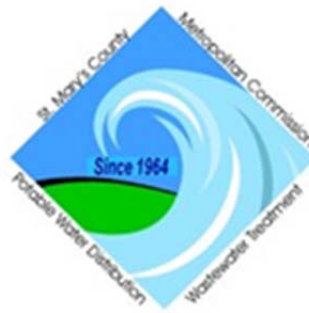


St. Mary's County Metropolitan Commission

Water & Sewer Rate Study



Final Report

January 21, 2015

Prepared by:

BURTON & ASSOCIATES

UTILITY RATES ■ ASSESSMENTS ■ FINANCIAL PLANNING

January 21, 2015

Ms. Becky Shick
Chief Financial Officer
23121 Camden Way,
California, MD 20619

Re: Water and Sewer Rate Study

Dear Ms. Shick,

Burton & Associates is pleased to present this Final Report of the Water and Sewer Rate Study (Study) that we performed for the St. Mary's County Metropolitan Commission (MetCom).

We appreciate the fine assistance provided by you and all of the members of MetCom staff who participated in the Study. If you or others at MetCom have any questions, please do not hesitate to call me at (813) 443-5138 or email me at aburnham@burtonandassociates.com.

Sincerely,



Andrew J. Burnham
Senior Vice President

Enclosure

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EXECUTIVE SUMMARY

E.1 INTRODUCTION

This Executive Summary presents an overview of the results of the Water & Sewer Rate Study (Study) that was conducted for the water and sewer utility systems of the St. Mary's County Metropolitan Commission (MetCom) by Burton & Associates.

E.1.1 Objectives

The principal objectives or components of the Study are as follows:

Revenue Sufficiency Analysis – Develop a multi-year plan of water and sewer rate revenue increases that will satisfy the operating and minor asset replacement costs of MetCom, as well as the establishment and maintenance of adequate reserves.

Rate Structure Modifications – Develop modifications, as appropriate, to ensure that MetCom's water and sewer rates conform to accepted industry practice and reflect a fair and equitable distribution of system costs while ensuring adequate fixed cost recovery, enhancing affordability for low volume and average users, and providing a price incentive for water conservation from higher volume users.

Assist in the Update of Miscellaneous Service Charges – Assist MetCom staff in identifying the cost of providing its various miscellaneous services (such as meter installation, service reconnection, inspections, plan reviews, etc.) to serve as the basis for potential adjustments to the charges for these types of services.

E.2 REVENUE SUFFICIENCY ANALYSIS

This analysis evaluated the sufficiency of MetCom’s revenues to meet all of its current and projected financial requirements over a ten-year projection period, and determined the level of any water and sewer rate revenue increases necessary in each year of the projection period to provide sufficient revenues to fund all of its cost requirements. With MetCom staff, we thoroughly discussed the base data and assumptions of the analysis and reviewed several alternative scenarios (particularly in regard to alternative reserve levels and rate adjustment plans). Through this process, we identified the recommended financial management plan and associated plan of annual water and sewer rate revenue increases presented herein. The recommended financial management plan and corresponding plan of annual water and sewer rate revenue adjustments is based upon the revenue and expense information, beginning balances, and assumptions as described in Section 2 of this report. Appendix A includes detailed schedules presenting all components of the financial management plan, while the recommended five-year rate revenue adjustment plan is presented in the following table:

Recommended Plan of Water & Sewer Rate Revenue Increases					
	<u>FY 15¹</u>	<u>FY 16²</u>	<u>FY 17</u>	<u>FY 18</u>	<u>FY 19</u>
Effective Date	7/1/14	7/1/15	7/1/16	7/1/17	7/1/18
Water Rate Revenue Increase	0.00%	3.00%	3.00%	3.00%	3.00%
Sewer Rate Revenue Increase	3.67%	3.75%	3.75%	3.75%	3.75%
Combined Impact to Typical Residential User (15,000 Gallons per Quarter)	2.40%	(3.32%)	3.52%	3.52%	3.52%

¹ FY 2015 increases were developed and implemented by MetCom

² FY 2016 increases were achieved within the recommended rate structure adjustments identified in Section 3 of this report, which actually reduces the cost of service for low volume and average residential users.

The financial management plan developed for MetCom as part of this Study reflects a five-year rate adjustment plan (FY 2015 – FY 2019) that meets the projected annual cost requirements of each respective system while establishing reserves to recommended levels by the end of the five-year period. Upon completion of the five-year plan, it is projected that MetCom will be able to operate with very modest annual increases to keep pace with assumed cost inflation starting in FY 2020.

It is important to note that we also recommend that MetCom conduct annual reviews to account for changes in customer growth, cost inflation, demands, regulatory requirements, and the impacts of any efficiency or cost savings initiatives. In doing so, MetCom could then modify its rate adjustment plans to ensure the sustainability of the water and sewer systems while minimizing rates to the greatest extent possible.

E.3 RATE STRUCTURE MODIFICATIONS

Burton & Associates examined MetCom's current retail water and sewer rates and developed recommended rate structure modifications that should be considered to i) fairly and equitably recover its current cost of service and revenue requirements, ii) conform to accepted national and local industry practices, iii) enhance fiscal stability and recovery of fixed costs, iv) enhance affordability to low and average volume users, v) provide a price incentive for water conservation, and vi) minimize administrative burden while enhancing the ability to be easily understood.

Notably, the recommended rate structure modifications include:

- 1) Establish separate water and sewer readiness-to-serve charges to recover a portion of the fixed operating costs of the systems from users. The charge would be scaled by meter size based upon maximum flow rates by meter size as published by the American Water Works Association (AWWA).
- 2) Remove minimum monthly billed usage amount and bill all metered use, which will avoid low volume users paying for water (and sewer) service they do not use.
- 3) Establish the following inclining block water usage rate structure that will provide affordability for low/average users and promote water conservation.
 - First tier: Essential domestic use for typical residence (lowest rate)
 - Second tier: Normal amount of irrigation for typical residence (higher rate)
 - Third tier: All remaining usage (highest rate)

The amount of water within each tier of the inclining block rate structure for larger meters should be scaled or adjusted based upon the maximum flow rates by meter size as published by the AWWA.

WATER & SEWER RATE STUDY

EXECUTIVE SUMMARY

- 4) Updated water and sewer non-metered service rates to be equal to the readiness-to-serve charge plus usage charges for typical residential user (5,000 gal.).
- 5) Bill residential sewer accounts metered rates (currently billed non-metered rates).
- 6) Continue to apply a single usage or metered volume-based rate for sewer service to all customers based upon the portion of the revenue requirement to be recovered in usage-based rates divided by total volume.
- 7) Apply the volume-based sewer usage charge to 100% of metered water volume.

The table below presents the monthly impact to a single-family residential customer with a 5/8" meter of the recommended rate structure for FY 2016 (which includes the identified revenue increases from the revenue sufficiency analysis). The table highlights the typical usage for this meter size (5,000 gallons) and demonstrates that a customer using this amount of water would see a \$1.80 decrease (or a 3.3% reduction) in their monthly cost per the rate structure proposed for FY 2016. A schedule of the water and sewer rates recommended for FY 2016, additional customer impact tables, and residential bill comparisons to local communities are included in Appendix B of this report.

Single Family 5/8" Meter Monthly Water & Sewer Bill Calculations						
<u>Monthly Use (Gal)</u>	<u>Est. % of Bills</u>	<u>Agg. %</u>	<u>FY 14/15</u>	<u>FY 15/16</u>	<u>\$ Chg</u>	
0	1.4%	1.4%	\$ 54.25	\$ 23.90	\$ (30.35)	
1,000	5.2%	6.6%	\$ 54.25	\$ 29.61	\$ (24.64)	
2,000	10.5%	17.0%	\$ 54.25	\$ 35.32	\$ (18.93)	
3,000	13.9%	30.9%	\$ 54.25	\$ 41.03	\$ (13.22)	
4,000	15.6%	46.5%	\$ 54.25	\$ 46.74	\$ (7.51)	
5,000	13.8%	60.3%	\$ 54.25	\$ 52.45	\$ (1.80)	
6,000	12.4%	72.7%	\$ 54.25	\$ 59.69	\$ 5.44	
7,000	7.7%	80.3%	\$ 57.32	\$ 66.93	\$ 9.61	
8,000	5.3%	85.6%	\$ 60.39	\$ 74.17	\$ 13.78	
9,000	3.5%	89.2%	\$ 63.46	\$ 81.41	\$ 17.95	
10,000	2.5%	91.7%	\$ 66.53	\$ 88.65	\$ 22.12	
15,000	0.6%	97.0%	\$ 81.88	\$ 124.85	\$ 42.97	
20,000	0.3%	98.7%	\$ 97.23	\$ 161.05	\$ 63.82	

E.4 MISCELLANEOUS SERVICE CHARGES

MetCom currently applies miscellaneous service charges in relation to the provision of specific services to individual customers. Inspections, reconnections, and meter installations are examples of the types of services for which MetCom has miscellaneous service charges. The intent of miscellaneous service charges is to ensure that the recipient of a specific service bears the costs associated with providing that service.

Burton & Associates created a cost-of-service template to be used for each miscellaneous service charge listed in MetCom's rate policies and schedules as well as any new charges MetCom may wish to consider. This template provides a consistent methodology for assigning the appropriate time and material costs necessary to provide each service (see Appendix C for screen captures of the Miscellaneous Fee Developer customized for MetCom). Upon population of the templates for each service, MetCom staff will identify any adjustments to these types of fees for consideration by the Commission at a later date as part of a proposed policy and/or fee schedule revision.

SECTION 1. INTRODUCTION

This report presents the results of the Water & Sewer Rate Study (Study) that was conducted for the water and sewer systems of the St. Mary's County Metropolitan Commission (MetCom). The following sections of this report describe the source data, assumptions, results, as well as the conclusions and recommendations of the Study.

1.1 BACKGROUND

MetCom was created as a quasi-governmental, non-profit body, for the purpose of providing centralized water and sewer service to St. Mary's County. MetCom is governed by a Board of Commissioners consisting of seven voting members, and one non-voting member. Voting members represent election districts and are appointed by the Board of County Commissioners to serve three-year staggered terms.

MetCom solicited proposals from qualified consultants in January of 2014 to provide a comprehensive study of its water and sewer service charges that will ensure its financial health and stability while appropriately allocating costs among its customers. *It is important to note that the study was not intended to cover the structure of fees set to pay for debt service and capital projects (i.e. System Improvement Charges and Capital Contribution Charges), as these structures are calculated and billed as set forth in MetCom's enabling legislation and are not part of its water and sewer service charges.* Burton & Associates was selected to perform the comprehensive rate study, the results of which are presented herein.

It is important to note that the Study presented herein was completed by June of 2014, with the results and recommendations of the Study first being presented to the MetCom Board of Commissioners in July of 2014, and subsequently presented to certain customer groups beginning in November of 2014.

1.2 OBJECTIVES

The principal objectives or components of the Study are as follows:

Revenue Sufficiency Analysis – Develop a multi-year plan of water and sewer rate revenue increases that will satisfy the operating and minor asset replacement costs of MetCom, as well as the establishment and maintenance of adequate reserves.

Rate Structure Modifications – Develop modifications, as appropriate, to ensure that MetCom’s water and sewer rates conform to accepted industry practice and reflect a fair and equitable distribution of system costs while ensuring adequate fixed cost recovery, enhancing affordability for low volume and average users, and providing a price incentive for water conservation from higher volume users.

Assist in the Update of Miscellaneous Service Charges – Assist MetCom staff in identifying the cost of providing its various miscellaneous services (such as meter installation, service reconnection, inspections, plan reviews, etc.) to serve as the basis for potential adjustments to the charges for these types of services.

SECTION 2. REVENUE SUFFICIENCY ANALYSIS

2.1 DESCRIPTION

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. The following sub-sections of the report presents a description of the source data, assumptions, and results of the RSA. Appendix A includes detailed supporting schedules for the financial management plan identified herein for MetCom.

The RSA evaluated the sufficiency of the revenues provided by MetCom's current rates to meet all of its financial requirements over a ten-year projection period of FY 2015 - FY 2024¹, and determined the level of rate revenue increases necessary in each year of the period to provide sufficient revenues to fund its requirements. With MetCom staff, we thoroughly reviewed the source data, assumptions, and several alternative scenarios (particularly in regard to alternative reserve levels and rate adjustment plans). During these work sessions, we examined the impact of various assumptions upon key financial indicators by use of graphical representations projected on a large viewing screen from our computer rate models. In this way, we developed the recommended financial management plan and associated plans of water and sewer rate adjustments presented herein that will allow MetCom to fund its requirements during the projection period.

¹ The RSA begins with FY 2014 data, however, the majority of this information serves as base data upon which future year projections of rate revenues and fund balances are based. Thus, for purposes of this analysis, FY 2014 is not considered to be part of the ten-year projection period.

In order to initialize the RSA, we obtained MetCom's historical and budgeted financial information regarding the operation of the water and sewer systems. We also counseled with MetCom staff regarding other assumptions and policies that would affect its financial performance, such as demands and customer growth, levels of reserves, earnings on invested funds, escalation rates for operating costs, etc.

All of this information was entered into our proprietary Financial Analysis and Management System (FAMS-XL©) interactive model. The FAMS-XL© model produced a ten-year projection of the sufficiency of MetCom's revenues to meet all of its 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 to fund all of its cost requirements, including the establishment and maintenance of appropriate reserve levels.

2.2 SOURCE DATA

The following presents the key source data relied upon in conducting the RSA:

Beginning Fund Balances

The detailed trial balance supporting the audited financial statements as of June 30, 2013 was utilized to establish MetCom's beginning FY 2014 unrestricted fund balance.

Revenues

The revenues utilized in the RSA reflect an evaluation of multiple years of historical results, six months of FY 2014 actual results, and the FY 2015 Budget. For purposes of the RSA, revenues were grouped and classified as retail rate revenue, wholesale revenue, interest income, and other minor revenue from miscellaneous service charges.

Retail rate revenue is comprised of non-metered, metered, and overage charges. Retail rate revenue is based audited FY 2013 results, adjusted annually to reflect additional revenue generated from assumed rate increases, customer growth, and changes in billed volume, as appropriate. Projections of all other revenues were based upon the FY 2015 Budget, excluding interest earnings (which were calculated annually based upon

projected average fund balances and assumed interest rates discussed with MetCom staff), and wholesale revenue from the Navy. Per the terms of a special service agreement, the Navy is charged an annual rate that is to be no more than the cost per thousand gallons of wastewater treatment and disposal at MetCom's Marlay-Taylor Treatment Facility. As such, the RSA calculates the projected revenues from the Navy based upon the projected portion of sewer expenses estimated for the Marlay-Taylor Treatment Facility and assumed customer volumes. Schedule 7 of Appendix A presents the annual calculation of the Navy rate and associated wholesale revenue to MetCom.

Operating Expenditures

MetCom's operating expenditures include all personnel as well as operating and maintenance expenses for its Water, Sewer, Engineering, and Administrative Departments. The RSA based operating expenditure projections on the individual expense categories and expense amounts within the FY 2015 Budget, adjusted annually based upon assumed cost escalation factors that were reviewed with MetCom staff.

Minor Asset Replacement Costs

Minor asset replacement costs reflect the FY 2015 Budget, while FY 2016 and future years reflect a rolling three-year average in order to estimate the continued need for such expenditures in the future. These costs are funded primarily from annual budgeted depreciation expenses, with any supplemental funding required in a particular year coming from either operating revenues or available reserves.

