	(202,600)	(207,059)	(211,616)	(266,274)
12 Operations and Maintenance (Variable)	(213,600)	(8,777)	(8,958)	(9,143)	(9,331)	(9,524)	(9,720)	(9,920)	(10,125)	(10,334)	(10,547)
13 Equals: Net Operating Income	\$ 1,115,545	1,099,450	1,214,629	1,338,014	1,470,447	1,572,514	1,764,833	1,928,061	2,102,891	2,290,059	2,440,345
14 Plus: Non-Operating Income/(Expense)											
15 Interest Earned On Fund Balances	\$ 4,909	9,031	10,416	10,573	11,526	12,180	11,815	11,556	12,314	14,525	17,300
16 Water Impact Fees	233,250	311,000	388,750	466,500	466,500	466,500	466,500	466,500	466,500	466,500	466,500
17 Equals: Net Income	\$ 1,353,704	1,419,481	1,613,795	1,815,086	1,948,474	2,051,195	2,243,148	2,406,116	2,581,704	2,771,083	2,924,145
18 Less: Debt Service											
19 Existing Debt Service	\$ (188,413)	(188,093)	(187,762)	(187,421)	(187,070)	(186,707)	(186,333)	(185,947)	(185,549)	(185,138)	(184,714)
20 Cumulative New Debt Service	-	(471,928)	(471,928)	(471,928)	(471,928)	(853,038)	(853,038)	(853,038)	(853,038)	(853,038)	(853,038)
21 Total Debt Service	\$ (188,413)	(660,021)	(659,690)	(659,349)	(658,998)	(1,039,745)	(1,039,371)	(1,038,985)	(1,038,587)	(1,038,176)	(1,037,752)
22 Less: Other Expenses											
23 Transfers Out	(1,314,900)	(171,650)	(175,941)	(180,340)	(184,848)	(189,469)	(194,206)	(199,061)	(204,038)	(209,139)	(214,367)
24 Capital Outlay	(131,300)	(130,600)	(92,212)	(94,056)	(95,937)	(97,856)	(99,813)	(101,809)	(103,846)	(105,923)	(108,041)
25 Equals: Net Cash Flow	\$ (514,159)	146,211	297,201	414,841	542,190	257,624	443,258	599,761	768,734	951,346	1,097,484
26 Unrestricted Working Capital Reserve Fund Test											
27 Balance At Beginning Of Fiscal Year	\$ 1,970,652	1,456,493	1,155,941	621,662	492,872	351,315	272,750	302,568	238,197	403,632	532,970
28 Cash Flow Surplus/(Deficit)	(514,159)	146,211	297,201	414,841	542,190	257,624	443,258	599,761	768,734	951,346	1,097,484
29 Cash Funded Capital	-	(446,763)	(831,480)	(543,632)	(514,920)	(336,189)	(413,441)	(664,132)	(603,299)	(822,007)	(856,747)
30 Projects Paid with Unrestricted Reserve Fund Balance	-	-	-	-	(168,826)	-	-	-	-	-	-
31 Balance At End Of Fiscal Year	\$ 1,456,493	1,155,941	621,662	492,872	351,315	272,750	302,568	238,197	403,632	532,970	773,708
32 Working Capital Reserve Target	383,803	253,157	251,557	256,902	262,505	338,566	338,067	344,541	351,342	358,490	374,338
33 Excess Working Capital Above Target	\$ 1,072,690	902,785	370,105	235,970	88,811	(65,816)	(35,499)	(106,345)	52,289	174,481	399,371
34 Debt Service Coverage Test											
35 Income Available For Debt Service (excludes Impact Fees)	\$ 1,120,454	1,108,481	1,225,045	1,348,586	1,481,974	1,584,695	1,776,648	1,939,616	2,115,204	2,304,583	2,457,645
36 Debt Service Coverage Ratio (target = 1.5)	5.95	1.68	1.86	2.05	2.25	1.52	1.71	1.87	2.04	2.22	2.37

Sewer Fund Cash Flow Pro Forma

Schedule 7-S

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Proposed Rate Increase	0.00%	14.64%	16.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
1 Rate Revenue Subject to Growth & Rate Adjustments											
2 Sewer Rate Revenue	\$ 1,271,210	1,271,210	1,491,447	1,800,642	1,925,834	2,057,584	2,196,198	2,341,994	2,495,305	2,656,479	2,825,879
3 Additional Revenue From Growth	-	29,760	43,152	60,068	62,170	64,346	66,598	68,929	71,341	73,838	76,423
4 Additional Rate Revenue From Rate Increase	-	190,476	248,364	65,125	69,580	74,268	79,198	84,382	89,833	95,561	101,581
5 Total Rate Revenue	\$ 1,271,210	1,491,447	1,800,642	1,925,834	2,057,584	2,196,198	2,341,994	2,495,305	2,656,479	2,825,879	3,003,882
6 Plus: Other Operating Revenues											
7 Other Operating Revenues	\$ 1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
8 Equals: Total Operating Revenue	\$ 1,273,010	1,493,247	1,802,442	1,927,634	2,059,384	2,197,998	2,343,794	2,497,105	2,658,279	2,827,679	3,005,682
9 Less: Operating Expenses											
10 Personnel Services	\$ (468,900)	(583,685)	(615,787)	(649,770)	(685,752)	(723,861)	(764,233)	(807,013)	(852,358)	(900,435)	(951,421)
11 Operations and Maintenance (Fixed)	(125,700)	(97,795)	(99,935)	(102,123)	(104,359)	(146,644)	(108,979)	(111,365)	(113,803)	(116,295)	(168,842)
12 Operations and Maintenance (Variable)	(129,300)	(86,783)	(88,707)	(90,675)	(92,686)	(94,741)	(96,843)	(98,991)	(101,186)	(103,431)	(105,725)
13 Equals: Net Operating Income	\$ 549,110	724,984	998,012	1,085,067	1,176,588	1,232,752	1,373,740	1,479,736	1,590,931	1,707,518	1,779,694
14 Plus: Non-Operating Income/(Expense)											
15 Interest Earned On Fund Balances	\$ 2,143	3,398	3,658	4,504	7,169	9,649	10,124	11,977	14,557	17,939	22,568
16 Sewer Impact Fees Fees	513,612	357,368	446,710	536,052	536,052	536,052	536,052	536,052	536,052	536,052	536,052
17 Equals: Net Income	\$ 1,064,865	1,085,751	1,448,380	1,625,623	1,719,809	1,778,453	1,919,916	2,027,765	2,141,540	2,261,509	2,338,313
18 Less: Debt Service											
19 Existing Debt Service	\$ 130,228	130,006	129,778	129,542	129,299	129,048	128,790	128,523	128,248	127,964	127,671
20 Cumulative New Debt Service	-	380,725	380,725	380,725	380,725	380,725	380,725	380,725	380,725	380,725	380,725
21 Total Debt Service	\$ 130,228	510,731	510,502	510,267	510,024	509,773	509,514	509,248	508,973	508,689	508,396
22 Less: Other Expenses											
23 Transfers Out	(189,600)	(296,650)	(300,941)	(305,340)	(309,848)	(189,469)	(194,206)	(199,061)	(204,038)	(209,139)	(214,367)
24 Capital Outlay	(359,500)	(180,000)	(184,500)	(189,113)	(193,840)	(198,686)	(203,653)	(208,745)	(213,963)	(219,313)	(224,795)
25 Net Cash Flow	\$ (128,075)	(258,998)	5,726	84,851	170,044	344,472	476,490	574,659	678,514	788,317	854,703
26 Unrestricted Working Capital Reserve Fund Test											
27 Balance At Beginning Of Fiscal Year	\$ 921,099	793,024	441,326	159,060	116,686	155,313	131,203	218,676	378,253	562,727	829,135
28 Cash Flow Surplus/(Deficit)	(128,075)	(258,998)	5,726	84,851	170,044	344,472	476,490	574,659	678,514	788,317	854,703
29 Projects Designated to be Paid with Cash	-	(92,700)	(287,992)	(127,225)	(131,417)	(368,582)	(389,016)	(415,082)	(494,040)	(521,909)	(503,969)
30 Projects Paid with Unrestricted Reserve Fund Balance	-	-	-	-	-	-	-	-	-	-	-
31 Balance At End Of Fiscal Year	\$ 793,024	441,326	159,060	116,686	155,313	131,203	218,676	378,253	562,727	829,135	1,179,869
32 Working Capital Reserve Target	120,650	128,044	134,072	140,428	147,133	160,874	161,676	169,561	177,891	186,693	204,331
33 Excess Working Capital Above Target	\$ 672,374	313,282	24,988	(23,742)	8,181	(29,671)	57,001	208,692	384,836	642,441	975,537
34 Debt Service Coverage Test											
35 Net Income Available For Debt Service	\$ 551,253	728,383	1,001,670	1,089,571	1,183,757	1,242,401	1,383,864	1,491,713	1,605,488	1,725,457	1,802,261
36 Debt Service Coverage Ratio (target = 1.5)	4.23	1.43	1.96	2.14	2.32	2.44	2.72	2.93	3.15	3.39	3.54