2.3 ASSUMPTIONS

The following presents the key assumptions utilized in the conduct of the RSA:

Cost Escalation

Annual cost escalation factors for each of the various types of operating expenditures were provided by MetCom staff and applied in each year of the projection period beginning in FY 2016. The specific escalation factors assumed for the various categories of expenses can be seen on Schedule 2 of Appendix A.

Cost Allocation

The RSA distributed MetCom's Administrative and Engineering Department costs in accordance with MetCom's current practice so that unique rate adjustment plans could be developed for the water and sewer systems based upon their respective cost of service requirements. A detailed presentation of the Administrative and Engineering Department cost allocation process is presented on Schedule 8 of Appendix A.

Interest Earnings on Invested Funds

The RSA reflects interest earnings on invested funds at a rate of 0.25% in FY 2015, 0.50% in FY 2016, 0.75% in FY 2017, 1.00% in FY 2018, 1.50% in FY 2019 and 2.00% in FY 2020 and each year thereafter.

Customer Growth and Volume Forecast

New connection and billed volume projections were based upon a review of historical data for both metered and unmetered service from FY 2011 through FY 2014, observance of current environmental and economic conditions, and discussions with staff regarding the anticipated number of new service connections and trends in billed volumes.

As such, the RSA reflects annual growth in service connections and billed volumes of 1.00% per year, which equates to about 150 new water and 180 new sewer accounts being added each year on average during the projection period.

Minimum Reserve Policy

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 utility system multi-year financial management 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, or to fund capital improvements on an interim basis until long-term funding sources are secured/received.

As such, it is important for MetCom to establish financial policies that clearly state the basis for establishing targeted reserve balances. 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 plan presented in this report assume that the MetCom will maintain a two-part minimum fund balance or reserve equal to 6 months of annual operating expenditures (excluding depreciation) for the water and sewer systems, plus an additional \$3.5 million to be used for capital improvement interim funding based upon discussions with Metcom staff regarding the magnitude of the multi-year capital improvement program and typical timeframe during which capital expenses are typically incurred before permanent funding sources are in place. The level of reserves recommended herein for MetCom is 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 ratings agencies, such as Fitch and Standard & Poor's.

Price Elasticity

This adjustment is incorporated into the analysis to reflect that as rates increase, discretionary water consumption will likely decline. Therefore, in order to generate sufficient revenue, projected rate increases will have to be adjusted to reflect a smaller revenue base to which they will be applied, thus causing the projected rate increases to be higher. The price elasticity adjustment reduces water and sewer volume-based revenues by the product of the annual rate increase and the annual assumed elasticity coefficient. In each year of the projection period, the price elasticity coefficient is 0.20, which means that for every 10% increase in price, the RSA reflects a 2% reduction in water (and therefore sewer) retail billed volumes.

2.4 RESULTS

Based upon the data and assumptions presented herein, the Utility's current rates will not provide sufficient revenue to meet its annual operating and minor asset replacement requirements and achieve recommended reserves over a multi-year projection period. As such the RSA developed a financial management plan for MetCom that reflects a five-year rate adjustment plan (FY 2015 – FY 2019) that meets the projected annual cost requirements of each system while increasing reserves to recommended levels by the end of the five-year period. Upon completion of the five-year plan, it is projected that Metcom will be able to sustainably operate its systems with similar modest increases to keep pace with assumed cost inflation.

The recommended multi-year retail rate revenue adjustment plans for each respective system are presented in the following table. It is important to note that FY 2016 revenue increases were achieved within recommended rate structure adjustments identified in Section 3 of this report, which actually reduces the cost of service to MetCom's low volume and average residential users.

WATER & SEWER RATE STUDY

REVENUE SUFFICIENCY ANALYSIS

Recommended Plan of Water & Sewer Rate Revenue Increases

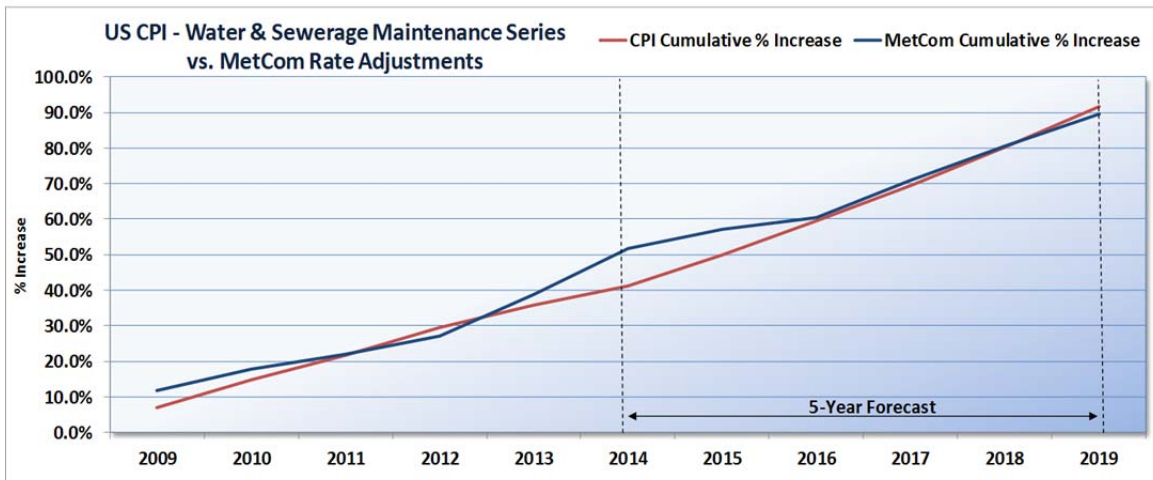
	FY 15 ¹	FY 16 ²	FY 17	FY 18	FY 19
Effective Date	7/1/14	7/1/15	7/1/16	7/1/17	7/1/18
Water Rate Revenue Increase	0.00%	3.00%	3.00%	3.00%	3.00%
Sewer Rate Revenue Increase	3.67%	3.75%	3.75%	3.75%	3.75%
Combined Impact to Typical Residential User (15,000 Gallons per Quarter)	2.40%	(3.32%)	3.52%	3.52%	3.52%

¹ FY 2015 increases were developed and implemented by MetCom

² FY 2016 increases were achieved within the recommended rate structure adjustments identified in Section 3 of this report, which actually reduces the cost of service for low volume and average residential users.

It is important to note that the recommended annual retail rate adjustments identified herein are consistent with national trends and our industry experience. As demonstrated in the following graph, the U.S. Consumer Price Index (CPI) Water & Sewerage Maintenance Series, which specifically measures the average national change in the cost of water and wastewater service to households, has risen at an average annual rate of about 6% during the past five years. Moreover, many of our clients across the country are presently experiencing rate increase requirements in the range of 3 to 8% per year.

The following graph displays five years of historical and projected increases to MetCom's combined water and sewer cost for its typical residential user (5,000 gallons per month, inclusive of both Service and System Improvement Charges) as compared to the CPI Water & Sewerage Maintenance Series. As can be seen, MetCom's rate increases have been and are expected to remain very consistent with national trends.



2.5 CONCLUSIONS & RECOMMENDATIONS

We have reached the following conclusions and recommendations regarding the sufficiency of MetCom's current water and sewer rates:

- Based upon the assumptions and base data described herein, the revenue produced by MetCom's current rates is not sufficient to address its annual operating, minor capital and reserve requirements.
- We recommend that MetCom replace its existing general fund reserve policies with a reserve policy that is equal to 6 months of operating expenses (excluding depreciation), plus an additional \$3.5 million for interim capital funding purposes.
- We recommend that MetCom commit to a five-year plan to achieve the reserve levels identified herein and adopt the corresponding plan of water and sewer retail rate revenue increases presented for FY 2015 - FY 2019.
- Additionally, we recommend MetCom consider rate structure modifications for FY 2016 as presented in Section 3 of this report. The recommended rate structure modifications conform to accepted industry practice, provide a greater allocation of costs and price incentive for conservation to large users, and enhance affordability for low volume and average users.
- MetCom should update this analysis on an annual basis as part of its budget process to account for any changes in customer growth, billed volumes, inflation, regulatory requirements, and the impacts of any efficiency or cost savings measures. In doing so, MetCom could then modify its rate adjustment plans as appropriate to ensure the financial sustainability of the water and sewer systems while minimizing rates to its customers to the greatest extent possible.

SECTION 3. RATE STRUCTURE MODIFICATIONS

We have reviewed MetCom’s current retail water and sewer rate structure, and while we conclude that it is generally fair and equitable, we do recommend certain modifications to the rate structure to address the following objectives:

- i) Fair and equitable recovery of the current cost of service and revenue requirements from each customer class,
- ii) Conformance to accepted national and local industry practices,
- iii) Improved fiscal stability and recovery of fixed costs,
- iv) Enhancement of affordability to low and average volume users,
- v) Provision of a price incentive to promote resource conservation,
- vi) Reduced administrative burden and improved ease of understanding by customers to the greatest extent possible.

The following sub-sections present a description of the basis of the recommended rate structure, supporting FY 2016 rate schedules, as well as the customer impacts of the FY 2016 rate recommendations. The recommended rate structure presented herein is intended for implementation on 7/1/15 (i.e. FY 2016) and includes the recommended FY 2016 water and sewer retail rate revenue increases of 3.00% and 3.75%, respectively, as identified in the RSA.

3.1 WATER RATES

Readiness-to-Serve Charge - 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 water system in a fixed readiness-to-serve charge, recognizing that utilities have substantial on-going costs that are incurred year-round to maintain facilities in a state of readiness to meet peak demands when they occur. Simply put, utilities incur these fixed costs regardless of the level of customer usage.

WATER & SEWER RATE STUDY RATE STRUCTURE MODIFICATIONS

As part of the Study we identified that 86.7% of the water system expenses are fixed and that only 13.3% are variable (i.e. would change as customer volume or flow changes).

METCOM Fixed & Variable Cost Allocation Summary

Components of FY 2015 Utility Costs	Water Cost	
	Amount	% of Total
Personnel Costs	\$1,044,517	21.7%
Variable Operating Costs	\$638,000	13.3%
Fixed Operating Costs	\$807,488	16.8%
Capital Outlay/Depreciation	\$230,000	4.8%
Administrative & General Expenses	\$1,685,520	35.0%
Engineering Expenses	\$408,812	8.5%
Total Annual Costs	\$4,814,337	100.0%

Variable Operating Costs generally increase or decrease as system demand increases/decreases, and include power, chemicals, and certain operating material/supply expenses. All other costs are generally fixed and independent of system demand.

That being said, the amount of system costs recovered in fixed versus variable charges is unique to each community's balance of fiscal stability, philosophy regarding cost recovery, and affordability objectives. In light of declining demands and concerns about fiscal stability, it has been our experience that utilities are trying to increase the portion of their revenues provided by fixed readiness-to-serve charges. Many utilities (including those in MetCom's area) endeavor to recover at least 30% of their annual revenues from fixed charges (see the following table), which is viewed favorably by municipal rating agencies such as Fitch.

MetCom Water System Expense vs. Proposed Revenue Allocation

Water System	Fixed	Variable
Operating Expenses	86.7%	13.3%
Operating Revenue	50.0%	50.0%
<i>Avg. Fixed/Usage Fee Split of Other Local Entities (Based on 6,000 Gall/Month Residential Bill)</i>	35.7%	64.3%

MetCom presently charges customers a minimum usage charge for 6,000 gallons of water use per month that is essentially a fixed charge to its customers, which currently provides a large portion of MetCom's annual revenues. In addition, MetCom also imposes a small additional ready-to-serve charge for customers with 1-1/2" or larger service connections.

WATER & SEWER RATE STUDY

RATE STRUCTURE MODIFICATIONS

We recommend that the minimum volume charge and current ready-to-serve charge be replaced with a traditional readiness-to-serve charge that is applicable to all customers. Such a change would avoid charging low volume customers for water service that they did not use, thus enhancing affordability for low volume users while also preserving the fixed cost recovery and financial stability objectives of MetCom. Specifically, we recommend that the MetCom establish a readiness-to-serve charge for water service intended to recover 50% of the annual revenue requirement of the system.

In addition, generally accepted ratemaking practice would differentiate readiness-to-serve charges by class of customer based upon the actual or potential usage characteristics of each customer class. As such, we recommend that all residential and general service (commercial, master-metered, governmental, etc.) customers with larger meters should have readiness-to-serve charges that are scaled by meter size as compared to a 5/8" meter based upon the ratio of maximum capacity flow rates by meter size as published by American Water Works Association (AWWA), as is common industry practice.

Usage or Volume Based Rates – MetCom currently has a single rate that is applied to all residential and general service metered volume above the amount included in the minimum charge (i.e. water use above 18,000 gallons per quarter or 6,000 gallons per month), as shown in the table below:

Current Water Usage Rate Structure		
Customer Class:	Monthly Gallons:	Rate per 1,000 gal
All	Over 6,000	\$ 3.07

MetCom also has a separate rate of \$6.28 per thousand gallons of metered flow through dedicated hydrant meters.

We reviewed MetCom's demographic data, domestic water use characteristics, and typical irrigation requirements to better quantify essential domestic requirements versus outdoor water use (see the following table) to develop the recommended inclining block water conservation rate structure presented herein.

WATER & SEWER RATE STUDY

RATE STRUCTURE MODIFICATIONS

According to U.S. Census estimates for 2008-2012, St. Mary's County has 2.7 persons per household, and the Environmental Protection Agency (EPA) estimates typical indoor domestic use (i.e. cooking, cleaning, showers, etc.) to be 60 gallons per person per day. Applying the demographic data to the per capita use identified herein results in a typical essential domestic water use of 5,000 gallons per month (15,000 gallons quarterly).

As it relates to outdoor use, we determined MetCom's average residential property size (based on GIS property data sampling and discussions with MetCom staff), typical irrigable area, as well as the average number and amount (in inches) of waterings per week (twice a week watering for four "peak" months of the year, once per week for four "shoulder" months of the year, and no waterings for four "winter" months of the year). The result was an empirical basis for identifying a reasonable amount of irrigation for a typical residential property (15,000 gallons per month or 45,000 gallons quarterly).

Amount of Typical Essential Domestic Usage	
People per Household	2.7
Typical Indoor Use (Gallons per Capital per Day)	60
Typical Essential Domestic Use (Tgal/month)	4,964
First Tier Usage Amount	5,000

Amount of Typical Residential Irrigation	
Square inches of area in 1/2 acre	3,136,320
% of area that is irrigable	50%
Number of inches per watering	0.50
Gallons per cubic inch	0.00432900433
Number of gallons per watering	3,394
Number of waterings per week	1.0
Gallons of irrigation per month	14,707
Second Tier Usage Amount	15,000

Third Tier Usage Amount	All Add. Use
--------------------------------	---------------------

Based upon this analysis, we recommend a three-tier inclining block rate structure with the first tier of the inclining block rate structure set at 5,000 gallons per month (or 15,000 per quarter) to provide for essential domestic use for typical families. We further recommend setting the second tier to include water usage between 5,001 to 20,000 gallons per month (or 15,001 – 60,000 per quarter) to accommodate typical residential

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irrigation requirements, with the third tier capturing all use above 20,000 gallons per month (or 60,000 gallons per quarter). We also recommend that the amount of consumption in each tier be scaled based upon the size of the meter recognizing that customers with larger meters do not have the same usage profile as residential customers.