Water Fund - Control Panel

Schedule 8-W



Sewer Utility - Control Panel

Schedule 8-S



Water Utility Capital Project Funding Summary

Schedule 9-W

<u>CIP Funding Sources:</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>	<u>FY 2025</u>	<u>FY 2026</u>
Water Impact Fees	\$ -	207,288	584,821	270,450	402,369	1,234,627	243,288	221,377	201,100	274,002	285,582
Revenue Fund (1)	-	-	-	-	168,826	-	-	-	-	-	-
Projected Debt Proceeds	-	5,326,682	-	-	-	1,622,984	2,388,105	-	-	-	-
Projects Designated To Be Paid With Cash (2)	-	446,763	831,480	543,632	514,920	336,189	413,441	664,132	603,299	822,007	856,747
Total CIP Funding Sources	\$ -	5,980,732	1,416,302	814,082	1,086,116	3,193,800	3,044,833	885,509	804,399	1,096,009	1,142,329

(1) Cash Funding = Projects that are specifically designated to be cash funded

(2) Revenue Funding = Projects that are funded with excess available cash

Total CIP Input	-	5,980,732	1,416,302	814,082	1,086,116	3,193,800	3,044,833	885,509	804,399	1,096,009	1,142,329
Variance	-	-	-	-	-	-	-	-	-	-	-

Sewer Utility Capital Project Funding Summary

Schedule 9-S

<u>CIP Funding Sources:</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>	<u>FY 2025</u>	<u>FY 2026</u>
Sewer Impact Fees	\$ -	643,750	97,115	76,569	98,468	133,093	134,576	138,361	158,346	163,097	167,990
Debt Proceeds	-	4,297,265	-	-	-	-	-	-	-	-	-
Projects Designated To Be Paid With Cash	-	92,700	287,992	127,225	131,417	368,582	389,016	415,082	494,040	521,909	503,969
Total CIP Funding Sources	\$ -	5,033,715	385,107	203,794	229,885	501,676	523,592	553,443	652,387	685,006	671,958

Total CIP Input	-	5,033,715	385,107	203,794	229,885	501,676	523,592	553,443	652,387	685,006	671,958
Variance	-	-	-	-	-	-	-	-	-	-	-

Water Fund Long-Term Borrowing Projections

Schedule 10-W

	<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>	<u>FY 2025</u>	<u>FY 2026</u>
Term (Years)	15	15	15	15	15	15	15	15	15	15	15
Interest Rate	3.25%	3.50%	3.75%	4.00%	4.25%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Sources of Funds											
Par Amount	\$0	\$5,435,390	\$0	\$0	\$0	\$4,092,947	\$0	\$0	\$0	\$0	\$0
Uses of Funds											
Proceeds	\$0	\$5,326,682	\$0	\$0	\$0	\$4,011,088	\$0	\$0	\$0	\$0	\$0
Cost of Issuance	\$0	\$108,708	\$0	\$0	\$0	\$81,859	\$0	\$0	\$0	\$0	\$0
Total Uses	\$ -	5,435,390	-	-	-	4,092,947	-	-	-	-	-
1 Year Interest		\$190,239				\$184,183					
Annual Debt Service		\$471,928				\$381,110					
Total Debt Service		\$7,078,922				\$5,716,648					
Cumulative New Annual Debt Service (1)	\$0	\$471,928	\$471,928	\$471,928	\$471,928	\$853,038	\$853,038	\$853,038	\$853,038	\$853,038	\$853,038

(1) Cumulative new annual debt service assumes interest-only payments in first year of debt issuance.

Sewer Fund Long-Term Borrowing Projections

Schedule 10-S

	<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>	<u>FY 2025</u>	<u>FY 2026</u>
Term (Years)	15	15	15	15	15	15	15	15	15	15	15
Interest Rate	3.25%	3.50%	3.75%	4.00%	4.25%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Sources of Funds											
Par Amount	\$0	\$4,384,964	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Uses of Funds											
Proceeds	\$0	\$4,297,265	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cost of Issuance	\$0	\$87,699	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Uses	\$ -	4,384,964	-								
1 Year Interest		\$153,474									
Annual Debt Service		\$380,725									
Total Debt Service		\$5,710,872									
Cumulative New Annual Debt Service (1)	\$0	\$380,725									

(1) Cumulative new annual debt service assumes interest-only payments in first year of debt issuance.

APPENDIX B: COST-OF-SERVICE SCHEDULES

Water System Operating & Debt Service Expense Allocation to Functions

SCHEDULE 11-W 1 of 5

	Test Year Budget	Allocation Basis	Source of Supply	Treatment	Distribution	Meters/Customer Service	Fire Protection	Source of Supply	Treatment	Distribution	Meters/Customer Service	Fire Protection
			% Allocation						\$ Allocation			
Department: 191 - Utility Billing												
Salaries	41,496	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	41,496	-
Overtime	-	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
Bilingual Pay	1,664	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	1,664	-
Leave Payoff	208	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	208	-
Social Security	2,392	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	2,392	-
Medicare	624	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	624	-
Workers' Compensation	2,808	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	2,808	-
PERS - Misc	8,320	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	8,320	-
Health Insurance	15,369	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	15,369	-
Dental/Vision Insurance	327	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	327	-
Long-Term Disability Insurance	218	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	218	-
Longevity Pay	-	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
Postage	8,691	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	8,691	-
Printing and Copying	7,669	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	7,669	-
Office Supplies	205	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	205	-
Software Maintenance Charges	511	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	511	-
Utility Billing Financial Services	6,646	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	6,646	-
Utility Bill Services	5,522	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	5,522	-
Cost Allocation from Others	-	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
Department: 191 - Utility Billing Subtotal	102,670							-	-	-	102,670	-