The price differential between tiers of an inclining block rate structure is typically established for each community based upon their unique balance of public policy objectives (such as affordability), customer impacts, and understanding of the usage intended to be captured within each tier. To enhance affordability for essential domestic water use (Tier 1), while providing a price incentive for water conservation to higher users (Tier 3), we recommend establishing the first tier rate at 50% of the second tier rate, and setting the third tier rate to be twice the level of the second tier rate.

As part of the recommended rate structure, we recommend that the rate per thousand gallons of metered volume on hydrant meters be set at the second tier or “base” rate of the recommended inclining block rate structure herein. We also recommend that MetCom consider establishing rate structure for residential and commercial users that have irrigation-only meters that is consistent with the portion of the inclining block rate structure for residential customers applicable to irrigation use. Specifically, the inclining block rate structure for a 5/8” irrigation-only meter would be as follows:

- Tier 1 = All use up to 15,000 gallons per month at the tier 2 rate presented herein
- Tier 2 = All use above 15,000 gallons per month at the tier 3 rate presented herein
- The usage in each tier would be scaled based upon meter size for larger meters

Lastly, we recommend updating the charge for unmetered service to be equal to the readiness-to-serve charge for a 5/8” meter plus the volume charges per the rate structure recommended herein based upon the typical monthly residential usage of 5,000 gallons per month (or 15,000 gallons quarterly). Schedule 1 of Appendix B provides a complete schedule of rates and charges for both metered and unmetered service.

3.2 SEWER RATES

Readiness-to-Serve Charge – As with water systems, common industry practice for sewer 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 sewer system in a fixed readiness-to-serve charge, recognizing that utilities have substantial on-going costs that are incurred year-round to maintain facilities in a state of readiness to meet peak demands when they occur. Simply put, utilities incur these fixed costs regardless of the level of customer usage.

As part of the Study we identified that 86.9% of the sewer system expenses are fixed and that only 13.1% are variable (i.e. would change as customer volume or flow changes).

METCOM Fixed & Variable Cost Allocation Summary

Components of FY 2015 Utility Costs	Sewer Cost		
	Amount	% of Total	
Personnel Costs	\$2,348,249	26.7%	
Variable Operating Costs	\$1,153,650	13.1%	<i>Variable Operating Costs generally increase or decrease as system demand increases/decreases, and include power, chemicals, and sludge removal expenses. All other costs are generally fixed and independent of system demand.</i>
Fixed Operating Costs	\$1,240,033	14.1%	
Capital Outlay/Depreciation	\$240,000	2.7%	
Administrative & General Expenses	\$3,209,881	36.5%	
Engineering Expenses	\$613,218	7.0%	
Total Annual Costs	\$8,805,031	100.0%	

That being said, the amount of system costs recovered in fixed versus variable charges is unique to each community's balance of fiscal stability, philosophy regarding cost recovery, and affordability objectives. In light of declining demands and concerns about fiscal stability, it has been our experience that utilities are trying to increase the portion of their revenues provided by fixed readiness-to-serve charges. Many utilities (including those in MetCom's area) endeavor to recover at least 30% of their annual revenues from fixed charges (see the following table), which is viewed favorably by municipal rating agencies such as Fitch.

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MetCom Sewer System Expense vs. Proposed Revenue Allocation

Sewer System	Fixed	Variable
Operating Expenses	86.9%	13.1%
Operating Revenue	50.0%	50.0%
<i>Avg. Fixed/Usage Fee Split of Other Local Entities (Based on 6,000 Gall/Month Residential Bill)</i>	34.9%	65.1%

MetCom presently charges customers a minimum sewer usage charge for 5,400 gallons of water use per month (90% of 6,000 gallons that is charged for water service) that is essentially a fixed charge to its customers, which currently provides a large portion of MetCom's annual revenues. We recommend that the minimum volume charge be replaced with a traditional readiness-to-serve charge that is applicable to all customers. Such a change would avoid charging low volume customers for service that they did not receive, thus enhancing affordability for low volume users while also preserving the fixed cost recovery and financial stability objectives of MetCom. Specifically, we recommend that the MetCom establish a readiness-to-serve charge for sewer service intended to recover 50% of the annual revenue requirement of the system.

Consistent with the water readiness-to-serve charges presented herein, we recommend that all residential and general service (commercial, master-metered, governmental, etc.) customers with larger meters should have sewer readiness-to-serve charges scaled based upon meter size as compared to a 5/8" meter based upon the ratio of maximum capacity flow rates by meter size as published by the AWWA (as is common industry practice).

Usage or Volume Based Rates – MetCom currently has a single rate that is applied to 90% of residential and general service metered water volume above the amount included in the minimum charge (i.e. 90% of metered water use above 16,200 gallons a quarter or 5,400 gallons a month).

We recommend that MetCom continue to charge a single sewer usage rate to all customer classes, and that the rate be updated to recover the portion of the sewer system revenue requirement not recovered in the readiness-to-serve charges recommended herein. We

also recommend that the sewer usage or volume-based rate be applied to 100% of metered water volume, as customers who have irrigation or other water-only service needs can have a separate irrigation-only meter installed and avoid sewer charges entirely on those types of water-only uses.

In addition, we recommend that MetCom begin billing its residential sewer accounts metered rates upon implementation of the new rate structure recommended herein. It is our understanding that residential accounts are presently being billed unmetered rates, despite the fact that many of these accounts receive metered water service.

Lastly, we also recommend updating the charge for unmetered service to be equal to the readiness-to-serve charge for a 5/8" meter plus the volume charges per the rate structure recommended herein based upon the typical monthly residential usage of 5,000 gallons per month (or 15,000 gallons quarterly). Schedule 1 of Appendix B provides a complete schedule of rates and charges for both metered and unmetered service.

3.3 PRICE ELASTICITY

As water and sewer rates increase, discretionary water (and therefore billed sewer volumes) usage will generally decline. Because changes in use in response to price are a function of the increase in price and the level of discretionary usage, the recommended modifications to the current rate structure are expected to have an impact on total water usage. The recommended rate structure is anticipated to produce an overall system-wide billed water use reduction of approximately 4%. That effect has been factored into the calculations of the recommended rates presented in the report.

3.4 SCHEDULE OF RECOMMENDED RATES

It is our recommendation that the adjustments discussed in the prior sub-sections should be made to the current retail water and sewer rates to better conform to accepted industry practice, address the current allocation of system costs, further promote water conservation, and enhance affordability for low volume and average users. Based upon discussions with MetCom staff, it is our understanding that its customer billing system can accommodate these recommended changes in rate structure. Specific recommended

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water and sewer retail rate schedules for FY 2016 are presented on Schedule 1 of Appendix B, based upon the revenue requirements as identified in the RSA and the rate structure modifications presented herein.

3.5 CUSTOMER IMPACT ANALYSIS

In considering implementation of the recommended retail water and sewer rates presented herein, it is important to examine the impact that those rates will have upon the cost of service to MetCom's various types of customers. Implementation of the recommended rates will impact customers with various usage patterns differently.

The following table presents the monthly impact to a single-family residential customer with a 5/8" meter of the recommended rate structure for FY 2016 (which includes the identified revenue increases from the RSA). The table highlights the typical monthly usage for this meter size (5,000 gallons) and demonstrates that a customer using this amount of water would see a \$1.80 decrease (or a 3.3% reduction) in their monthly cost per the rate structure proposed for FY 2016.

Single Family 5/8" Meter Monthly Water & Sewer Bill Calculations					
<u>Monthly Use (Gal)</u>	<u>Est. % of Bills</u>	<u>Agg. %</u>	<u>FY 14/15</u>	<u>FY 15/16</u>	<u>\$ Chg</u>
0	1.4%	1.4%	\$ 54.25	\$ 23.90	\$ (30.35)
1,000	5.2%	6.6%	\$ 54.25	\$ 29.61	\$ (24.64)
2,000	10.5%	17.0%	\$ 54.25	\$ 35.32	\$ (18.93)
3,000	13.9%	30.9%	\$ 54.25	\$ 41.03	\$ (13.22)
4,000	15.6%	46.5%	\$ 54.25	\$ 46.74	\$ (7.51)
5,000	13.8%	60.3%	\$ 54.25	\$ 52.45	\$ (1.80)
6,000	12.4%	72.7%	\$ 54.25	\$ 59.69	\$ 5.44
7,000	7.7%	80.3%	\$ 57.32	\$ 66.93	\$ 9.61
8,000	5.3%	85.6%	\$ 60.39	\$ 74.17	\$ 13.78
9,000	3.5%	89.2%	\$ 63.46	\$ 81.41	\$ 17.95
10,000	2.5%	91.7%	\$ 66.53	\$ 88.65	\$ 22.12
15,000	0.6%	97.0%	\$ 81.88	\$ 124.85	\$ 42.97
20,000	0.3%	98.7%	\$ 97.23	\$ 161.05	\$ 63.82

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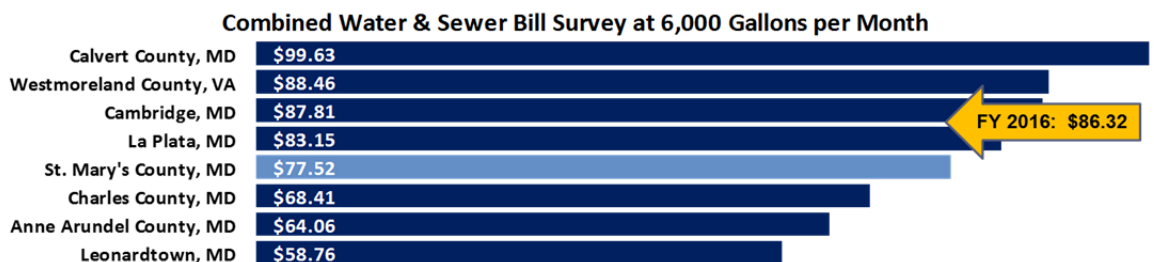
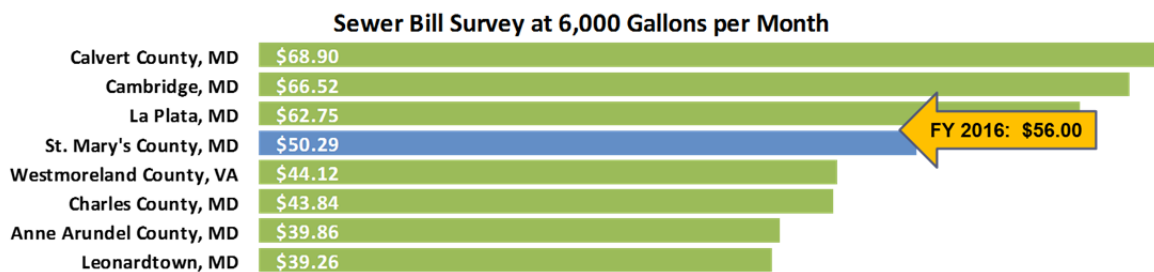
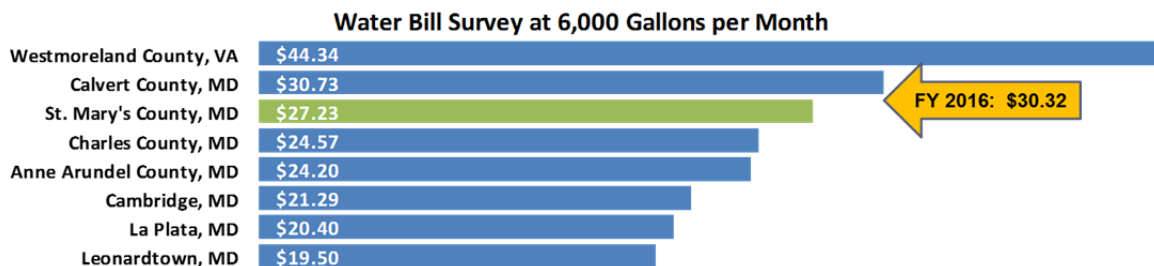
RATE STRUCTURE MODIFICATIONS

In addition to evaluating the impacts of the recommended rates to single-family residential customers with a 5/8" meter (which can be seen in complete detail on Schedule 2 of Appendix B), Schedules 3 and 4 of Appendix B present an analysis of the impact to the monthly cost of service for various non-residential and master-metered residential customers, respectively.

3.6 COMPARATIVE RATE SURVEY RESULTS

As part of the Study, we prepared a FY 2015 residential rate survey that compares the current and recommended monthly bill for MetCom's typical residential users to that of neighboring communities. The survey was performed to provide an understanding of the current range of typical utility costs in the area and how MetCom fits within that range.

The following graphs present a comparison of the water and sewer monthly charges for a single-family residential customer with a 5/8" meter based on 6,000 gallons of water use (the mathematical average usage per FY 2013 billing data).



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It is important to note that the FY 2015 survey of cost for neighboring communities is a “snapshot in time” for FY 2015. With the multitude of financial and water demand pressures each utility is currently facing, many of the monthly bills shown in this survey are certain to change in FY 2016 and beyond. Based upon publicly available information, our industry experience, and the plan of annual rate adjustments identified in this report, we fully expect that MetCom will continue to be of comparable cost to the neighboring utilities in its geographic area.

SECTION 4. MISCELLANEOUS SERVICE CHARGES

This section of the report presents the analysis of miscellaneous service charges that was conducted as part of the Study.

4.1 OVERVIEW

MetCom currently applies miscellaneous service charges in relation to the provision of specific services to individual customers. Inspections, reconnections, and meter installations are examples of the types of services for which MetCom has various specific service charges. The intent of miscellaneous service charges is to ensure that the recipient of a specific service bears the costs associated with providing that service.

Miscellaneous service charges are typically calculated by determining the costs, including both the time and materials, necessary to provide the service. Identification of the type of employee(s) involved in providing each service (meter services technician, maintenance worker, permit technician, construction inspector, etc.) and of the materials used (water meter, couplings, forms, vehicles, equipment, etc.) is the first step in developing appropriate fees. The employee(s) cost, including any overhead allocations (i.e. benefits) are then added to the costs of materials, including any overhead allocations (purchasing, warehousing, etc.) to determine the charge for each respective service.

4.2 APPROACH

Burton & Associates created a cost-of-service template to be used for each miscellaneous service charge listed in MetCom's rate policies and schedules, as well as any new charges MetCom may wish to consider. This template provides a consistent methodology for assigning the appropriate time and material costs necessary to provide each service (see Appendix C for screen captures of the Miscellaneous Fee Developer customized for MetCom). Upon population of the templates for each service, MetCom staff will identify any adjustments to these types of fees for consideration by the Commission at a later date as part of a proposed policy and/or fee schedule revision.

APPENDIX A – FINANCIAL FORECAST

Supporting Schedules

The Schedules on the following pages present the supporting schedules of the financial management plan developed as part of the Revenue Sufficiency Analysis.

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APPENDIX A

Schedule 1 –Assumptions

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Annual Growth:											
Water:											
Non-Metered											
Average Number of Accounts	888	897	906	915	924	933	943	952	962	971	981
Growth (1)	(8)	9	9	9	9	9	9	9	10	10	10
Percent Increase	-0.88%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Metered											
Average Number of Accounts	14,243	14,385	14,529	14,675	14,821	14,970	15,119	15,270	15,423	15,577	15,733
Growth (1)	141	142	144	145	147	148	150	151	153	154	156
Percent Increase	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Metered Volume											
Annual Metered Consumption	1,365,267	1,378,920	1,392,709	1,406,636	1,420,702	1,434,909	1,449,258	1,463,751	1,478,388	1,493,172	1,508,104
Growth	13,517	13,653	13,789	13,927	14,066	14,207	14,349	14,493	14,638	14,784	14,932
Percent Increase	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Sewer:											
Non-Metered											
Average Number of Accounts	17,193	17,365	17,539	17,714	17,891	18,070	18,251	18,433	18,618	18,804	18,992
Growth (1)	500	172	174	175	177	179	181	183	184	186	188
Percent Increase	3.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Metered											
Average Number of Accounts	545	550	556	561	567	573	578	584	590	596	602
Growth (1)	5	5	6	6	6	6	6	6	6	6	6
Percent Increase	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Volume											
Average Volume	1,499,196	1,494,800	1,494,800	1,494,800	1,494,800	1,494,800	1,494,800	1,494,800	1,494,800	1,494,800	1,494,800
Growth (2)	0	-4,397	0	0	0	0	0	0	0	0	0
Percent Increase	0.00%	-0.29%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Average Annual Interest Earnings Rate:											
On Fund Balances:	0.25%	0.25%	0.50%	0.75%	1.00%	1.50%	2.00%	2.00%	2.00%	2.00%	2.00%
Operating Budget Reserve:											
Target (Number of Months of Reserve)	3.5	4.0	4.5	5.0	5.5	6.0	6.0	6.0	6.0	6.0	6.0
Operating Budget Execution Percentage:											
Personal Services (3)	100%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
Variable O&M (3)	100%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
Fixed O&M (3)	100%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%

(1) Account growth in FY 2014 is a projections based on upon the YTD revenues of the system for 7 months

(2) Volume normalization per the FY 2015 budget

(3) Execution rates in FY 2015 and forward are based on an analysis of historical budget execution

Schedule 2 – Cost Inflation Factors

<u>Expense Line Item</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>
Personal Services									
Casual Labor	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Commissioner Stipend	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Contractual Employee Reg	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Contractual Employees OT	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Hospitalization-Overhead	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
Life Insurance-Overhead	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
Long/Term Disab.Overhead	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
MD Pension Plan	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
OPEB Health Benefits	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Payroll Taxes-Overhead	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Professional Service	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Pension Loan	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Retirement-Overhead	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Salary-OT	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Salary-Regular	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Standby	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Supplemental Pay	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Tuition Reimb-Overhead	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Operational Expenses									
Accounting-Overhead	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Allocate Engineering	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Allocate Eng-Water Opera	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Allocate OH-Water Opera.	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Allocate Overhead	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Amortized Bond Fees-Admin	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Bank Fees/On-Line Bill Payment Fees	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Bond Fees - Admin.	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Buildings	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Bldg.Supply-S.Treatment	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Building Utilities	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%

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Schedule 2 – Cost Inflation Factors

<u>Expense Line Item</u>	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Cable	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
CAM First Colony	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Camera Repairs	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Chemicals	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Classifieds - Overhead	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Cleaning	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Computer Svcs-Overhead	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Contingencies	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Depreciation	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Dues&Subscrip	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Employment Advertising	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Employee Related Expense	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Engineering Review	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Fire Hydrant ISO Inspec.	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
First Colony CAM	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Flow monitoring devices	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Fuel (Diesel & Oil)	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Generator Maintenance	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Grinder Pump Inventory	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Grinder Pump Tools	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Grounds	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Inspec Prof Svcs	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Inspection Overhead	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Inspector Supplies	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Insurance	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Lab.Supply	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Lab&Soils Testing	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Lead/Copper/Mjr.Test-W	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Legal Services-Overhead	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Leonardtwn Plant-Treat	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Maintenance	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%

WATER & SEWER RATE STUDY
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Schedule 2 – Cost Inflation Factors

<u>Expense Line Item</u>	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Maintenance Grinder Pumps	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Major System Repair	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Major Testing	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Materials & Sup General	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Meter Reading Expense	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Mileage	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Misc Consultant	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Miscellaneous Exp	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Miss Utilitiy Svcs.-Eng	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Mortgage Expense-Overhead	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Office Fuel	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Office/Print Supp	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Pagers	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Parts	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Phone/Fax	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Physicals	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Postage	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Power	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Prop&Liab.Ins-Overhead	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Professional Service	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Public Relations	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Recv'y of Cost	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Repairs	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Rent	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Review Salary Overhead	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Safety Supplies	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
SCADA	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Sewer	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Sludge Removal-Sewer Trea	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
SSO Fines & Penalties	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Staff Developement	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Station Fuel & Gas	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%

WATER & SEWER RATE STUDY
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Schedule 2 – Cost Inflation Factors

<u>Expense Line Item</u>	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Stations/Bldgs/Inventory	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Supplies	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Telephone & Dialers	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Tools	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
TP Parts	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
TP Repairs	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Trailer Rent Exp	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Training	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Training-Overnight Travel	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Uniforms	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Vehicle Maintenance	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Vehicle Operations	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Waste Mgmt	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Water Construction Safety	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Water	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Water Meter Reading-W	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Water Testing-Water	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
WW Construction Parts	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
WWTP Repairs	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Default Inflation Factor (if expense not listed above)	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%

WATER & SEWER RATE STUDY

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Schedule 3 – Account & Billed Volume Data

Fiscal Year Ending:	Historical Data			Forecast										
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Water														
Non-Metered Total Equivalent Billing Units														
Total Accounts	1,077	897	896	888	897	906	915	924	933	943	952	962	971	981
Growth (Accts) (1)	N/A	-180	-1	-8	9	9	9	9	9	9	9	10	10	10
% Change	N/A	-16.68%	-0.15%	-0.88%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Metered Equivalent Billing Units														
Total Accounts	13,300	13,988	14,102	14,243	14,385	14,529	14,675	14,821	14,970	15,119	15,270	15,423	15,577	15,733
Growth (Accts)	N/A	689	114	141	142	144	145	147	148	150	151	153	154	156
% Change	N/A	5.18%	0.81%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Usage (1,000 gal.)														
Billed Use	1,059,219	1,139,588	1,351,749	1,365,267	1,378,920	1,392,709	1,406,636	1,420,702	1,434,909	1,449,258	1,463,751	1,478,388	1,493,172	1,508,104
% Change	N/A	7.59%	18.62%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Sewer														
Non-Metered Total Equivalent Billing Units														
Total Accounts	15,888	16,283	16,693	17,193	17,365	17,539	17,714	17,891	18,070	18,251	18,433	18,618	18,804	18,992
Growth (Accts) (1)	N/A	395	410	500	172	174	175	177	179	181	183	184	186	188
% Change	N/A	2.49%	2.52%	3.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Metered Equivalent Billing Units														
Total Accounts	609	605	540	545	550	556	561	567	573	578	584	590	596	602
Growth (Accts)	N/A	-4	-66	5	5	6	6	6	6	6	6	6	6	6
% Change	N/A	-0.63%	-10.89%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Metered Use Navy (1,000 gal.)														
Billed Use	184,968	163,103	185,913	185,913	185,913	177,995	177,995	177,995	177,995	177,995	177,995	177,995	177,995	177,995
% Change (2)	N/A	-11.82%	13.99%	0.00%	-4.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Metered Use St. Mary's College Usage (1,000 gal.)														
Billed Use	26,322	27,163	21,460	21,460	21,460	24,982	24,982	24,982	24,982	24,982	24,982	24,982	24,982	24,982
% Change	N/A	3.20%	-21.00%	0.00%	16.41%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Treatment Plant Influent Volume (1,000 gal.)														
Billed Use	1,330,318	1,277,351	1,291,823	1,291,823	1,291,823	1,291,823	1,291,823	1,291,823	1,291,823	1,291,823	1,291,823	1,291,823	1,291,823	1,291,823
% Change (2)	N/A	-3.98%	1.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

(1) Non-Metered equivalent accounts received a calibrating adjustment in FY 2014 to reconcile the expected revenue and number of accounts

(2) Volume for both the Navy and St. Mary's College were calibrated in FY 2015 to equate to the budget

Schedule 4 – Beginning Balances

WATER & SEWER RATE STUDY
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Source: FY 2013 CAFR for Fiscal Year Ending June 30, 2013

	Revenue Fund
CURRENT UNRESTRICTED ASSETS	
MD Bank & Trust Company / MD B&T-Operating Account	\$ 70,454,128
MD Bank & Trust Company / MD B&T-Deposit Account	\$ (63,217,659)
MD Bank & Trust Company / MD B&T-Payroll Account	\$ 2,148,661
Petty Cash Account / Petty Cash-Operations	\$ 500
Petty Cash Account / Billing Cash Drawers	\$ 400
Merc.Safe Deposit & Trust / MLGIP Investments	\$ (542,268)
Accounts Receivable / Accounts Receivable	\$ 1,096,305
Accounts Receivable / credit balance	\$ (115,358)
Accounts Receivable / Accounts Receivable-Other	\$ 77,581
Prepaid Insurance / Prepaid Insurance	\$ 174
Other Prepays / Other Prepays	\$ 345,799
Inventory / Radio Rd Meter Proj Inven	\$ -
Exchange / Exchange-general	\$ 42,408
Exchange / Suspense Utility Cash	\$ 168,128
Exchange / Exchange-Cash Management	\$ (524,035)
TOTAL CURRENT ASSETS	\$ 9,934,763
CURRENT LIABILITIES	
Offset account / Offset Acc't-open payable	(635,497)
Accounts Payable / A/P-General Fund	(15,235)
Accruals Payable / Accrued Wages Payable	(479,245)
Accruals Payable / Other Accrued Exp.Payable	(12)
Employee Deduc.Payable / Employee Pay-TDA	14,745
Employee Deduc.Payable / Employee Pay-Uniforms	155
Employee Deduc.Payable / Employee Pay-Hospitaliza.	(14,745)
Employee Deduc.Payable / Employee Pay-Garnishment	-
Employee Deduc.Payable / FSA	(3,195)
Employee Deduc.Payable / FSA-Dependent Care	(6,753)
Employee Deduc.Payable / Aflac Insurance	(1,602)
Employee Deduc.Payable / Uniform purchase reimb	221
Deferred Inspec Fees / Deferred Inspec Fees	(52,978)
Cash Bond / Cash Bond Developer Acct	(73,290)
CALCULATED FUND BALANCE (ASSETS - LIABILITIES)	\$ 8,667,331
Plus/(Less): Fund Restricted/Identified for Capital Projects in FY 14 & FY 15 (1)	\$ (2,256,002)
NET UNRESTRICTED FUND BALANCE	\$ 6,411,329

(1) Per Reserve Document sent by client - 6/30/14

WATER & SEWER RATE STUDY

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Schedule 5 – Operating Expenditures

Expense Item	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
1 Sewer Expenses											
2 Departmental Placeholders											
3 Personal Services											
4 Department Salary Budget Expense	\$ 2,206,636	\$ 2,343,916	\$ 2,449,392	\$ 2,559,615	\$ 2,674,798	\$ 2,795,163	\$ 2,920,946	\$ 3,052,388	\$ 3,189,746	\$ 3,333,284	\$ 3,483,282
5 Subtotal	\$ 2,206,636	\$ 2,343,916	\$ 2,449,392	\$ 2,559,615	\$ 2,674,798	\$ 2,795,163	\$ 2,920,946	\$ 3,052,388	\$ 3,189,746	\$ 3,333,284	\$ 3,483,282
6 Fixed O&M Expenses											
7 Departmental Depreciation Placeholder	\$ 240,000	\$ 240,000	\$ 242,400	\$ 244,824	\$ 247,272	\$ 249,745	\$ 252,242	\$ 254,765	\$ 257,312	\$ 259,886	\$ 262,484
8 Subtotal	\$ 240,000	\$ 240,000	\$ 242,400	\$ 244,824	\$ 247,272	\$ 249,745	\$ 252,242	\$ 254,765	\$ 257,312	\$ 259,886	\$ 262,484
9 Total - Departmental Placeholders	\$ 2,446,636	\$ 2,583,916	\$ 2,691,792	\$ 2,804,439	\$ 2,922,070	\$ 3,044,908	\$ 3,173,188	\$ 3,307,153	\$ 3,447,058	\$ 3,593,170	\$ 3,745,767
10 Sewer Construction											
11 Personal Services											
12 008-0110-501.05-11 Contractual Employee Reg	\$ -	\$ 4,333	\$ 4,528	\$ 4,732	\$ 4,945	\$ 5,167	\$ 5,400	\$ 5,643	\$ 5,897	\$ 6,162	\$ 6,439
13 Subtotal	\$ -	\$ 4,333	\$ 4,528	\$ 4,732	\$ 4,945	\$ 5,167	\$ 5,400	\$ 5,643	\$ 5,897	\$ 6,162	\$ 6,439
14 Fixed O&M Expenses											
15 008-0110-501.10-01 WW Construction Parts	\$ 3,000	\$ 3,500	\$ 3,588	\$ 3,677	\$ 3,769	\$ 3,863	\$ 3,960	\$ 4,059	\$ 4,160	\$ 4,264	\$ 4,371
16 008-0110-501.10-04 Maintenance-Sewer Bldgs.	\$ 500	\$ 500	\$ 513	\$ 525	\$ 538	\$ 552	\$ 566	\$ 580	\$ 594	\$ 609	\$ 624
17 008-0110-501.10-05 Maintenance-Sewer Lines	\$ 70,000	\$ 35,000	\$ 35,875	\$ 36,772	\$ 37,691	\$ 38,633	\$ 39,599	\$ 40,589	\$ 41,604	\$ 42,644	\$ 43,710
18 008-0110-501.20-01 Vehicle Operations	\$ 9,900	\$ 9,900	\$ 10,148	\$ 10,401	\$ 10,661	\$ 10,928	\$ 11,201	\$ 11,481	\$ 11,768	\$ 12,062	\$ 12,364
19 008-0110-501.20-02 Vehicle Maintenance	\$ 8,000	\$ 8,000	\$ 8,200	\$ 8,405	\$ 8,615	\$ 8,831	\$ 9,051	\$ 9,278	\$ 9,509	\$ 9,747	\$ 9,991
20 008-0110-501.32-01 Materials & Sup General	\$ 10,000	\$ 10,000	\$ 10,250	\$ 10,506	\$ 10,769	\$ 11,038	\$ 11,314	\$ 11,597	\$ 11,887	\$ 12,184	\$ 12,489
21 008-0110-501.32-02 Safety Supplies	\$ 800	\$ 800	\$ 820	\$ 841	\$ 862	\$ 883	\$ 905	\$ 928	\$ 951	\$ 975	\$ 999
22 008-0110-501.32-03 Mat&Sup stations bldg inv	\$ 24,000	\$ 24,000	\$ 24,600	\$ 25,215	\$ 25,845	\$ 26,492	\$ 27,154	\$ 27,833	\$ 28,528	\$ 29,242	\$ 29,973
23 008-0110-501.32-04 Tools	\$ 2,500	\$ 3,500	\$ 3,588	\$ 3,677	\$ 3,769	\$ 3,863	\$ 3,960	\$ 4,059	\$ 4,160	\$ 4,264	\$ 4,371
24 008-0110-501.40-05 Office Fuel	\$ 3,000	\$ 3,000	\$ 3,150	\$ 3,308	\$ 3,473	\$ 3,647	\$ 3,829	\$ 4,020	\$ 4,221	\$ 4,432	\$ 4,654
25 008-0110-501.42-01 Mileage	\$ 500	\$ 500	\$ 513	\$ 525	\$ 538	\$ 552	\$ 566	\$ 580	\$ 594	\$ 609	\$ 624
26 008-0110-501.42-02 Training	\$ 2,000	\$ 2,000	\$ 2,050	\$ 2,101	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,319	\$ 2,377	\$ 2,437	\$ 2,498
27 008-0110-501.42-03 Uniforms	\$ 1,240	\$ 1,550	\$ 1,589	\$ 1,628	\$ 1,669	\$ 1,711	\$ 1,754	\$ 1,798	\$ 1,842	\$ 1,889	\$ 1,936
28 008-0110-501.42-05 Physicals	\$ 500	\$ 600	\$ 615	\$ 630	\$ 646	\$ 662	\$ 679	\$ 696	\$ 713	\$ 731	\$ 749
29 008-0110-501.42-12 Training-Overnight Travel	\$ 530	\$ 1,200	\$ 1,230	\$ 1,261	\$ 1,292	\$ 1,325	\$ 1,358	\$ 1,392	\$ 1,426	\$ 1,462	\$ 1,499
30 Subtotal	\$ 136,470	\$ 104,050	\$ 106,726	\$ 109,473	\$ 112,293	\$ 115,187	\$ 118,158	\$ 121,207	\$ 124,338	\$ 127,552	\$ 130,852
31 Total - Sewer Construction	\$ 136,470	\$ 108,383	\$ 111,254	\$ 114,205	\$ 117,237	\$ 120,354	\$ 123,557	\$ 126,850	\$ 130,235	\$ 133,714	\$ 137,291
32 Sewer Maintenance											
33 Fixed O&M Expenses											
34 008-0110-502.10-01 Maintenance-S PS Parts	\$ 35,000	\$ 35,000	\$ 35,875	\$ 36,772	\$ 37,691	\$ 38,633	\$ 39,599	\$ 40,589	\$ 41,604	\$ 42,644	\$ 43,710
35 008-0110-502.10-02 Maintenance-S PS Repairs	\$ 37,000	\$ 30,000	\$ 30,750	\$ 31,519	\$ 32,307	\$ 33,114	\$ 33,942	\$ 34,791	\$ 35,661	\$ 36,552	\$ 37,466
36 008-0110-502.10-04 Maintenance-Sewer Bldgs.	\$ 4,250	\$ 2,000	\$ 2,050	\$ 2,101	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,319	\$ 2,377	\$ 2,437	\$ 2,498
37 008-0110-502.10-05 Maintenance-Sewer Lines	\$ 2,460	\$ 2,000	\$ 2,050	\$ 2,101	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,319	\$ 2,377	\$ 2,437	\$ 2,498
38 008-0110-502.20-01 Vehicle Operations	\$ 55,000	\$ 57,600	\$ 59,040	\$ 60,516	\$ 62,029	\$ 63,580	\$ 65,169	\$ 66,798	\$ 68,468	\$ 70,180	\$ 71,935
39 008-0110-502.20-02 Vehicle Maintenance	\$ 41,200	\$ 25,000	\$ 25,625	\$ 26,266	\$ 26,922	\$ 27,595	\$ 28,285	\$ 28,992	\$ 29,717	\$ 30,460	\$ 31,222
40 008-0110-502.32-01 Mtl&Supp - General	\$ 8,000	\$ 9,000	\$ 9,225	\$ 9,456	\$ 9,692	\$ 9,934	\$ 10,183	\$ 10,437	\$ 10,698	\$ 10,966	\$ 11,240
41 008-0110-502.32-02 Safety Supplies	\$ 3,000	\$ 3,000	\$ 3,075	\$ 3,152	\$ 3,231	\$ 3,311	\$ 3,394	\$ 3,479	\$ 3,566	\$ 3,655	\$ 3,747
42 008-0110-502.32-03 Stations/Bldgs/Inventory	\$ 1,000	\$ 1,000	\$ 1,025	\$ 1,051	\$ 1,077	\$ 1,104	\$ 1,131	\$ 1,160	\$ 1,189	\$ 1,218	\$ 1,249
43 008-0110-502.32-04 Tools	\$ 3,500	\$ 3,500	\$ 3,588	\$ 3,677	\$ 3,769	\$ 3,863	\$ 3,960	\$ 4,059	\$ 4,160	\$ 4,264	\$ 4,371
44 008-0110-502.42-02 Staff Development	\$ 3,410	\$ 3,410	\$ 3,495	\$ 3,583	\$ 3,672	\$ 3,764	\$ 3,858	\$ 3,955	\$ 4,053	\$ 4,155	\$ 4,259