Water System Operating & Debt Service Expense Allocation to Functions

SCHEDULE 11-W 2 of 5

	Test Year Budget	Allocation Basis	Source of Supply				Source of Supply					
			Treatment	Distribution	Meters/Customer Service	Fire Protection	Treatment	Distribution	Meters/Customer Service	Fire Protection		
			% Allocation				\$ Allocation					
Department: 340 - Water Administration												
Salaries	49,800	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	14,230	1,047	19,206	14,271	1,047
Overtime	300	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	86	6	116	86	6
Bilingual Pay	600	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	171	13	231	172	13
Social Security	2,850	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	814	60	1,099	817	60
Medicare	750	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	214	16	289	215	16
Workers' Compensation	3,750	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	1,072	79	1,446	1,075	79
PERS - Misc	4,200	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	1,200	88	1,620	1,204	88
PERS - PEPR Misc	1,800	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	514	38	694	516	38
Health Insurance	11,700	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	3,343	246	4,512	3,353	246
Dental/Vision Insurance	300	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	86	6	116	86	6
Long-Term Disability Insurance	150	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	43	3	58	43	3
Deferred Comp Employer Match	300	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	86	6	116	86	6
Longevity Pay	-	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	-	-	-	-	-
Postage	205	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	58	4	79	59	4
Printing and Copying	205	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	58	4	79	59	4
Advertising	102	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	29	2	39	29	2
Office Supplies	409	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	117	9	158	117	9
Financial Services	8,998	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	2,571	189	3,470	2,579	189
Public Works Services	-	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	-	-	-	-	-
Sewer & Water Services	2,965	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	847	62	1,144	850	62
Gas Utility	102	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	29	2	39	29	2
Water Utility	102	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	29	2	39	29	2
Waste Disposal	1,329	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	380	28	513	381	28
Phone Charges	818	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	234	17	315	234	17
Cell Phone Charges	307	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	88	6	118	88	6
Other Utilities	614	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	175	13	237	176	13
General Operating Supplies	102	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	29	2	39	29	2
Water Conservation Supplies	5,000	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	1,429	105	1,928	1,433	105
Uniforms / Personnel Equipment	409	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	117	9	158	117	9
Janitorial Supplies	102	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	29	2	39	29	2
Permits & Inspections	5,215	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	1,490	110	2,011	1,494	110
Building Maintenance Supplies	511	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	146	11	197	147	11
Gasoline & Oil	6,630	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	1,894	139	2,557	1,900	139
Vehicle Maintenance	2,250	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	643	47	868	645	47
General Operations Equipment	2,045	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	584	43	789	586	43
Meetings & Conferences	511	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	146	11	197	147	11
Other Training	818	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	234	17	315	234	17
Certifications	1,841	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	526	39	710	527	39
Publications	307	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	88	6	118	88	6
Recruitment	-	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	-	-	-	-	-
Water Conservation Rebates	15,000	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	4,286	315	5,785	4,299	315
Memberships	2,000	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	571	42	771	573	42
Property Taxes	1,432	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	409	30	552	410	30
Cost Allocation from Others	-	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	-	-	-	-	-
Department: 340 - Water Administration Subtotal	136,828							39,097	2,876	52,769	39,211	2,876

Water System Operating & Debt Service Expense Allocation to Functions

SCHEDULE 11-W 3 of 5

	Test Year Budget	Allocation Basis	Source of Supply					Source of Supply				
			Treatment	Distribution	Meters/Customer Service	Fire Protection	Treatment	Distribution	Meters/Customer Service	Fire Protection		
			% Allocation					\$ Allocation				
Department: 345 - Water Production												
Salaries	130,333	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	26,067	5,213	83,413	10,427	5,213
Overtime	1,167	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	233	47	747	93	47
Bilingual Pay	833	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	167	33	533	67	33
Leave Payoff	500	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	100	20	320	40	20
Certification Stipend	3,833	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	767	153	2,453	307	153
On-Call Pay	-	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	-	-	-	-	-
Social Security	7,833	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	1,567	313	5,013	627	313
Medicare	2,000	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	400	80	1,280	160	80
Workers' Compensaton	19,333	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	3,867	773	12,373	1,547	773
PERS - Misc	23,833	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	4,767	953	15,253	1,907	953
PERS - PEPRM Misc	667	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	133	27	427	53	27
Health Insurance	28,167	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	5,633	1,127	18,027	2,253	1,127
Dental/Vision Insurance	833	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	167	33	533	67	33
Long-Term Disability Insurance	500	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	100	20	320	40	20
Deferred Comp Employer Match	333	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	67	13	213	27	13
Longevity Pay	-	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	-	-	-	-	-
Software Maintenance Charges	409	Water Production FTE	20.00%	4.00%	64.00%	8.00%	4.00%	82	16	262	33	16
Water Production Services	40,900	Staff Estimate (1)	80.00%	0.00%	20.00%	0.00%	0.00%	32,720	-	8,180	-	-
Electricity	-	Treatment	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Gas Utility	-	Distribution	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	-	-	-
Phone Charges	-	Distribution	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	-	-	-
Uniforms / Personnel Equipment	-	Distribution	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	-	-	-
Water Production Supplies	41,412	Staff Estimate (1)	80.00%	0.00%	20.00%	0.00%	0.00%	33,130	-	8,282	-	-
Building Maintenance Supplies	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Gasoline & Oil	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Vehicle Maintenance	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Water Operations Equipment	2,754	Distribution	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	2,754	-	-
Other Training	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Water Equipment	1,530	Distribution	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	1,530	-	-
Uniform Allowance	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Public Works Services	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Water Utility	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Waste Disposal	-	Treatment	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Cell Phone Charges	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Other Utilities	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
General Operating Supplies	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Janitorial Supplies	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Permits & Inspections	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
General Operations Equipment	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Other Meals & Travel	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Certifications	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Memberships	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Electronic Equipment	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Contractual Services	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Meetings & Conferences	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Property Taxes	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Sustainable Groundwater Management Act (Compliance)	10,000	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	10,000	-	-	-	-
Department: 345 - Water Production Subtotal	317,172							119,965	8,823	161,915	17,646	8,823

Water System Operating & Debt Service Expense Allocation to Functions

SCHEDULE 11-W 4 of 5

	Test Year Budget	Allocation Basis	Source of Supply	Treatment	Distribution	Meters/Customer Service	Fire Protection	Source of Supply	Treatment	Distribution	Meters/Customer Service	Fire Protection
			% Allocation					\$ Allocation				
Department: 705 - Enterprise Debt												
Financial Services - Loan Fees	-	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	-	-	-	-	-
Principal	-	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	-	-	-	-	-
Interest Expense	-	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	-	-	-	-	-
Department: 705 - Enterprise Debt Subtotal	-							-	-	-	-	-
Department: 901 - General Government Capital												
Annual Water Meter Replacement	-	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	-	-	-	-	-
Fire Hydrant Replacement	-	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	-	-	-	-	-
Conversion - Paint Water Tank Exterior	-	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	-	-	-	-	-
Conversion - Extend Walnut Water Main	-	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	-	-	-	-	-
Conversion - Refurbish Oak Avenue Tank	-	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	-	-	-	-	-
Department: 901 - General Government Capital Subtotal	-							-	-	-	-	-
Department: 950 - Enterprise Capital												
Chlorimeter	-	Treatment	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Chlorine Free Analyzer	-	Treatment	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Chlorine Pumps	-	Treatment	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Well Meters	-	Supply	100.00%	0.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Closed Quarter Compactor	-	Treatment	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Upright Rammer (Whacker)	-	Treatment	0.00%	100.00%	0.00%	0.00%	0.00%	-	-	-	-	-
Annual Meter Replacement	50,000	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	50,000	-
Annual Fire Hydrant Replacement	30,600	Fire Protection	0.00%	0.00%	0.00%	0.00%	100.00%	-	-	-	-	30,600
Radio Meter Equipment	-	Meter/Services	0.00%	0.00%	0.00%	100.00%	0.00%	-	-	-	-	-
Capital Equipment	50,000	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	14,287	1,051	19,283	14,329	1,051
Department: 950 - Enterprise Capital Subtotal	130,600							14,287	1,051	19,283	64,329	31,651

Water System Operating & Debt Service Expense Allocation to Functions

SCHEDULE 11-W 5 of 5

	Test Year Budget	Allocation Basis	Source of Supply	Treatment	Distribution	Meters/Customer Service	Fire Protection	Source of Supply	Treatment	Distribution	Meters/Customer Service	Fire Protection
			% Allocation					\$ Allocation				
Department: a95 - Finance Support Service												
Interest Expense	-	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	-	-	-	-	-
Department: a95 - Finance Support Service Subtotal	-							-	-	-	-	-
Debt Service												
CIEDB Water Loan	188,093	Distribution	0.00%	0.00%	100.00%	0.00%	0.00%	-	-	188,093	-	-
New Debt Service	471,928	Debt Split	44.77%	0.00%	0.00%	55.23%	0.00%	211,262	-	-	260,666	-
Debt Service Subtotal	660,021							211,262	-	188,093	260,666	-
Transfers												
Transfer to General Fund	171,650	Indirect	28.57%	2.10%	38.57%	28.66%	2.10%	49,047	3,608	66,199	49,190	3,608
Transfers Subtotal	171,650							49,047	3,608	66,199	49,190	3,608
Capital Projects												
Revenue Fund	-	CIP Projects	42.35%	0.00%	33.04%	24.61%	0.00%	-	-	-	-	-
Projects Designated To Be Paid With Cash	446,763	CIP Projects	42.35%	0.00%	33.04%	24.61%	0.00%	189,192	-	147,618	109,952	-
Capital Projects Subtotal	446,763							189,192	-	147,618	109,952	-
Sum of Operating Expenses	858,919							222,396	16,358	300,165	273,044	46,958
Sum of Debt Service	660,021							211,262	-	188,093	260,666	-
Sum of Capital Projects	446,763							189,192	-	147,618	109,952	-
TOTAL EXPENDITURES	1,965,702							622,850	16,358	635,876	643,663	46,958

Sewer System Operating & Debt Service Expense Allocation to Functions

SCHEDULE 11-S 1 of 6

	Test Year COS	Allocation Basis	% Allocation			\$ Allocation		
			Meters/Customer Service	Collection	Treatment/ Disposal	Meters/Customer Service	Collection	Treatment/ Disposal
Department: 191 - Utility Billing								
Salaries	41,496	Customer	100.00%	0.00%	0.00%	41,496	-	-
Overtime	0	Customer	100.00%	0.00%	0.00%	-	-	-
Bilingual Pay	1,664	Customer	100.00%	0.00%	0.00%	1,664	-	-
Leave Payoff	208	Customer	100.00%	0.00%	0.00%	208	-	-
Social Security	2,392	Customer	100.00%	0.00%	0.00%	2,392	-	-
Medicare	624	Customer	100.00%	0.00%	0.00%	624	-	-
Workers' Compensation	2,808	Customer	100.00%	0.00%	0.00%	2,808	-	-
PERS - Misc	8,320	Customer	100.00%	0.00%	0.00%	8,320	-	-
Health Insurance	15,369	Customer	100.00%	0.00%	0.00%	15,369	-	-
Dental/Vision Insurance	327	Customer	100.00%	0.00%	0.00%	327	-	-
Long-Term Disability Insurance	218	Customer	100.00%	0.00%	0.00%	218	-	-
Deferred Comp Employer Match	0	Customer	100.00%	0.00%	0.00%	-	-	-
Longevity Pay	0	Customer	100.00%	0.00%	0.00%	-	-	-
Postage	8,691	Customer	100.00%	0.00%	0.00%	8,691	-	-
Printing and Copying	7,669	Customer	100.00%	0.00%	0.00%	7,669	-	-
Office Supplies	205	Customer	100.00%	0.00%	0.00%	205	-	-
Software Maintenance Charges	511	Customer	100.00%	0.00%	0.00%	511	-	-
Utility Billing Financial Services	6,646	Customer	100.00%	0.00%	0.00%	6,646	-	-
Utility Bill Services	5,522	Customer	100.00%	0.00%	0.00%	5,522	-	-
General Services	0	Customer	100.00%	0.00%	0.00%	-	-	-
Technology Supplies	0	Customer	100.00%	0.00%	0.00%	-	-	-
Recruitment	0	Customer	100.00%	0.00%	0.00%	-	-	-
Contractual Services	0	Customer	100.00%	0.00%	0.00%	-	-	-
Customer Service Station Remodel	0	Customer	100.00%	0.00%	0.00%	-	-	-
Capital Expenditures	0	Customer	100.00%	0.00%	0.00%	-	-	-
Cost Allocation from Others	0	Customer	100.00%	0.00%	0.00%	-	-	-
Department: 191 - Utility Billing Subtotal	102,670					102,670	-	-

Sewer System Operating & Debt Service Expense Allocation to Functions

SCHEDULE 11-S 2 of 6

	Test Year COS	Allocation Basis	Meters/Customer Service			Meters/Customer Service		
			Collection	Treatment/ Disposal	% Allocation	Collection	Treatment/ Disposal	\$ Allocation
Department: 330 - Wastewater Administration								
Salaries	49,800	Indirect	12.90%	50.30%	36.80%	6,424	25,049	18,326
Overtime	300	Indirect	12.90%	50.30%	36.80%	39	151	110
Bilingual Pay	750	Indirect	12.90%	50.30%	36.80%	97	377	276
Social Security	2,850	Indirect	12.90%	50.30%	36.80%	368	1,434	1,049
Medicare	750	Indirect	12.90%	50.30%	36.80%	97	377	276
Workers' Compensation	3,750	Indirect	12.90%	50.30%	36.80%	484	1,886	1,380
PERS - Misc	4,200	Indirect	12.90%	50.30%	36.80%	542	2,113	1,546
PERS - PEPR Misc	1,800	Indirect	12.90%	50.30%	36.80%	232	905	662
Health Insurance	11,700	Indirect	12.90%	50.30%	36.80%	1,509	5,885	4,306
Dental/Vision Insurance	150	Indirect	12.90%	50.30%	36.80%	19	75	55
Long-Term Disability Insurane	150	Indirect	12.90%	50.30%	36.80%	19	75	55
Deferred Comp Employer Match	300	Indirect	12.90%	50.30%	36.80%	39	151	110
Longevity Pay	0	Indirect	12.90%	50.30%	36.80%	-	-	-
Advertising	0	Indirect	12.90%	50.30%	36.80%	-	-	-
Office Supplies	1,023	Indirect	12.90%	50.30%	36.80%	132	514	376
Financial Services	6,237	Indirect	12.90%	50.30%	36.80%	805	3,137	2,295
Public Works Services	0	Indirect	12.90%	50.30%	36.80%	-	-	-
General Services	0	Indirect	12.90%	50.30%	36.80%	-	-	-
Contractual Services	0	Indirect	12.90%	50.30%	36.80%	-	-	-
Gas Utility	102	Indirect	12.90%	50.30%	36.80%	13	51	38
Water Utility	307	Indirect	12.90%	50.30%	36.80%	40	154	113
Waste Disposal	2,352	Indirect	12.90%	50.30%	36.80%	303	1,183	865
Cell Phone Charges	716	Indirect	12.90%	50.30%	36.80%	92	360	263
Other Utilities	510	Indirect	12.90%	50.30%	36.80%	66	257	188
General Operating Supplies	0	Indirect	12.90%	50.30%	36.80%	-	-	-
Uniforms / Personnel Equipment	614	Indirect	12.90%	50.30%	36.80%	79	309	226
Janitorial Supplies	205	Indirect	12.90%	50.30%	36.80%	26	103	75
Public Works Supplies	1,125	Indirect	12.90%	50.30%	36.80%	145	566	414
Building Maintenance Supplies	1,023	Indirect	12.90%	50.30%	36.80%	132	514	376
Gasoline & Oil	2,754	Indirect	12.90%	50.30%	36.80%	355	1,385	1,013
Vehicle Maintenance	2,965	Indirect	12.90%	50.30%	36.80%	383	1,492	1,091
General Operations Equipment	307	Indirect	12.90%	50.30%	36.80%	40	154	113
Cost Allocation from Others	0	Indirect	12.90%	50.30%	36.80%	-	-	-
Department: 330 - Wastewater Administration Subtotal	96,738					12,479	48,659	35,599