WATER & SEWER RATE STUDY

APPENDIX A

Schedule 5 – Operating Expenditures

		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
	Expense Item											
45	008-0110-502.42-03 Uniforms	\$ 4,500	\$ 5,060	\$ 5,187	\$ 5,316	\$ 5,449	\$ 5,585	\$ 5,725	\$ 5,868	\$ 6,015	\$ 6,165	\$ 6,319
46	008-0110-502.42-05 Physicals	\$ 1,180	\$ 1,800	\$ 1,845	\$ 1,891	\$ 1,938	\$ 1,987	\$ 2,037	\$ 2,087	\$ 2,140	\$ 2,193	\$ 2,248
47	008-0110-502.42-12 Training-Overnight Travel	\$ 5,000	\$ 3,850	\$ 3,946	\$ 4,045	\$ 4,146	\$ 4,250	\$ 4,356	\$ 4,465	\$ 4,576	\$ 4,691	\$ 4,808
48	Total - Sewer Maintenance	\$ 204,500	\$ 182,220	\$ 186,776	\$ 191,445	\$ 196,231	\$ 201,137	\$ 206,165	\$ 211,319	\$ 216,602	\$ 222,017	\$ 227,568
49	Sewer Operations											
50	Fixed O&M Expenses											
51	008-0110-504.10-01 Maintenance- PSParts	\$ 31,000	\$ 35,000	\$ 35,875	\$ 36,772	\$ 37,691	\$ 38,633	\$ 39,599	\$ 40,589	\$ 41,604	\$ 42,644	\$ 43,710
52	008-0110-504.10-02 Maintenance- PSRepairs	\$ 49,000	\$ 85,000	\$ 87,125	\$ 89,303	\$ 91,536	\$ 93,824	\$ 96,170	\$ 98,574	\$ 101,038	\$ 103,564	\$ 106,153
53	008-0110-504.10-03 Maintenance- Grounds	\$ 22,000	\$ 34,000	\$ 34,850	\$ 35,721	\$ 36,614	\$ 37,530	\$ 38,468	\$ 39,430	\$ 40,415	\$ 41,426	\$ 42,461
54	008-0110-504.10-04 Maintenance-Sewer Bldgs.	\$ 19,000	\$ 23,000	\$ 23,575	\$ 24,164	\$ 24,768	\$ 25,388	\$ 26,022	\$ 26,673	\$ 27,340	\$ 28,023	\$ 28,724
55	008-0110-504.10-05 Maintenance-Sewer Lines	\$ 12,000	\$ 13,000	\$ 13,325	\$ 13,658	\$ 14,000	\$ 14,350	\$ 14,708	\$ 15,076	\$ 15,453	\$ 15,839	\$ 16,235
56	008-0110-504.10-08 SCADA	\$ 23,000	\$ 25,000	\$ 25,625	\$ 26,266	\$ 26,922	\$ 27,595	\$ 28,285	\$ 28,992	\$ 29,717	\$ 30,460	\$ 31,222
57	008-0110-504.10-09 Camera Repairs	\$ 6,000	\$ 6,000	\$ 6,150	\$ 6,304	\$ 6,461	\$ 6,623	\$ 6,788	\$ 6,958	\$ 7,132	\$ 7,310	\$ 7,493
58	008-0110-504.10-10 Flow monitoring devices	\$ -	\$ 5,000	\$ 5,125	\$ 5,253	\$ 5,384	\$ 5,519	\$ 5,657	\$ 5,798	\$ 5,943	\$ 6,092	\$ 6,244
59	008-0110-504.10-11 Generator Maintenance	\$ 48,000	\$ 48,000	\$ 49,200	\$ 50,430	\$ 51,691	\$ 52,983	\$ 54,308	\$ 55,665	\$ 57,057	\$ 58,483	\$ 59,945
60	008-0110-504.14-01 Telephone & Dialers	\$ 27,400	\$ 27,400	\$ 28,085	\$ 28,787	\$ 29,507	\$ 30,244	\$ 31,001	\$ 31,776	\$ 32,570	\$ 33,384	\$ 34,219
61	008-0110-504.18-01 Station Fuel & Gas	\$ 8,400	\$ 6,500	\$ 6,825	\$ 7,166	\$ 7,525	\$ 7,901	\$ 8,296	\$ 8,711	\$ 9,146	\$ 9,603	\$ 10,084
62	008-0110-504.20-01 Vehicle Operations	\$ 33,000	\$ 34,700	\$ 35,568	\$ 36,457	\$ 37,368	\$ 38,302	\$ 39,260	\$ 40,241	\$ 41,247	\$ 42,279	\$ 43,336
63	008-0110-504.20-02 Vehicle Maintenance	\$ 13,500	\$ 8,000	\$ 8,200	\$ 8,405	\$ 8,615	\$ 8,831	\$ 9,051	\$ 9,278	\$ 9,509	\$ 9,747	\$ 9,991
64	008-0110-504.22-01 Lab&Soils Testing	\$ 5,000	\$ 2,000	\$ 2,050	\$ 2,101	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,319	\$ 2,377	\$ 2,437	\$ 2,498
65	008-0110-504.32-01 Materials & Sup General	\$ 14,000	\$ 21,000	\$ 21,525	\$ 22,063	\$ 22,615	\$ 23,180	\$ 23,760	\$ 24,354	\$ 24,962	\$ 25,586	\$ 26,226
66	008-0110-504.32-02 Safety Supplies	\$ 5,400	\$ 5,500	\$ 5,638	\$ 5,778	\$ 5,923	\$ 6,071	\$ 6,223	\$ 6,378	\$ 6,538	\$ 6,701	\$ 6,869
67	008-0110-504.32-03 Stations/Bldgs/Inventory	\$ 5,000	\$ 5,000	\$ 5,125	\$ 5,253	\$ 5,384	\$ 5,519	\$ 5,657	\$ 5,798	\$ 5,943	\$ 6,092	\$ 6,244
68	008-0110-504.32-04 Tools	\$ 5,000	\$ 5,000	\$ 5,125	\$ 5,253	\$ 5,384	\$ 5,519	\$ 5,657	\$ 5,798	\$ 5,943	\$ 6,092	\$ 6,244
69	008-0110-504.32-05 Office/Print Supp	\$ 6,000	\$ 6,000	\$ 6,150	\$ 6,304	\$ 6,461	\$ 6,623	\$ 6,788	\$ 6,958	\$ 7,132	\$ 7,310	\$ 7,493
70	008-0110-504.32-06 Cleaning	\$ 340	\$ 340	\$ 349	\$ 357	\$ 366	\$ 375	\$ 385	\$ 394	\$ 404	\$ 414	\$ 425
71	008-0110-504.36-04 Misc Consultant	\$ 2,000	\$ 3,063	\$ 3,140	\$ 3,218	\$ 3,299	\$ 3,381	\$ 3,466	\$ 3,552	\$ 3,641	\$ 3,732	\$ 3,825
72	008-0110-504.40-02 Phone/Fax	\$ 8,000	\$ 8,000	\$ 8,280	\$ 8,570	\$ 8,870	\$ 9,180	\$ 9,501	\$ 9,834	\$ 10,178	\$ 10,534	\$ 10,903
73	008-0110-504.40-03 Waste Mgmt	\$ 2,500	\$ 2,500	\$ 2,563	\$ 2,627	\$ 2,692	\$ 2,760	\$ 2,829	\$ 2,899	\$ 2,972	\$ 3,046	\$ 3,122
74	008-0110-504.40-04 Cable	\$ 2,200	\$ 2,200	\$ 2,255	\$ 2,311	\$ 2,369	\$ 2,428	\$ 2,489	\$ 2,551	\$ 2,615	\$ 2,680	\$ 2,747
75	008-0110-504.40-05 Office Fuel	\$ 2,687	\$ 2,687	\$ 2,821	\$ 2,962	\$ 3,111	\$ 3,266	\$ 3,429	\$ 3,601	\$ 3,781	\$ 3,970	\$ 4,168
76	008-0110-504.40-06 Cleaning	\$ 850	\$ 1,000	\$ 1,025	\$ 1,051	\$ 1,077	\$ 1,104	\$ 1,131	\$ 1,160	\$ 1,189	\$ 1,218	\$ 1,249
77	008-0110-504.42-02 Staff Development	\$ 4,800	\$ 4,800	\$ 4,920	\$ 5,043	\$ 5,169	\$ 5,298	\$ 5,431	\$ 5,567	\$ 5,706	\$ 5,848	\$ 5,995
78	008-0110-504.42-03 Uniforms	\$ 3,900	\$ 5,050	\$ 5,176	\$ 5,306	\$ 5,438	\$ 5,574	\$ 5,714	\$ 5,856	\$ 6,003	\$ 6,153	\$ 6,307
79	008-0110-504.42-05 Physicals	\$ 1,235	\$ 1,500	\$ 1,538	\$ 1,576	\$ 1,615	\$ 1,656	\$ 1,697	\$ 1,740	\$ 1,783	\$ 1,828	\$ 1,873
80	008-0110-504.42-12 Training-Overnight Travel	\$ 6,980	\$ 1,518	\$ 1,556	\$ 1,595	\$ 1,635	\$ 1,676	\$ 1,717	\$ 1,760	\$ 1,804	\$ 1,850	\$ 1,896
81	008-0110-504.46-01 Miscellaneous Exp	\$ 3,450	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
82	008-0110-504.46-02 SSO Fines & Penalties	\$ 20,000	\$ 20,000	\$ 20,500	\$ 21,013	\$ 21,538	\$ 22,076	\$ 22,628	\$ 23,194	\$ 23,774	\$ 24,368	\$ 24,977
83	Subtotal	\$ 391,642	\$ 447,758	\$ 459,262	\$ 471,067	\$ 483,183	\$ 495,617	\$ 508,378	\$ 521,476	\$ 534,919	\$ 548,717	\$ 562,879
84	Variable O&M Expenses											
85	008-0110-504.12-01 Power	\$ 175,000	\$ 188,000	\$ 197,400	\$ 207,270	\$ 217,634	\$ 228,515	\$ 239,941	\$ 251,938	\$ 264,535	\$ 277,762	\$ 291,650
86	008-0110-504.26-01 Chemicals	\$ 30,000	\$ 30,000	\$ 31,500	\$ 33,075	\$ 34,729	\$ 36,465	\$ 38,288	\$ 40,203	\$ 42,213	\$ 44,324	\$ 46,540
87	008-0110-504.40-01 Power	\$ 8,900	\$ 8,900	\$ 9,345	\$ 9,812	\$ 10,303	\$ 10,818	\$ 11,359	\$ 11,927	\$ 12,523	\$ 13,149	\$ 13,807
88	Subtotal	\$ 213,900	\$ 226,900	\$ 238,245	\$ 250,157	\$ 262,665	\$ 275,798	\$ 289,588	\$ 304,068	\$ 319,271	\$ 335,235	\$ 351,996
89	Total - Sewer Operations	\$ 605,542	\$ 674,658	\$ 697,507	\$ 721,224	\$ 745,848	\$ 771,415	\$ 797,967	\$ 825,544	\$ 854,190	\$ 883,951	\$ 914,876