Sewer System Operating & Debt Service Expense Allocation to Functions

SCHEDULE 11-S 3 of 6

	Test Year COS	Allocation Basis	Meters/Customer Service	Collection	Treatment/ Disposal	Meters/Customer Service	Collection	Treatment/ Disposal
			% Allocation			\$ Allocation		
Department: 333 - Wastewater Collection								
Salaries	184,241	Collection	0.00%	100.00%	0.00%	-	184,241	-
Overtime	3,399	Collection	0.00%	100.00%	0.00%	-	3,399	-
Bilingual Pay	680	Collection	0.00%	100.00%	0.00%	-	680	-
Leave Payoff	816	Collection	0.00%	100.00%	0.00%	-	816	-
Certification Stipend	3,943	Collection	0.00%	100.00%	0.00%	-	3,943	-
On-Call Pay	0	Collection	0.00%	100.00%	0.00%	-	-	-
Social Security	11,150	Collection	0.00%	100.00%	0.00%	-	11,150	-
Medicare	2,855	Collection	0.00%	100.00%	0.00%	-	2,855	-
Workers' Compensation	27,602	Collection	0.00%	100.00%	0.00%	-	27,602	-
PERS - Misc	28,690	Collection	0.00%	100.00%	0.00%	-	28,690	-
PERS - PEPR Misc	2,583	Collection	0.00%	100.00%	0.00%	-	2,583	-
Health Insurance	35,081	Collection	0.00%	100.00%	0.00%	-	35,081	-
Dental/Vision Insurance	1,224	Collection	0.00%	100.00%	0.00%	-	1,224	-
Long-Term Disability Insurance	680	Collection	0.00%	100.00%	0.00%	-	680	-
Deferred Comp Employer Match	272	Collection	0.00%	100.00%	0.00%	-	272	-
Longevity Pay	0	Collection	0.00%	100.00%	0.00%	-	-	-
Sewer Collection Services	40,900	Collection	0.00%	100.00%	0.00%	-	40,900	-
Electricity	7,956	Collection	0.00%	100.00%	0.00%	-	7,956	-
Gas Utility	0	Collection	0.00%	100.00%	0.00%	-	-	-
Janitorial Supplies	0	Collection	0.00%	100.00%	0.00%	-	-	-
Public Works Supplies	5,215	Collection	0.00%	100.00%	0.00%	-	5,215	-
Permits & Inspections	307	Collection	0.00%	100.00%	0.00%	-	307	-
Sewer Operations Equipment	15,300	Collection	0.00%	100.00%	0.00%	-	15,300	-
Other Training	511	Collection	0.00%	100.00%	0.00%	-	511	-
Certifications	614	Collection	0.00%	100.00%	0.00%	-	614	-
Memberships	409	Collection	0.00%	100.00%	0.00%	-	409	-
Property Taxes	614	Collection	0.00%	100.00%	0.00%	-	614	-
Lift Station Battery	2,040	Collection	0.00%	100.00%	0.00%	-	2,040	-
Sewer Line Rotor	1,020	Collection	0.00%	100.00%	0.00%	-	1,020	-
Inspection Mirror Kit	510	Collection	0.00%	100.00%	0.00%	-	510	-
Gas Detectors	1,020	Collection	0.00%	100.00%	0.00%	-	1,020	-
Wastewater Collection Services	0	Collection	0.00%	100.00%	0.00%	-	-	-
Department: 333 - Wastewater Collection Subtotal	379,631					-	379,631	-

Sewer System Operating & Debt Service Expense Allocation to Functions

SCHEDULE 11-S 4 of 6

	Test Year COS	Allocation Basis	Meters/Customer Service			Meters/Customer Service		
			Collection % Allocation	Treatment/Disposal	Collection \$ Allocation	Treatment/Disposal		
Department: 335 - Wastewater Treatment								
Salaries	82,784	Treatment	0.00%	0.00%	100.00%	-	-	82,784
Overtime	1,976	Treatment	0.00%	0.00%	100.00%	-	-	1,976
Bilingual Pay	520	Treatment	0.00%	0.00%	100.00%	-	-	520
Leave Payoff	208	Treatment	0.00%	0.00%	100.00%	-	-	208
Certification Pay	1,872	Treatment	0.00%	0.00%	100.00%	-	-	1,872
On-Call Pay	0	Treatment	0.00%	0.00%	100.00%	-	-	-
Social Security	5,096	Treatment	0.00%	0.00%	100.00%	-	-	5,096
Medicare	1,248	Treatment	0.00%	0.00%	100.00%	-	-	1,248
Workers' Compensation	12,480	Treatment	0.00%	0.00%	100.00%	-	-	12,480
PERS - Misc	8,944	Treatment	0.00%	0.00%	100.00%	-	-	8,944
PERS - PEPR Misc	2,454	Treatment	0.00%	0.00%	100.00%	-	-	2,454
Health Insurance	11,772	Treatment	0.00%	0.00%	100.00%	-	-	11,772
Dental/Vision Insurance	654	Treatment	0.00%	0.00%	100.00%	-	-	654
Long-Term Disability Insurance	327	Treatment	0.00%	0.00%	100.00%	-	-	327
Deferred Comp Employer Match	208	Treatment	0.00%	0.00%	100.00%	-	-	208
Longevity Pay	0	Treatment	0.00%	0.00%	100.00%	-	-	-
Sewer Treatment Services	31,902	Treatment	0.00%	0.00%	100.00%	-	-	31,902
General Services	5,113	Treatment	0.00%	0.00%	100.00%	-	-	5,113
Electricity	0	Treatment	0.00%	0.00%	100.00%	-	-	-
Gas Utility	0	Treatment	0.00%	0.00%	100.00%	-	-	-
General Operating Supplies	0	Treatment	0.00%	0.00%	100.00%	-	-	-
Uniforms / Personnel Equipment	0	Treatment	0.00%	0.00%	100.00%	-	-	-
Public Works Supplies	0	Treatment	0.00%	0.00%	100.00%	-	-	-
Permits & Inspections	8,691	Treatment	0.00%	0.00%	100.00%	-	-	8,691
Building Maintenance Supplies	409	Treatment	0.00%	0.00%	100.00%	-	-	409
Sewer Operations Eqt Maint & Repair	1,020	Treatment	0.00%	0.00%	100.00%	-	-	1,020
Other Training	511	Treatment	0.00%	0.00%	100.00%	-	-	511
Certifications	920	Treatment	0.00%	0.00%	100.00%	-	-	920
Publications	615	Treatment	0.00%	0.00%	100.00%	-	-	615
Property Taxes	5,931	Treatment	0.00%	0.00%	100.00%	-	-	5,931
pH Probe	1,020	Treatment	0.00%	0.00%	100.00%	-	-	1,020
DO Probe	1,020	Treatment	0.00%	0.00%	100.00%	-	-	1,020
Round Debris Baskets	1,020	Treatment	0.00%	0.00%	100.00%	-	-	1,020
Microscope	510	Treatment	0.00%	0.00%	100.00%	-	-	510
Meetings & Conferences	0	Treatment	0.00%	0.00%	100.00%	-	-	-
Department: 335 - Wastewater Treatment Subtotal	189,225					-	-	189,225

Sewer System Operating & Debt Service Expense Allocation to Functions

SCHEDULE 11-S 5 of 6

	Test Year COS	Allocation Basis	% Allocation			\$ Allocation		
			Meters/Customer Service	Collection	Treatment/ Disposal	Meters/Customer Service	Collection	Treatment/ Disposal
Department: 345 - Water Production								
Uniforms / Personnel Equipment	0	Indirect	12.90%	50.30%	36.80%	-	-	-
Department: 345 - Water Production Subtotal	-					-	-	-
Department: 705 - Enterprise Debt								
Financial Services - Loan Fees	0	Indirect	12.90%	50.30%	36.80%	-	-	-
Principal	0	Indirect	12.90%	50.30%	36.80%	-	-	-
Interest Expense	0	Indirect	12.90%	50.30%	36.80%	-	-	-
Department: 705 - Enterprise Debt Subtotal	-					-	-	-
Department: 901 - General Government Capital								
Sewer Trunk Line Study	0	Indirect	12.90%	50.30%	36.80%	-	-	-
Department: 901 - General Government Capital Subtotal	-					-	-	-
Department: 950 - Enterprise Capital								
Lift Station Motor Pump	0	Collection	0.00%	100.00%	0.00%	-	-	-
Clarifier #2 Scum Pump	0	Treatment	0.00%	0.00%	100.00%	-	-	-
Clarifier #3 Scum Pump	0	Treatment	0.00%	0.00%	100.00%	-	-	-
Root Cutter Kit	0	Collection	0.00%	100.00%	0.00%	-	-	-
Backup Generators	0	Collection	0.00%	100.00%	0.00%	-	-	-
Trailer Trash Pump	0	Collection	0.00%	100.00%	0.00%	-	-	-
Install SCADA System	0	Collection	0.00%	100.00%	0.00%	-	-	-
Install Headworks/Screening System	0	Treatment	0.00%	0.00%	100.00%	-	-	-
Miscellaneous Capital Equipment	180,000	CIP Projects	0.00%	16.62%	83.38%	-	29,923	150,077
Department: 950 - Enterprise Capital Subtotal	180,000					-	29,923	150,077