WATER & SEWER RATE STUDY

APPENDIX A

Schedule 5 – Operating Expenditures

		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Expense Item												
90	Sewer Grinder Pumps											
91	Operational & Maintenance Expenses											
92	008-0110-505.10-05 Maintenance Grinder Pumps	\$ 68,000	\$ 50,000	\$ 51,250	\$ 52,531	\$ 53,845	\$ 55,191	\$ 56,570	\$ 57,985	\$ 59,434	\$ 60,920	\$ 62,443
93	008-0110-505.20-02 Vehicle Maintenance	\$ 3,400	\$ 3,400	\$ 3,485	\$ 3,572	\$ 3,661	\$ 3,753	\$ 3,847	\$ 3,943	\$ 4,042	\$ 4,143	\$ 4,246
94	008-0110-505.32-01 Materials & Sup General	\$ 3,000	\$ 2,000	\$ 2,050	\$ 2,101	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,319	\$ 2,377	\$ 2,437	\$ 2,498
95	008-0110-505.32-03 Grinder Pump Inventory	\$ 160	\$ 160	\$ 164	\$ 168	\$ 172	\$ 177	\$ 181	\$ 186	\$ 190	\$ 195	\$ 200
96	008-0110-505.32-04 Grinder Pump Tools	\$ 1,200	\$ 1,200	\$ 1,230	\$ 1,261	\$ 1,292	\$ 1,325	\$ 1,358	\$ 1,392	\$ 1,426	\$ 1,462	\$ 1,499
97	Total - Sewer Grinder Pumps	\$ 75,760	\$ 56,760	\$ 58,179	\$ 59,633	\$ 61,124	\$ 62,652	\$ 64,219	\$ 65,824	\$ 67,470	\$ 69,157	\$ 70,885
98	Marlay-Taylor Treatment Plant											
99	Fixed O&M Expenses											
100	008-0110-516.10-01 TP Parts	\$ 44,000	\$ 25,000	\$ 25,625	\$ 26,266	\$ 26,922	\$ 27,595	\$ 28,285	\$ 28,992	\$ 29,717	\$ 30,460	\$ 31,222
101	008-0110-516.10-02 TP Repairs	\$ 98,000	\$ 60,000	\$ 61,500	\$ 63,038	\$ 64,613	\$ 66,229	\$ 67,884	\$ 69,582	\$ 71,321	\$ 73,104	\$ 74,932
102	008-0110-516.10-03 Grounds	\$ 4,000	\$ 4,000	\$ 4,100	\$ 4,203	\$ 4,308	\$ 4,415	\$ 4,526	\$ 4,639	\$ 4,755	\$ 4,874	\$ 4,995
103	008-0110-516.10-04 Buildings	\$ 6,500	\$ 15,000	\$ 15,375	\$ 15,759	\$ 16,153	\$ 16,557	\$ 16,971	\$ 17,395	\$ 17,830	\$ 18,276	\$ 18,733
104	008-0110-516.10-11 Generator Maintenance	\$ 9,350	\$ 9,350	\$ 9,584	\$ 9,823	\$ 10,069	\$ 10,321	\$ 10,579	\$ 10,843	\$ 11,114	\$ 11,392	\$ 11,677
105	008-0110-516.10-12 Co-Generator Maintenance	\$ 25,000	\$ 75,000	\$ 76,875	\$ 78,797	\$ 80,767	\$ 82,786	\$ 84,856	\$ 86,977	\$ 89,151	\$ 91,380	\$ 93,665
106	008-0110-516.14-02 Telephones & Dialers	\$ 9,000	\$ 8,000	\$ 8,200	\$ 8,405	\$ 8,615	\$ 8,831	\$ 9,051	\$ 9,278	\$ 9,509	\$ 9,747	\$ 9,991
107	008-0110-516.18-02 Station Fuel & Gas	\$ 80,000	\$ 85,000	\$ 89,250	\$ 93,713	\$ 98,398	\$ 103,318	\$ 108,484	\$ 113,908	\$ 119,604	\$ 125,584	\$ 131,863
108	008-0110-516.20-01 Vehicle Operations	\$ 5,000	\$ 5,000	\$ 5,125	\$ 5,253	\$ 5,384	\$ 5,519	\$ 5,657	\$ 5,798	\$ 5,943	\$ 6,092	\$ 6,244
109	008-0110-516.20-02 Vehicle Maintenance	\$ 2,300	\$ 2,000	\$ 2,050	\$ 2,101	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,319	\$ 2,377	\$ 2,437	\$ 2,498
110	008-0110-516.22-01 Lab&Soils Testing	\$ 26,000	\$ 35,000	\$ 35,875	\$ 36,772	\$ 37,691	\$ 38,633	\$ 39,599	\$ 40,589	\$ 41,604	\$ 42,644	\$ 43,710
111	008-0110-516.32-01 Mtls & Supplies General	\$ 5,350	\$ 5,000	\$ 5,125	\$ 5,253	\$ 5,384	\$ 5,519	\$ 5,657	\$ 5,798	\$ 5,943	\$ 6,092	\$ 6,244
112	008-0110-516.32-02 Safety Supp-Sewer Treat	\$ 5,000	\$ 3,000	\$ 3,075	\$ 3,152	\$ 3,231	\$ 3,311	\$ 3,394	\$ 3,479	\$ 3,566	\$ 3,655	\$ 3,747
113	008-0110-516.32-03 Bldg.Supply-S.Treatment	\$ 1,500	\$ 1,500	\$ 1,538	\$ 1,576	\$ 1,615	\$ 1,656	\$ 1,697	\$ 1,740	\$ 1,783	\$ 1,828	\$ 1,873
114	008-0110-516.32-04 Tools-Sewer Treatment	\$ 1,300	\$ 1,500	\$ 1,538	\$ 1,576	\$ 1,615	\$ 1,656	\$ 1,697	\$ 1,740	\$ 1,783	\$ 1,828	\$ 1,873
115	008-0110-516.32-05 Office/Print Supp-S.Treat	\$ 3,550	\$ 2,500	\$ 2,563	\$ 2,627	\$ 2,692	\$ 2,760	\$ 2,829	\$ 2,899	\$ 2,972	\$ 3,046	\$ 3,122
116	008-0110-516.32-06 Cleaning Supp-S.Treat	\$ 1,000	\$ 750	\$ 769	\$ 788	\$ 808	\$ 828	\$ 849	\$ 870	\$ 892	\$ 914	\$ 937
117	008-0110-516.32-07 Lab.Supply-Sewer Treat	\$ 15,000	\$ 15,000	\$ 15,375	\$ 15,759	\$ 16,153	\$ 16,557	\$ 16,971	\$ 17,395	\$ 17,830	\$ 18,276	\$ 18,733
118	008-0110-516.40-03 Waste Mgmt-Bldg.Util-Trea	\$ 6,000	\$ 3,600	\$ 3,690	\$ 3,782	\$ 3,877	\$ 3,974	\$ 4,073	\$ 4,175	\$ 4,279	\$ 4,386	\$ 4,496
119	008-0110-516.40-06 Cleaning-Bldg.Util-Treat	\$ 239	\$ 250	\$ 256	\$ 263	\$ 269	\$ 276	\$ 283	\$ 290	\$ 297	\$ 305	\$ 312
120	008-0110-516.42-01 Mileage-Treatment	\$ 250	\$ 250	\$ 256	\$ 263	\$ 269	\$ 276	\$ 283	\$ 290	\$ 297	\$ 305	\$ 312
121	008-0110-516.42-02 Staff Devel.-Treatment	\$ 3,120	\$ 3,500	\$ 3,588	\$ 3,677	\$ 3,769	\$ 3,863	\$ 3,960	\$ 4,059	\$ 4,160	\$ 4,264	\$ 4,371
122	008-0110-516.42-03 Uniforms-Treatment	\$ 5,400	\$ 5,500	\$ 5,638	\$ 5,778	\$ 5,923	\$ 6,071	\$ 6,223	\$ 6,378	\$ 6,538	\$ 6,701	\$ 6,869
123	008-0110-516.42-05 Physicals-Treatment	\$ 1,205	\$ 1,500	\$ 1,538	\$ 1,576	\$ 1,615	\$ 1,656	\$ 1,697	\$ 1,740	\$ 1,783	\$ 1,828	\$ 1,873
124	008-0110-516.42-12 Training-Travel Overnight	\$ 8,500	\$ 3,000	\$ 3,075	\$ 3,152	\$ 3,231	\$ 3,311	\$ 3,394	\$ 3,479	\$ 3,566	\$ 3,655	\$ 3,747
125	008-0110-516.46-01 Misc.Expense-Treatment	\$ 3,500	\$ 3,550	\$ 3,639	\$ 3,730	\$ 3,823	\$ 3,919	\$ 4,016	\$ 4,117	\$ 4,220	\$ 4,325	\$ 4,433
126	Subtotal	\$ 370,064	\$ 373,750	\$ 385,219	\$ 397,080	\$ 409,350	\$ 422,044	\$ 435,178	\$ 448,770	\$ 462,837	\$ 477,398	\$ 492,472
127	Variable O&M Expenses											
128	008-0110-516.12-02 Power	\$ 240,000	\$ 275,000	\$ 288,750	\$ 303,188	\$ 318,347	\$ 334,264	\$ 350,977	\$ 368,526	\$ 386,953	\$ 406,300	\$ 426,615
129	008-0110-516.26-02 Chemicals	\$ 186,000	\$ 215,000	\$ 225,750	\$ 237,038	\$ 248,889	\$ 261,334	\$ 274,401	\$ 288,121	\$ 302,527	\$ 317,653	\$ 333,536
130	008-0110-516.28-01 Sludge Removal-Sewer Trea	\$ 229,698	\$ 248,000	\$ 260,400	\$ 273,420	\$ 287,091	\$ 301,446	\$ 316,518	\$ 332,344	\$ 348,961	\$ 366,409	\$ 384,729
131	008-0110-516.30-01 Leonardtown Plant-Treat	\$ -	\$ 133,750	\$ 137,094	\$ 140,521	\$ 144,034	\$ 147,635	\$ 151,326	\$ 155,109	\$ 158,987	\$ 162,961	\$ 167,035
132	Subtotal	\$ 655,698	\$ 871,750	\$ 911,994	\$ 954,166	\$ 998,361	\$ 1,044,679	\$ 1,093,222	\$ 1,144,100	\$ 1,197,427	\$ 1,253,324	\$ 1,311,916
133	Total - Marlay-Taylor Treatment Plant	\$ 1,025,762	\$ 1,245,500	\$ 1,297,213	\$ 1,351,247	\$ 1,407,712	\$ 1,466,723	\$ 1,528,400	\$ 1,592,869	\$ 1,660,263	\$ 1,730,721	\$ 1,804,388

WATER & SEWER RATE STUDY

APPENDIX A

Schedule 5 – Operating Expenditures

Expense Item	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Other Treatment Plants											
Fixed O&M Expenses											
008-0110-517.10-01 TP Parts	\$ 8,000	\$ 8,000	\$ 8,200	\$ 8,405	\$ 8,615	\$ 8,831	\$ 9,051	\$ 9,278	\$ 9,509	\$ 9,747	\$ 9,991
008-0110-517.10-02 TP Repairs	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
008-0110-517.10-03 Grounds	\$ 4,000	\$ 13,000	\$ 13,325	\$ 13,658	\$ 14,000	\$ 14,350	\$ 14,708	\$ 15,076	\$ 15,453	\$ 15,839	\$ 16,235
008-0110-517.10-04 Buildings	\$ 3,500	\$ 3,500	\$ 3,588	\$ 3,677	\$ 3,769	\$ 3,863	\$ 3,960	\$ 4,059	\$ 4,160	\$ 4,264	\$ 4,371
008-0110-517.10-11 Generator Maintenance	\$ 7,700	\$ 6,000	\$ 6,150	\$ 6,304	\$ 6,461	\$ 6,623	\$ 6,788	\$ 6,958	\$ 7,132	\$ 7,310	\$ 7,493
008-0110-517.14-02 Telephones & Dialers	\$ 1,200	\$ 1,000	\$ 1,025	\$ 1,051	\$ 1,077	\$ 1,104	\$ 1,131	\$ 1,160	\$ 1,189	\$ 1,218	\$ 1,249
008-0110-517.18-02 Station Fuel & Gas	\$ 1,600	\$ 1,600	\$ 1,680	\$ 1,764	\$ 1,852	\$ 1,945	\$ 2,042	\$ 2,144	\$ 2,251	\$ 2,364	\$ 2,482
008-0110-517.20-01 Vehide Operations	\$ 10,000	\$ 11,400	\$ 11,685	\$ 11,977	\$ 12,277	\$ 12,583	\$ 12,898	\$ 13,221	\$ 13,551	\$ 13,890	\$ 14,237
008-0110-517.20-02 Vehicle Maintenance	\$ 4,400	\$ 2,000	\$ 2,050	\$ 2,101	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,319	\$ 2,377	\$ 2,437	\$ 2,498
008-0110-517.22-01 Lab&Soils Testing	\$ 2,700	\$ 2,000	\$ 2,050	\$ 2,101	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,319	\$ 2,377	\$ 2,437	\$ 2,498
008-0110-517.22-02 Major Testing	\$ 300	\$ 300	\$ 308	\$ 315	\$ 323	\$ 331	\$ 339	\$ 348	\$ 357	\$ 366	\$ 375
008-0110-517.32-01 Mtls & Supplies General	\$ 2,000	\$ 2,000	\$ 2,050	\$ 2,101	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,319	\$ 2,377	\$ 2,437	\$ 2,498
008-0110-517.30-01 Leonardtown Plant-Treat	\$ 111,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
008-0110-517.32-02 Safety Supp-Sewer Treat	\$ 470	\$ 500	\$ 513	\$ 525	\$ 538	\$ 552	\$ 566	\$ 580	\$ 594	\$ 609	\$ 624
008-0110-517.32-03 Bldg.Supply-S.Treatment	\$ 30	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
008-0110-517.32-04 Tools-Sewer Treatment	\$ 1,500	\$ 2,000	\$ 2,050	\$ 2,101	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,319	\$ 2,377	\$ 2,437	\$ 2,498
008-0110-517.32-05 Office/Print Supp-S.Treat	\$ 150	\$ 150	\$ 154	\$ 158	\$ 162	\$ 166	\$ 170	\$ 174	\$ 178	\$ 183	\$ 187
008-0110-517.32-07 Lab.Supply-Sewer Treat	\$ 4,200	\$ 4,800	\$ 4,920	\$ 5,043	\$ 5,169	\$ 5,298	\$ 5,431	\$ 5,567	\$ 5,706	\$ 5,848	\$ 5,995
008-0110-517.40-03 Waste Mgmt-Bldg.Util-Trea	\$ 1,500	\$ 2,000	\$ 2,050	\$ 2,101	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,319	\$ 2,377	\$ 2,437	\$ 2,498
008-0110-517.42-02 Staff Devel.-Treatment	\$ 3,674	\$ 2,815	\$ 2,885	\$ 2,958	\$ 3,031	\$ 3,107	\$ 3,185	\$ 3,265	\$ 3,346	\$ 3,430	\$ 3,516
008-0110-517.42-03 Uniforms-Treatment	\$ 1,370	\$ 2,000	\$ 2,050	\$ 2,101	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,319	\$ 2,377	\$ 2,437	\$ 2,498
008-0110-517.42-05 Physicals-Treatment	\$ 280	\$ 280	\$ 287	\$ 294	\$ 302	\$ 309	\$ 317	\$ 325	\$ 333	\$ 341	\$ 350
008-0110-517.42-12 Training-Overnight Travel	\$ 256	\$ 450	\$ 461	\$ 473	\$ 485	\$ 497	\$ 509	\$ 522	\$ 535	\$ 548	\$ 562
008-0110-517.46-01 Misc.Expense-Treatment	\$ 50	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal	\$ 184,880	\$ 65,795	\$ 67,480	\$ 69,209	\$ 70,983	\$ 72,804	\$ 74,673	\$ 76,591	\$ 78,559	\$ 80,579	\$ 82,653
Variable O&M Expenses											
008-0110-517.12-02 Power	\$ 50,000	\$ 50,000	\$ 52,500	\$ 55,125	\$ 57,881	\$ 60,775	\$ 63,814	\$ 67,005	\$ 70,355	\$ 73,873	\$ 77,566
008-0110-517.26-02 Chemicals	\$ 5,000	\$ 5,000	\$ 5,250	\$ 5,513	\$ 5,788	\$ 6,078	\$ 6,381	\$ 6,700	\$ 7,036	\$ 7,387	\$ 7,757
Subtotal	\$ 55,000	\$ 55,000	\$ 57,750	\$ 60,638	\$ 63,669	\$ 66,853	\$ 70,195	\$ 73,705	\$ 77,391	\$ 81,260	\$ 85,323
Total Other Treatment Plants	\$ 239,880	\$ 120,795	\$ 125,230	\$ 129,846	\$ 134,653	\$ 139,657	\$ 144,868	\$ 150,296	\$ 155,950	\$ 161,839	\$ 167,976
Airedale Rd Treatment Plant											
Operational & Maintenance Expenses											
008-0110-518.10-02 WWTP Repairs	\$ 8,000	\$ 3,000	\$ 3,075	\$ 3,152	\$ 3,231	\$ 3,311	\$ 3,394	\$ 3,479	\$ 3,566	\$ 3,655	\$ 3,747
008-0110-518.10-03 Grounds	\$ 6,000	\$ 5,000	\$ 5,125	\$ 5,253	\$ 5,384	\$ 5,519	\$ 5,657	\$ 5,798	\$ 5,943	\$ 6,092	\$ 6,244
008-0110-518.12-02 power	\$ 1,280	\$ 1,200	\$ 1,260	\$ 1,323	\$ 1,389	\$ 1,459	\$ 1,532	\$ 1,608	\$ 1,689	\$ 1,773	\$ 1,862
008-0110-518.14-02 telephone	\$ 400	\$ 500	\$ 513	\$ 525	\$ 538	\$ 552	\$ 566	\$ 580	\$ 594	\$ 609	\$ 624
Total - Airedale Rd Treatment Plant	\$ 15,680	\$ 9,700	\$ 9,973	\$ 10,253	\$ 10,543	\$ 10,841	\$ 11,149	\$ 11,466	\$ 11,792	\$ 12,129	\$ 12,477
Total Sewer	\$ 4,750,230	\$ 4,981,932	\$ 5,177,922	\$ 5,382,293	\$ 5,595,417	\$ 5,817,687	\$ 6,049,513	\$ 6,291,321	\$ 6,543,560	\$ 6,806,699	\$ 7,081,227