Sewer System Operating & Debt Service Expense Allocation to Functions

SCHEDULE 11-S 6 of 6

	Test Year COS	Allocation Basis	% Allocation			\$ Allocation		
			Meters/Customer Service	Collection	Treatment/ Disposal	Meters/Customer Service	Collection	Treatment/ Disposal
Department: a95 - Finance Support Service								
Interest Expense	0	Indirect	12.90%	50.30%	36.80%	-	-	-
Department: a95 - Finance Support Service Subtotal	-					-	-	-
Debt Service								
CIEDB Sewer Loan	130,006	Treatment	0.00%	0.00%	100.00%	-	-	130,006
New Debt Service	380,725	Treatment	0.00%	0.00%	100.00%	-	-	380,725
Debt Service Subtotal	510,731					-	-	510,731
Transfers								
Transfer to General Fund	171,650	Indirect	12.90%	50.30%	36.80%	22,143	86,340	63,167
Contribution to Renewal and Replacement	125,000	CIP Projects	0.00%	16.62%	83.38%	-	20,780	104,220
Transfers Subtotal	296,650					22,143	107,120	167,387
Capital Projects								
Revenue Fund	0	CIP Projects	0.00%	16.62%	83.38%	-	-	-
Projects Designated To Be Paid With Cash	92,700	CIP Projects	0.00%	16.62%	83.38%	-	15,411	77,289
Capital Projects Subtotal	92,700					-	15,411	77,289
TOTAL EXPENDITURES	1,848,343					137,291	580,744	1,130,308

Water Functional Cost Allocations

Schedule 12-W

	Total Costs	System Parameter				
		Base Capacity - Avg Day (per TGAL) 493,469 Annual Use (TGAL)	Extra Capacity - Max Day (per TGPD) 4,220 Max Day (TGPD)	Extra Capacity - Peak Hour (per TGPD) 2,817 Max Hour (TGPD)	Fire Protection (per TGAL) 614,040	Customer - Meters/Services (per Bill) 49,800
Total System Metrics (Unit of measure)						
Operating Expenses						
Source of Supply	\$ 222,396	\$ 222,396	\$ -	\$ -	\$ -	\$ -
Treatment	\$ 16,355	\$ 5,349	\$ 11,005	\$ -	\$ -	\$ -
Distribution	\$ 300,165	\$ 65,457	\$ 134,671	\$ 100,037	\$ -	\$ -
Meters/Services	\$ 273,044	\$ -	\$ -	\$ -	\$ -	\$ 273,044
Public Fire Protection	\$ 29,103	\$ -	\$ -	\$ -	\$ 29,103	\$ -
Private Fire Protection	\$ 17,851	\$ -	\$ -	\$ -	\$ 17,851	\$ -
Total Costs (less Private Fire)	\$ 841,064	\$ 293,202	\$ 145,677	\$ 100,037	\$ 29,103	\$ 273,044
% Distribution		34.9%	17.3%	11.9%	3.5%	32.5%
Unit Cost of Service (Unit of measure)		\$0.59 (per TGAL)	\$34.52 (per TGPD)	\$35.51 (per TGPD)	\$0.05 (per TGAL)	\$5.48 (per bill)
Supply Unit Cost	\$	0.45	\$ -	\$ -	\$ -	\$ -
Treatment Unit Cost	\$	0.01	\$ 2.61	\$ -	\$ -	\$ -
T&D Unit Cost						
Distribution	\$	0.13	\$ 31.91	\$ 35.51		
Customer - Meter/Services	\$	-	\$ -	\$ -	\$	5.48
Fire Protection	\$	-	\$ -	\$ -	0.05	\$ -
Debt Service						
Source of Supply	\$ 211,262	\$ 211,262	\$ -	\$ -	\$ -	\$ -
Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution	\$ 188,093	\$ 41,017	\$ 84,389	\$ 62,686	\$ -	\$ -
Meters/Services	\$ 260,666	\$ -	\$ -	\$ -	\$ -	\$ 260,666
Fire Protection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Costs	\$ 660,021	\$ 252,279	\$ 84,389	\$ 62,686	\$ -	\$ 260,666
% Distribution		38.2%	12.8%	9.5%	0.0%	39.5%
Unit Cost of Service (Unit of measure)		\$0.51 (per TGAL)	\$20.00 (per TGPD)	\$22.25 (per TGPD)	\$0.00 (per TGAL)	\$5.23 (per bill)
Supply Unit Cost	\$	0.38	\$ -	\$ -	\$ -	\$ -
Treatment Unit Cost	\$	-	\$ -	\$ -	\$ -	\$ -
T&D Unit Cost						
Distribution	\$	0.07	\$ 15.69	\$ 17.47		
Customer - Meter/Services	\$	-	\$ -	\$ -	\$	2.21
Fire Protection	\$	-	\$ -	\$ -	\$ -	\$ -
Cash Funded Capital						
Source of Supply	\$ 189,192	\$ 189,192	\$ -	\$ -	\$ -	\$ -
Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution	\$ 147,618	\$ 32,191	\$ 66,230	\$ 49,197	\$ -	\$ -
Meters/Services	\$ 109,952	\$ -	\$ -	\$ -	\$ -	\$ 109,952
Fire Protection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Costs	\$ 446,763	\$ 221,384	\$ 66,230	\$ 49,197	\$ -	\$ 109,952
% Distribution		49.6%	14.8%	11.0%	0.0%	24.6%
Unit Cost of Service (Unit of measure)		\$0.45 (per TGAL)	\$15.69 (per TGPD)	\$17.47 (per TGPD)	\$0.00 (per TGPD)	\$2.21 (per bill)
Supply Unit Cost	\$	0.38	\$ -	\$ -	\$ -	\$ -
Treatment Unit Cost	\$	-	\$ -	\$ -	\$ -	\$ -
T&D Unit Cost						
Distribution	\$	0.07	\$ 15.69	\$ 17.47		
Customer - Meter/Services	\$	-	\$ -	\$ -	\$	2.21
Fire Protection	\$	-	\$ -	\$ -	\$ -	\$ -
Summary Totals						
	Total Costs	Unit Costs				
Operating	\$ 841,064	\$ 0.59	\$ 34.52	\$ 35.51	\$ 0.05	\$ 5.48
Debt Service	\$ 660,021	\$ 0.51	\$ 20.00	\$ 22.25	\$ -	\$ 5.23
Rate Funded Capital	\$ 446,763	\$ 0.45	\$ 15.69	\$ 17.47	\$ -	\$ 2.21
Total	\$ 1,947,847	\$ 1.55	\$ 70.21	\$ 75.23	\$ 0.05	\$ 12.92

Sewer Functional Cost Allocations

Schedule 12-S

	Total Costs	System Parameter	
		Volume	Customer
Total System		4,301	43,128
(Unit of measure)		Unit Equivalents (in EDUs)	Annual Bills
Operating Expenses			
Meters/Customer Service	\$ 137,291	\$ -	\$ 137,291
Collection	\$ 565,333	\$ 565,333	\$ -
<u>Treatment/Disposal</u>	<u>\$ 542,288</u>	<u>\$ 542,288</u>	<u>\$ -</u>
Total Costs	\$ 1,244,912	\$ 1,107,621	\$ 137,291
% Distribution		89.0%	11.0%
Unit Cost of Service		\$ 257.51	\$ 3.18
(Unit of measure)		(per billed equivalent)	(per bill)
Debt Service			
Meters/Customer Service	\$ -	\$ -	\$ -
Collection	\$ -	\$ -	\$ -
<u>Treatment/Disposal</u>	<u>\$ 510,731</u>	<u>\$ 510,731</u>	<u>\$ -</u>
Total Costs	\$ 510,731	\$ 510,731	\$ -
% Distribution		100.0%	0.0%
Unit Cost of Service		\$ 118.74	\$ -
(Unit of measure)		(per billed equivalent)	(per bill)
Cash Funded Capital			
Meters/Customer Service	\$ -	\$ -	\$ -
Collection	\$ 15,411	\$ 15,411	\$ -
<u>Treatment/Disposal</u>	<u>\$ 77,289</u>	<u>\$ 77,289</u>	<u>\$ -</u>
Total Costs	\$ 92,700	\$ 92,700	\$ -
% Distribution		100.0%	0.0%
Unit Cost of Service		\$ 21.55	\$ -
(Unit of measure)		(per billed equivalent)	(per bill)
Summary Totals			
	<u>Total Costs</u>	<u>Unit Costs</u>	
Operating	\$ 1,244,912	\$ 257.51	\$ 3.18
Debt Service	\$ 510,731	\$ 118.74	\$ -
Rate Funded Capital	\$ 92,700	\$ 21.55	\$ -
Total	\$ 1,848,343	\$ 397.81	\$ 3.18

APPENDIX C: PROPOSED RATE SCHEDULES & BILL IMPACT ANALYSIS

Proposed Schedule of Water Rates

FY 2017

Water Service Rate Schedule (with 7.056% rate increase)

Monthly Account Charge: \$10.67

<u>Monthly Meter Charge:</u>		<u>Tiered Variable Consumptive Rates (Single Family Residential Only)</u>		<u>Private Fire Service</u>			
<u>Meter Size</u>	<u>Monthly Charge</u>	<u>Tier</u>	<u>Threshold (gallons)</u>	<u>Rate (\$ per TGAL)</u>	<u>Service</u>	<u>Proposed Fixed</u>	
5/8"	\$13.42	Tier 1	0 - 8000	\$1.17	<u>Connection Size</u>	<u>Monthly Rate</u>	
3/4"	\$14.80	Tier 2	8000 - 15000	\$1.75	5/8"	\$0.25	
1"	\$17.55	Tier 3	> 15000	\$3.35	3/4"	\$0.40	
1 1/2"	\$24.42	<u>Uniform Variable Consumptive Rates</u>				1"	\$0.86
2"	\$32.67	<u>Customer Class</u>	<u>Rate (\$ per TGAL)</u>		1.5"	\$2.50	
3"	\$54.68	Multifamily Residential	\$1.73		2"	\$5.34	
4"	\$79.44	Commercial / Institutional	\$1.68		3"	\$15.50	
6"	\$148.20	Industrial	\$1.65		4"	\$33.03	
		Irrigation/Landscape/Agriculture	\$2.38		6"	\$95.94	

FY 2018

Water Service Rate Schedule (with 5% rate increase)

Monthly Account Charge: \$11.20

<u>Monthly Meter Charge:</u>		<u>Tiered Variable Consumptive Rates (Single Family Residential Only)</u>		<u>Private Fire Service</u>			
<u>Meter Size</u>	<u>Monthly Charge</u>	<u>Tier</u>	<u>Threshold (gallons)</u>	<u>Rate (\$ per TGAL)</u>	<u>Service</u>	<u>Proposed Fixed</u>	
5/8"	\$14.09	Tier 1	0 - 8000	\$1.23	<u>Connection Size</u>	<u>Monthly Rate</u>	
3/4"	\$15.54	Tier 2	8000 - 15000	\$1.84	5/8"	\$0.26	
1"	\$18.43	Tier 3	> 15000	\$3.52	3/4"	\$0.42	
1 1/2"	\$25.64	<u>Uniform Variable Consumptive Rates</u>				1"	\$0.90
2"	\$34.30	<u>Customer Class</u>	<u>Rate (\$ per TGAL)</u>		1.5"	\$2.63	
3"	\$57.41	Multifamily Residential	\$1.82		2"	\$5.61	
4"	\$83.41	Commercial / Institutional	\$1.76		3"	\$16.28	
6"	\$155.61	Industrial	\$1.73		4"	\$34.68	
		Irrigation/Landscape/Agriculture	\$2.50		6"	\$100.74	

FY 2019

Water Service Rate Schedule (with 5% rate increase)

Monthly Account Charge: \$11.76

<u>Monthly Meter Charge:</u>		<u>Tiered Variable Consumptive Rates (Single Family Residential Only)</u>		<u>Private Fire Service</u>			
<u>Meter Size</u>	<u>Monthly Charge</u>	<u>Tier</u>	<u>Threshold (gallons)</u>	<u>Rate (\$ per TGAL)</u>	<u>Service</u>	<u>Proposed Fixed</u>	
5/8"	\$14.79	Tier 1	0 - 8000	\$1.29	<u>Connection Size</u>	<u>Monthly Rate</u>	
3/4"	\$16.32	Tier 2	8000 - 15000	\$1.93	5/8"	\$0.27	
1"	\$19.35	Tier 3	> 15000	\$3.70	3/4"	\$0.44	
1 1/2"	\$26.92	<u>Uniform Variable Consumptive Rates</u>				1"	\$0.95
2"	\$36.02	<u>Customer Class</u>	<u>Rate (\$ per TGAL)</u>		1.5"	\$2.76	
3"	\$60.28	Multifamily Residential	\$1.91		2"	\$5.89	
4"	\$87.58	Commercial / Institutional	\$1.85		3"	\$17.09	
6"	\$163.39	Industrial	\$1.82		4"	\$36.41	
		Irrigation/Landscape/Agriculture	\$2.62		6"	\$105.78	

Proposed Schedule of Water Rates

FY 2020

Water Service Rate Schedule (with 5% rate increase)

Monthly Account Charge: \$12.35

<u>Monthly Meter Charge:</u>		<u>Tiered Variable Consumptive Rates (Single Family Residential Only)</u>			<u>Private Fire Service</u>	
<u>Meter Size</u>	<u>Monthly Charge</u>	<u>Tier</u>	<u>Threshold (gallons)</u>	<u>Rate (\$ per TGAL)</u>	<u>Service</u>	<u>Proposed Fixed</u>
5/8"	\$15.53	Tier 1	0 - 8000	\$1.35	<u>Connection Size</u>	<u>Monthly Rate</u>
3/4"	\$17.14	Tier 2	8000 - 15000	\$2.03	5/8"	\$0.28
1"	\$20.32	Tier 3	> 15000	\$3.89	3/4"	\$0.46
1 1/2"	\$28.27	<u>Uniform Variable Consumptive Rates</u>			1"	\$1.00
2"	\$37.82	<u>Customer Class</u>	<u>Rate (\$ per TGAL)</u>		1.5"	\$2.90
3"	\$63.29	Multifamily Residential	\$2.01		2"	\$6.18
4"	\$91.96	Commercial / Institutional	\$1.94		3"	\$17.94
6"	\$171.56	Industrial	\$1.91		4"	\$38.23
		Irrigation/Landscape/Agriculture	\$2.75		6"	\$111.07

FY 2021

Water Service Rate Schedule (with 5% rate increase)

Monthly Account Charge: \$12.97

<u>Monthly Meter Charge:</u>		<u>Tiered Variable Consumptive Rates (Single Family Residential Only)</u>			<u>Private Fire Service</u>	
<u>Meter Size</u>	<u>Monthly Charge</u>	<u>Tier</u>	<u>Threshold (gallons)</u>	<u>Rate (\$ per TGAL)</u>	<u>Service</u>	<u>Proposed Fixed</u>
5/8"	\$16.31	Tier 1	0 - 8000	\$1.42	<u>Connection Size</u>	<u>Monthly Rate</u>
3/4"	\$18.00	Tier 2	8000 - 15000	\$2.13	5/8"	\$0.29
1"	\$21.34	Tier 3	> 15000	\$4.08	3/4"	\$0.48
1 1/2"	\$29.68	<u>Uniform Variable Consumptive Rates</u>			1"	\$1.05
2"	\$39.71	<u>Customer Class</u>	<u>Rate (\$ per TGAL)</u>		1.5"	\$3.05
3"	\$66.45	Multifamily Residential	\$2.11		2"	\$6.49
4"	\$96.56	Commercial / Institutional	\$2.04		3"	\$18.84
6"	\$180.14	Industrial	\$2.01		4"	\$40.14
		Irrigation/Landscape/Agriculture	\$2.89		6"	\$116.62

Proposed Schedule of Sewer Rates

FY 2017

Sewer Rate Schedule (with 16% increase)

Monthly Rate (per Account): \$3.18

Fixed Meter Charge (per equivalent unit): \$26.58

FY 2018

Sewer Rate Schedule (with 3.5% increase)

Monthly Rate (per Account): \$3.29

Fixed Meter Charge (per equivalent unit): \$27.51

FY 2019

Sewer Rate Schedule (with 3.5% increase)

Monthly Rate (per Account): \$3.41

Fixed Meter Charge (per equivalent unit): \$28.47

FY 2020

Sewer Rate Schedule (with 3.5% increase)

Monthly Rate (per Account): \$3.53

Fixed Meter Charge (per equivalent unit): \$29.47

FY 2021

Sewer Rate Schedule (with 3.5% increase)