WATER & SEWER RATE STUDY

APPENDIX A

Schedule 5 – Operating Expenditures

Expense Item	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
174 Water Expenses											
175 Departmental Placeholders											
176 Personal Services											
177 Department Salary Budget Expense	\$ 954,935	\$ 1,042,350	\$ 1,089,256	\$ 1,138,272	\$ 1,189,495	\$ 1,243,022	\$ 1,298,958	\$ 1,357,411	\$ 1,418,494	\$ 1,482,327	\$ 1,549,031
178 Subtotal	\$ 954,935	\$ 1,042,350	\$ 1,089,256	\$ 1,138,272	\$ 1,189,495	\$ 1,243,022	\$ 1,298,958	\$ 1,357,411	\$ 1,418,494	\$ 1,482,327	\$ 1,549,031
179 Operational & Maintenance Expenses											
180 Departmental Depreciation Placeholder	\$ 220,000	\$ 230,000	\$ 232,300	\$ 234,623	\$ 236,969	\$ 239,339	\$ 241,732	\$ 244,150	\$ 246,591	\$ 249,057	\$ 251,548
181 Contingencies	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
182 Subtotal	\$ 320,000	\$ 230,000	\$ 232,300	\$ 234,623	\$ 236,969	\$ 239,339	\$ 241,732	\$ 244,150	\$ 246,591	\$ 249,057	\$ 251,548
183 Total - Departmental Placeholder	\$ 1,274,935	\$ 1,272,350	\$ 1,321,556	\$ 1,372,895	\$ 1,426,464	\$ 1,482,361	\$ 1,540,690	\$ 1,601,560	\$ 1,665,085	\$ 1,731,384	\$ 1,800,579
184 Water Construction											
185 Personal Services											
186 008-0115-551.05-11 Contractual Employee Reg	\$ -	\$ 2,167	\$ 2,265	\$ 2,366	\$ 2,473	\$ 2,584	\$ 2,700	\$ 2,822	\$ 2,949	\$ 3,082	\$ 3,220
187 Subtotal	\$ -	\$ 2,167	\$ 2,265	\$ 2,366	\$ 2,473	\$ 2,584	\$ 2,700	\$ 2,822	\$ 2,949	\$ 3,082	\$ 3,220
188 Operational & Maintenance Expenses											
189 008-0115-551.10-01 parts	\$ 3,500	\$ 6,000	\$ 6,150	\$ 6,304	\$ 6,461	\$ 6,623	\$ 6,788	\$ 6,958	\$ 7,132	\$ 7,310	\$ 7,493
190 008-0115-551.10-02 repairs	\$ -	\$ 6,000	\$ 6,150	\$ 6,304	\$ 6,461	\$ 6,623	\$ 6,788	\$ 6,958	\$ 7,132	\$ 7,310	\$ 7,493
191 008-0115-551.10-04 Maintenance-Bldgs.	\$ 1,500	\$ 1,500	\$ 1,538	\$ 1,576	\$ 1,615	\$ 1,656	\$ 1,697	\$ 1,740	\$ 1,783	\$ 1,828	\$ 1,873
192 008-0115-551.10-05 Maintenance-Water Lines	\$ 110,000	\$ 160,000	\$ 164,000	\$ 168,100	\$ 172,303	\$ 176,610	\$ 181,025	\$ 185,551	\$ 190,190	\$ 194,944	\$ 199,818
193 008-0115-551.20-01 Vehicle Oper. Mainten-W	\$ 10,000	\$ 10,000	\$ 10,250	\$ 10,506	\$ 10,769	\$ 11,038	\$ 11,314	\$ 11,597	\$ 11,887	\$ 12,184	\$ 12,489
194 008-0115-551.20-02 Vehicle Main. Mainten-W	\$ 10,000	\$ 10,000	\$ 10,250	\$ 10,506	\$ 10,769	\$ 11,038	\$ 11,314	\$ 11,597	\$ 11,887	\$ 12,184	\$ 12,489
195 008-0115-551.32-01 Mtls&Supp. Gen- Constr. W	\$ 5,000	\$ 5,000	\$ 5,125	\$ 5,253	\$ 5,384	\$ 5,519	\$ 5,657	\$ 5,798	\$ 5,943	\$ 6,092	\$ 6,244
196 008-0115-551.32-02 Water Construction Safety	\$ 1,000	\$ 1,000	\$ 1,025	\$ 1,051	\$ 1,077	\$ 1,104	\$ 1,131	\$ 1,160	\$ 1,189	\$ 1,218	\$ 1,249
197 008-0115-551.32-03 Sta&Bldg. Supply-Water	\$ 40,000	\$ 40,000	\$ 41,000	\$ 42,025	\$ 43,076	\$ 44,153	\$ 45,256	\$ 46,388	\$ 47,547	\$ 48,736	\$ 49,955
198 008-0115-551.32-04 Tools- Constr. Water	\$ 4,000	\$ 4,000	\$ 4,100	\$ 4,203	\$ 4,308	\$ 4,415	\$ 4,526	\$ 4,639	\$ 4,755	\$ 4,874	\$ 4,995
199 008-0115-551.40-05 Office Fuel	\$ 3,600	\$ 3,600	\$ 3,780	\$ 3,969	\$ 4,167	\$ 4,376	\$ 4,595	\$ 4,824	\$ 5,066	\$ 5,319	\$ 5,585
200 008-0115-551.42-01 Mileage- Constr. Water	\$ 450	\$ 450	\$ 461	\$ 473	\$ 485	\$ 497	\$ 509	\$ 522	\$ 535	\$ 548	\$ 562
201 008-0115-551.42-02 Staff Devel.- Constr- Water	\$ 2,000	\$ 2,000	\$ 2,050	\$ 2,101	\$ 2,154	\$ 2,208	\$ 2,263	\$ 2,319	\$ 2,377	\$ 2,437	\$ 2,498
202 008-0115-551.42-03 Uniforms- Constr. Water	\$ 1,240	\$ 1,550	\$ 1,589	\$ 1,628	\$ 1,669	\$ 1,711	\$ 1,754	\$ 1,798	\$ 1,842	\$ 1,889	\$ 1,936
203 008-0115-551.42-05 Physicals- Constr. Water	\$ 500	\$ 500	\$ 513	\$ 525	\$ 538	\$ 552	\$ 566	\$ 580	\$ 594	\$ 609	\$ 624
204 008-0115-551.42-12 Training- Overnight Travel	\$ 530	\$ 1,200	\$ 1,230	\$ 1,261	\$ 1,292	\$ 1,325	\$ 1,358	\$ 1,392	\$ 1,426	\$ 1,462	\$ 1,499
205 Subtotal	\$ 193,320	\$ 252,800	\$ 259,210	\$ 265,785	\$ 272,529	\$ 279,446	\$ 286,542	\$ 293,820	\$ 301,286	\$ 308,945	\$ 316,801
206 Total - Water Construction	\$ 193,320	\$ 254,967	\$ 261,475	\$ 268,151	\$ 275,002	\$ 282,030	\$ 289,242	\$ 296,642	\$ 304,235	\$ 312,027	\$ 320,022
207 Water Maintenance - now part of 555											
208 Operational & Maintenance Expenses											
209 008-0115-552.42-02 Staff Devel- Mainten- Water	\$ -	\$ 3,500	\$ 3,588	\$ 3,677	\$ 3,769	\$ 3,863	\$ 3,960	\$ 4,059	\$ 4,160	\$ 4,264	\$ 4,371
210 008-0115-552.42-03 Uniforms- Mainten. Water	\$ -	\$ 4,700	\$ 4,818	\$ 4,938	\$ 5,061	\$ 5,188	\$ 5,318	\$ 5,451	\$ 5,587	\$ 5,726	\$ 5,870
211 008-0115-552.42-05 Physicals- Mainten. Water	\$ -	\$ 500	\$ 513	\$ 525	\$ 538	\$ 552	\$ 566	\$ 580	\$ 594	\$ 609	\$ 624
212 008-0115-552.42-12 Training- Overnight Travel	\$ -	\$ 7,168	\$ 7,347	\$ 7,531	\$ 7,719	\$ 7,912	\$ 8,110	\$ 8,313	\$ 8,520	\$ 8,734	\$ 8,952
213 Total - Water Maintenance	\$ -	\$ 15,868	\$ 16,265	\$ 16,671	\$ 17,088	\$ 17,515	\$ 17,953	\$ 18,402	\$ 18,862	\$ 19,334	\$ 19,817