Monthly Rate (per Account): \$3.65

Fixed Meter Charge (per equivalent unit): \$30.50

Bill Impact Analysis – Single Family Residential Account with 5/8" Meter

Monthly Use (Gal)	# of Bills	% of Bills	Agg. %	Current Total	Proposed Total	\$ Chg.	% Chg.
0	5,143	17.9%	17.9%	\$38.83	\$43.18	\$4.35	11.2%
1,000	615	2.1%	20.0%	\$39.57	\$44.35	\$4.78	12.1%
2,000	722	2.5%	22.5%	\$40.31	\$45.52	\$5.21	12.9%
3,000	914	3.2%	25.7%	\$41.05	\$46.69	\$5.64	13.7%
4,000	1,363	4.7%	30.4%	\$41.79	\$47.86	\$6.07	14.5%
5,000	1,613	5.6%	36.0%	\$42.53	\$49.03	\$6.50	15.3%
6,000	1,826	6.3%	42.3%	\$43.73	\$50.20	\$6.47	14.8%
7,000	1,936	6.7%	49.1%	\$44.93	\$51.37	\$6.44	14.3%
8,000	1,880	6.5%	55.6%	\$46.13	\$52.54	\$6.41	13.9%
9,000	1,749	6.1%	61.7%	\$47.33	\$54.29	\$6.96	14.7%
10,000	1,632	5.7%	67.3%	\$48.53	\$56.04	\$7.51	15.5%
15,000	796	2.8%	86.2%	\$56.03	\$64.79	\$8.76	15.6%
20,000	301	1.0%	94.1%	\$64.83	\$81.54	\$16.71	25.8%
40,000	11	0.0%	99.7%	\$115.63	\$148.54	\$32.91	28.5%
60,000	2	0.0%	99.9%	\$171.03	\$215.54	\$44.51	26.0%

Bill Impact Analysis – Multifamily Residential Accounts

Meter Size	% of Customers	Meter Size	Units	Typical Mtly Usage (Gal)	Current Total	Proposed Total	\$ Chg.	% Chg.
5/8"	76.4%							
Large User		5/8"	6.00	60,000	\$265.27	\$240.01	\$11.60	4.4%
Average User		5/8"	4.00	24,000	\$136.71	\$137.86	\$1.15	0.8%
Low Volume User		5/8"	2.00	5,000	\$67.33	\$65.12	-\$2.21	-3.3%
1"	21.8%							
Large User		1"	28.00	250,000	\$1,120.54	\$1,011.38	-\$109.16	-9.7%
Average User		1"	10.00	50,000	\$298.70	\$306.57	\$7.87	2.6%
Low Volume User		1"	5.00	10,000	\$129.50	\$137.70	\$8.20	6.3%
1 1/2"	0.3%							
Large User		1 1/2"	15.00	165,000	\$695.39	\$612.06	-\$83.33	-12.0%
Average User		1 1/2"	3.00	65,000	\$239.83	\$199.85	-\$39.98	-16.7%
Low Volume User		1 1/2"	2.00	16,000	\$87.94	\$95.15	\$7.21	8.2%
4"	0.9%							
Large User		4"	30.00	233,000	\$1,148.46	\$1,083.73	-\$64.73	-5.6%
Average User		4"	15.00	100,000	\$556.85	\$554.63	-\$2.22	-0.4%
Low Volume User		4"	5.00	47,000	\$261.24	\$263.60	\$2.36	0.9%

Bill Impact Analysis – Small Commercial Accounts

Meter Size	% of Commercial Customers	Meter Size	Units	Typical Mtly Usage (Gal)	Current Total	Proposed Total	\$ Chg.	% Chg.
5/8"								
56.4%								
Large User		5/8"	1.00	60,000	\$171.03	\$143.98	-\$27.05	-15.8%
Average User		5/8"	1.00	24,000	\$72.23	\$83.50	\$11.27	15.6%
Low Volume User		5/8"	1.00	10,000	\$48.53	\$59.98	\$11.45	23.6%
3/4"								
1.8%								
Large User		3/4"	1.00	92,000	\$259.67	\$199.12	-\$60.55	-23.3%
Average User		3/4"	1.00	26,000	\$76.85	\$88.24	\$11.39	14.8%
Low Volume User		3/4"	1.00	9,000	\$47.33	\$59.68	\$12.35	26.1%
1"								
13.5%								
Large User		1"	2.00	118,000	\$358.10	\$272.13	-\$85.97	-24.0%
Average User		1"	2.00	48,000	\$164.20	\$154.53	-\$9.67	-5.9%
Low Volume User		1"	1.00	20,000	\$66.44	\$80.91	\$14.47	21.8%
1 1/2"								
9.8%								
Large User		1 1/2"	2.00	165,000	\$492.03	\$357.96	-\$134.07	-27.2%
Average User		1 1/2"	1.00	65,000	\$190.23	\$163.38	-\$26.85	-14.1%
Low Volume User		1 1/2"	1.00	16,000	\$63.14	\$81.06	\$17.92	28.4%

Bill Impact Analysis – Irrigation/Landscape Customer with 3” Meter

Monthly Use (Gal)	# of Bills	% of Bills	Agg. %	Current Water	Proposed Water	\$ Chg.	% Chg.
0	43	65.2%	65.2%	\$49.61	\$54.68	\$5.07	10.2%
1,000	4	6.1%	71.2%	\$50.35	\$57.06	\$6.71	13.3%
2,000	9	13.6%	84.8%	\$51.09	\$59.44	\$8.35	16.3%
3,000	-	0.0%	84.8%	\$51.83	\$61.82	\$9.99	19.3%
4,000	-	0.0%	84.8%	\$52.57	\$64.20	\$11.63	22.1%
5,000	1	1.5%	86.4%	\$53.31	\$66.58	\$13.27	24.9%
6,000	1	1.5%	87.9%	\$54.51	\$68.96	\$14.45	26.5%
7,000	2	3.0%	90.9%	\$55.71	\$71.34	\$15.63	28.1%
8,000	-	0.0%	90.9%	\$56.91	\$73.72	\$16.81	29.5%
9,000	1	1.5%	92.4%	\$58.11	\$76.10	\$17.99	31.0%
10,000	-	0.0%	92.4%	\$59.31	\$78.48	\$19.17	32.3%
15,000	-	0.0%	92.4%	\$66.81	\$90.38	\$23.57	35.3%
20,000	-	0.0%	92.4%	\$75.61	\$102.28	\$26.67	35.3%
40,000	-	0.0%	92.4%	\$126.41	\$149.88	\$23.47	18.6%
60,000	-	0.0%	97.0%	\$181.81	\$197.48	\$15.67	8.6%
80,000	-	0.0%	98.5%	\$237.21	\$245.08	\$7.87	3.3%
100,000	-	0.0%	100.0%	\$292.61	\$292.68	\$0.07	0.0%

Bill Impact Analysis – Large Commercial Accounts

Meter Size	% of Commercial Customers	Meter Size	Units	Typical Mtly Usage (Gal)	Current Total	Proposed Total	\$ Chg.	% Chg.
2"		12.3%						
Large User		2"	7.00	717,000	\$2,148.73	\$1,426.46	-\$722.27	-33.6%
Average User		2"	4.00	80,000	\$309.84	\$276.57	-\$33.27	-10.7%
Low Volume User		2"	1.00	27,000	\$88.63	\$107.79	\$19.16	21.6%
3"		3.7%						
Large User		3"	2.00	278,000	\$835.27	\$578.06	-\$257.21	-30.8%
Average User		3"	1.00	45,000	\$165.06	\$160.04	-\$5.02	-3.0%
Low Volume User		3"	1.00	20,000	\$100.41	\$118.04	\$17.63	17.6%
4"		1.8%						
Large User		4"	5.00	233,000	\$796.30	\$606.96	-\$189.34	-23.8%
Average User		4"	3.00	100,000	\$378.29	\$330.36	-\$47.93	-12.7%
Low Volume User		4"	1.00	47,000	\$181.88	\$188.16	\$6.28	3.5%
6"		0.6%						
Large User		6"	9.00	2,372,000	\$6,918.74	\$4,375.55	-\$2,543.19	-36.8%