WATER & SEWER RATE STUDY

APPENDIX A

Schedule 5 – Operating Expenditures

Expense Item	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
214 Water Operations											
215 Operational & Maintenance Expenses											
216 008-0115-555.10-01 Maintenance-Water PSParts	\$ 67,645	\$ 80,000	\$ 82,000	\$ 84,050	\$ 86,151	\$ 88,305	\$ 90,513	\$ 92,775	\$ 95,095	\$ 97,472	\$ 99,909
217 008-0115-555.10-02 Maintenance-Water PSReprs	\$ 37,000	\$ 140,000	\$ 143,500	\$ 147,088	\$ 150,765	\$ 154,534	\$ 158,397	\$ 162,357	\$ 166,416	\$ 170,576	\$ 174,841
218 008-0115-555.10-03 Maintenance-Water Grounds	\$ 23,000	\$ 30,000	\$ 30,750	\$ 31,519	\$ 32,307	\$ 33,114	\$ 33,942	\$ 34,791	\$ 35,661	\$ 36,552	\$ 37,466
219 008-0115-555.10-04 Maintenance-Water Bldgs.	\$ 8,355	\$ 16,000	\$ 16,400	\$ 16,810	\$ 17,230	\$ 17,661	\$ 18,103	\$ 18,555	\$ 19,019	\$ 19,494	\$ 19,982
220 008-0115-555.10-05 Maintenance-Water Lines	\$ 5,000	\$ 4,000	\$ 4,100	\$ 4,203	\$ 4,308	\$ 4,415	\$ 4,526	\$ 4,639	\$ 4,755	\$ 4,874	\$ 4,995
221 008-0115-555.10-07 Fire Hydrant ISO Inspec.	\$ 45,000	\$ 45,000	\$ 46,125	\$ 47,278	\$ 48,460	\$ 49,672	\$ 50,913	\$ 52,186	\$ 53,491	\$ 54,828	\$ 56,199
222 008-0115-555.10-08 SCADA	\$ 18,000	\$ 18,000	\$ 18,450	\$ 18,911	\$ 19,384	\$ 19,869	\$ 20,365	\$ 20,874	\$ 21,396	\$ 21,931	\$ 22,480
223 008-0115-555.10-11 Generator Maintenance	\$ 34,000	\$ 34,000	\$ 34,850	\$ 35,721	\$ 36,614	\$ 37,530	\$ 38,468	\$ 39,430	\$ 40,415	\$ 41,426	\$ 42,461
224 008-0115-555.14-03 Tele.&Dialers-Water	\$ 3,000	\$ 2,500	\$ 2,563	\$ 2,627	\$ 2,692	\$ 2,760	\$ 2,829	\$ 2,899	\$ 2,972	\$ 3,046	\$ 3,122
225 008-0115-555.18-03 Sta.Fuel&Gas-Water	\$ 7,200	\$ 6,000	\$ 6,150	\$ 6,304	\$ 6,461	\$ 6,623	\$ 6,788	\$ 6,958	\$ 7,132	\$ 7,310	\$ 7,493
226 008-0115-555.20-01 Vehicle Oper-Water	\$ 38,000	\$ 36,900	\$ 37,823	\$ 38,768	\$ 39,737	\$ 40,731	\$ 41,749	\$ 42,793	\$ 43,863	\$ 44,959	\$ 46,083
227 008-0115-555.20-02 Vehicle Main-Water	\$ 11,000	\$ 7,000	\$ 7,175	\$ 7,354	\$ 7,538	\$ 7,727	\$ 7,920	\$ 8,118	\$ 8,321	\$ 8,529	\$ 8,742
228 008-0115-555.22-01 Water Testing-Water	\$ 15,500	\$ 18,000	\$ 18,450	\$ 18,911	\$ 19,384	\$ 19,869	\$ 20,365	\$ 20,874	\$ 21,396	\$ 21,931	\$ 22,480
229 008-0115-555.24-01 Water Meter Reading-W	\$ 69,400	\$ 38,076	\$ 39,028	\$ 40,004	\$ 41,004	\$ 42,029	\$ 43,079	\$ 44,156	\$ 45,260	\$ 46,392	\$ 47,552
230 008-0115-555.32-01 Mtl&Supp.Gen-Water	\$ 7,000	\$ 10,000	\$ 10,250	\$ 10,506	\$ 10,769	\$ 11,038	\$ 11,314	\$ 11,597	\$ 11,887	\$ 12,184	\$ 12,489
231 008-0115-555.32-02 Safety Supply-Water	\$ 7,000	\$ 5,000	\$ 5,125	\$ 5,253	\$ 5,384	\$ 5,519	\$ 5,657	\$ 5,798	\$ 5,943	\$ 6,092	\$ 6,244
232 008-0115-555.32-03 Sta&Bldg.Supply-Water	\$ 10,000	\$ 7,000	\$ 7,175	\$ 7,354	\$ 7,538	\$ 7,727	\$ 7,920	\$ 8,118	\$ 8,321	\$ 8,529	\$ 8,742
233 008-0115-555.32-04 Tools-Supply	\$ 4,000	\$ 4,000	\$ 4,100	\$ 4,203	\$ 4,308	\$ 4,415	\$ 4,526	\$ 4,639	\$ 4,755	\$ 4,874	\$ 4,995
234 008-0115-555.32-05 Office/Print Supply-Water	\$ 7,000	\$ 4,000	\$ 4,100	\$ 4,203	\$ 4,308	\$ 4,415	\$ 4,526	\$ 4,639	\$ 4,755	\$ 4,874	\$ 4,995
235 008-0115-555.32-06 Cleaning	\$ 352	\$ 500	\$ 513	\$ 525	\$ 538	\$ 552	\$ 566	\$ 580	\$ 594	\$ 609	\$ 624
236 008-0115-555.40-01 Power-Bldg.Util-Water	\$ 10,000	\$ 9,000	\$ 9,450	\$ 9,923	\$ 10,419	\$ 10,940	\$ 11,487	\$ 12,061	\$ 12,664	\$ 13,297	\$ 13,962
237 008-0115-555.40-02 Phone/Fax-Bldg.Util-Water	\$ 8,900	\$ 9,000	\$ 9,315	\$ 9,641	\$ 9,978	\$ 10,328	\$ 10,689	\$ 11,063	\$ 11,451	\$ 11,851	\$ 12,266
238 008-0115-555.40-03 Waste Mgmt-Bldg.Util-W	\$ 2,500	\$ 2,500	\$ 2,563	\$ 2,627	\$ 2,692	\$ 2,760	\$ 2,829	\$ 2,899	\$ 2,972	\$ 3,046	\$ 3,122
239 008-0115-555.40-04 Cable-Bldg.Util-Water	\$ 2,396	\$ 2,396	\$ 2,456	\$ 2,517	\$ 2,580	\$ 2,645	\$ 2,711	\$ 2,779	\$ 2,848	\$ 2,919	\$ 2,992
240 008-0115-555.40-05 Off.Fuel-Bldg.Util-Water	\$ 3,888	\$ 3,888	\$ 4,082	\$ 4,287	\$ 4,501	\$ 4,726	\$ 4,962	\$ 5,210	\$ 5,471	\$ 5,744	\$ 6,032
241 008-0115-555.40-06 Cleaning-Bldg.Util-Water	\$ 850	\$ 850	\$ 871	\$ 893	\$ 915	\$ 938	\$ 962	\$ 986	\$ 1,010	\$ 1,036	\$ 1,062
242 008-0115-555.42-01 Mileage-Water	\$ 100	\$ 100	\$ 103	\$ 105	\$ 108	\$ 110	\$ 113	\$ 116	\$ 119	\$ 122	\$ 125
243 008-0115-555.42-02 Staff Development - Water	\$ 3,500	\$ 110	\$ 113	\$ 116	\$ 118	\$ 121	\$ 124	\$ 128	\$ 131	\$ 134	\$ 137
244 008-0115-555.42-03 Uniforms-Water	\$ 3,125	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
245 008-0115-555.42-04 Pagets-Water	\$ 100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
246 008-0115-555.42-05 Physicals-Water	\$ 500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
247 008-0115-555.42-12 Training-Overnight Travel	\$ 7,520	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
248 008-0115-555.46-01 Misc.Expense-Water	\$ 5,000	\$ 5,000	\$ 5,125	\$ 5,253	\$ 5,384	\$ 5,519	\$ 5,657	\$ 5,798	\$ 5,943	\$ 6,092	\$ 6,244
249 Subtotal	\$ 465,831	\$ 538,820	\$ 552,703	\$ 566,952	\$ 581,577	\$ 596,589	\$ 611,999	\$ 627,817	\$ 644,055	\$ 660,724	\$ 677,837
250 008-0115-555.12-03 Power-Water	\$ 566,449	\$ 513,000	\$ 538,650	\$ 565,583	\$ 593,862	\$ 623,555	\$ 654,732	\$ 687,469	\$ 721,843	\$ 757,935	\$ 795,831
251 008-0115-555.26-03 Chemicals-Water	\$ 119,000	\$ 125,000	\$ 131,250	\$ 137,813	\$ 144,703	\$ 151,938	\$ 159,535	\$ 167,512	\$ 175,888	\$ 184,682	\$ 193,916
252 Subtotal	\$ 685,449	\$ 638,000	\$ 669,900	\$ 703,395	\$ 738,565	\$ 775,493	\$ 814,268	\$ 854,981	\$ 897,730	\$ 942,617	\$ 989,747
Total -Water Operations	\$ 1,151,280	\$ 1,176,820	\$ 1,222,603	\$ 1,270,347	\$ 1,320,142	\$ 1,372,082	\$ 1,426,267	\$ 1,482,798	\$ 1,541,785	\$ 1,603,341	\$ 1,667,584
253 Total - Water	\$ 2,619,535	\$ 2,720,005	\$ 2,821,898	\$ 2,928,064	\$ 3,038,695	\$ 3,153,989	\$ 3,274,152	\$ 3,399,403	\$ 3,529,968	\$ 3,666,085	\$ 3,808,002

WATER & SEWER RATE STUDY

APPENDIX A

Schedule 5 – Operating Expenditures

Expense Item	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
254 Admin Expenses											
255 Departmental Placeholders											
256 Personal Services											
257 Department Salary Budget Expense	\$ 1,390,844	\$ 1,543,863	\$ 1,613,336	\$ 1,685,937	\$ 1,761,804	\$ 1,841,085	\$ 1,923,934	\$ 2,010,511	\$ 2,100,984	\$ 2,195,528	\$ 2,294,327
258 Total - Departmental Placeholder	\$ 1,390,844	\$ 1,543,863	\$ 1,613,336	\$ 1,685,937	\$ 1,761,804	\$ 1,841,085	\$ 1,923,934	\$ 2,010,511	\$ 2,100,984	\$ 2,195,528	\$ 2,294,327
259 General Admin											
260 Personal Services											
261 008-0292-567.05-07 Commissioner Stipend	\$ 14,500	\$ 14,500	\$ 15,153	\$ 15,834	\$ 16,547	\$ 17,292	\$ 18,070	\$ 18,883	\$ 19,732	\$ 20,620	\$ 21,548
262 008-0292-567.05-11 Contractual Employee Reg	\$ 102,401	\$ 106,785	\$ 111,590	\$ 116,612	\$ 121,859	\$ 127,343	\$ 133,074	\$ 139,062	\$ 145,320	\$ 151,859	\$ 158,693
263 008-0292-567.06-01 Casual&Contract Lbr-Admin	\$ 5,000	\$ 5,000	\$ 5,225	\$ 5,460	\$ 5,706	\$ 5,963	\$ 6,231	\$ 6,511	\$ 6,804	\$ 7,111	\$ 7,430
264 008-0292-567.07-01 Payroll Taxes-Overhead	\$ 447,700	\$ 479,236	\$ 500,802	\$ 523,338	\$ 546,888	\$ 571,498	\$ 597,215	\$ 624,090	\$ 652,174	\$ 681,522	\$ 712,190
265 008-0292-567.07-02 Hospitalization-Overhead	\$ 1,329,100	\$ 1,163,677	\$ 1,256,771	\$ 1,357,313	\$ 1,465,898	\$ 1,583,170	\$ 1,709,823	\$ 1,846,609	\$ 1,994,338	\$ 2,153,885	\$ 2,326,196
266 008-0292-567.07-03 Retirement-Overhead	\$ 113,092	\$ 113,092	\$ 113,092	\$ 113,092	\$ 113,092	\$ 113,092	\$ 113,092	\$ 113,092	\$ 113,092	\$ 113,092	\$ 113,092
267 008-0292-567.07-04 Long/Term Disab.Overhead	\$ 12,960	\$ 12,760	\$ 13,079	\$ 13,406	\$ 13,741	\$ 14,085	\$ 14,437	\$ 14,798	\$ 15,168	\$ 15,547	\$ 15,935
268 008-0292-567.07-05 Life Insurance-Overhead	\$ 10,800	\$ 9,592	\$ 10,359	\$ 11,188	\$ 12,083	\$ 13,050	\$ 14,094	\$ 15,221	\$ 16,439	\$ 17,754	\$ 19,174
269 008-0292-567.07-06 Tuition Reimb-Overhead	\$ 8,300	\$ 13,800	\$ 13,800	\$ 13,800	\$ 13,800	\$ 13,800	\$ 13,800	\$ 13,800	\$ 13,800	\$ 13,800	\$ 13,800
270 008-0292-567.07-07 MD Pension Plan	\$ 544,300	\$ 542,754	\$ 567,178	\$ 592,701	\$ 619,372	\$ 647,244	\$ 676,370	\$ 706,807	\$ 738,613	\$ 771,851	\$ 806,584
271 008-0292-567.07-08 OPEB Health Benefits	\$ 456,000	\$ 458,000	\$ 469,450	\$ 481,186	\$ 493,216	\$ 505,546	\$ 518,185	\$ 531,140	\$ 544,418	\$ 558,029	\$ 571,979
272 Subtotal	\$ 3,044,153	\$ 2,919,196	\$ 3,076,499	\$ 3,243,930	\$ 3,422,203	\$ 3,612,082	\$ 3,814,390	\$ 4,030,012	\$ 4,259,898	\$ 4,505,069	\$ 4,766,623
273 Operational & Maintenance Expenses											
274 008-0292-567.20-01 Vehicle Operation-Admin	\$ 1,500	\$ 1,800	\$ 1,845	\$ 1,891	\$ 1,938	\$ 1,987	\$ 2,037	\$ 2,087	\$ 2,140	\$ 2,193	\$ 2,248
275 008-0292-567.20-02 Vehicle Maintenance-Admin	\$ 300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
276 008-0292-567.32-01 Office Supply-Admin	\$ 20,366	\$ 90,233	\$ 92,489	\$ 94,801	\$ 97,171	\$ 99,600	\$ 102,090	\$ 104,643	\$ 107,259	\$ 109,940	\$ 112,689
277 008-0292-567.32-02 Office Printing-Admin.	\$ 30,206	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
278 008-0292-567.32-03 Postage-Admin	\$ 96,000	\$ 98,000	\$ 100,450	\$ 102,961	\$ 105,535	\$ 108,174	\$ 110,878	\$ 113,650	\$ 116,491	\$ 119,403	\$ 122,389
279 008-0292-567.34-01 Prop&Liab.Ins-Overhead	\$ 257,400	\$ 274,800	\$ 281,670	\$ 288,712	\$ 295,930	\$ 303,328	\$ 310,911	\$ 318,684	\$ 326,651	\$ 334,817	\$ 343,188
280 008-0292-567.36-01 Accounting-Overhead	\$ 21,200	\$ 21,200	\$ 21,730	\$ 22,273	\$ 22,830	\$ 23,401	\$ 23,986	\$ 24,586	\$ 25,200	\$ 25,830	\$ 26,476
281 008-0292-567.36-02 Computer Svcs-Overhead	\$ 91,400	\$ 100,400	\$ 104,416	\$ 108,593	\$ 112,936	\$ 117,454	\$ 122,152	\$ 127,038	\$ 132,120	\$ 137,404	\$ 142,901
282 008-0292-567.36-03 Legal Services-Overhead	\$ 27,700	\$ 27,700	\$ 28,393	\$ 29,102	\$ 29,830	\$ 30,576	\$ 31,340	\$ 32,124	\$ 32,927	\$ 33,750	\$ 34,594
283 008-0292-567.36-04 Misc.Consultants-Admin	\$ 27,000	\$ 17,000	\$ 17,425	\$ 17,861	\$ 18,307	\$ 18,765	\$ 19,234	\$ 19,715	\$ 20,208	\$ 20,713	\$ 21,231
284 008-0292-567.36-05 Public Relations	\$ 14,600	\$ 14,500	\$ 14,863	\$ 15,234	\$ 15,615	\$ 16,005	\$ 16,405	\$ 16,816	\$ 17,236	\$ 17,667	\$ 18,109
285 008-0292-567.40-01 Power-Bldg.Util-Admin	\$ 13,294	\$ 28,700	\$ 30,135	\$ 31,642	\$ 33,224	\$ 34,885	\$ 36,629	\$ 38,461	\$ 40,384	\$ 42,403	\$ 44,523
286 008-0292-567.40-02 Phone/Fax-Bldg.Util-Admin	\$ 49,300	\$ 50,160	\$ 51,916	\$ 53,733	\$ 55,613	\$ 57,560	\$ 59,574	\$ 61,659	\$ 63,818	\$ 66,051	\$ 68,363
287 008-0292-567.40-03 Waste Mgmt-Bldg.Util-Admi	\$ 1,202	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
288 008-0292-567.40-04 Cable_Bldg.Util-Admin	\$ 3,980	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
289 008-0292-567.40-05 Off.Fuel&Gas-Bldg.Util-Ad	\$ 288	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
290 008-0292-567.40-06 Cleaning-Bldg.Util-Admin	\$ 8,124	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
291 008-0292-567.40-07 CAM First Colony	\$ 5,912	\$ 6,900	\$ 7,073	\$ 7,249	\$ 7,431	\$ 7,616	\$ 7,807	\$ 8,002	\$ 8,202	\$ 8,407	\$ 8,617
292 008-0292-567.42-01 Mileage-Admin	\$ 1,380	\$ 4,026	\$ 4,127	\$ 4,230	\$ 4,336	\$ 4,444	\$ 4,555	\$ 4,669	\$ 4,786	\$ 4,905	\$ 5,028
293 008-0292-567.42-02 Staff Development - Admin	\$ 47,640	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
294 008-0292-567.42-03 Uniforms-Admin	\$ -	\$ 100	\$ 103	\$ 105	\$ 108	\$ 110	\$ 113	\$ 116	\$ 119	\$ 122	\$ 125
295 008-0292-567.42-05 Physicals-Admin	\$ 1,011	\$ 1,273	\$ 1,305	\$ 1,337	\$ 1,371	\$ 1,405	\$ 1,440	\$ 1,476	\$ 1,513	\$ 1,551	\$ 1,590
296 008-0292-567.42-12 Training-Overnight Travel	\$ 21,069	\$ 51,410	\$ 52,695	\$ 54,013	\$ 55,363	\$ 56,747	\$ 58,166	\$ 59,620	\$ 61,110	\$ 62,638	\$ 64,204
297 008-0292-567.44-01 Depreciation-Admin	\$ 105,000	\$ 125,000	\$ 126,250	\$ 127,513	\$ 128,788	\$ 130,076	\$ 131,376	\$ 132,690	\$ 134,017	\$ 135,357	\$ 136,711
298 008-0292-567.46-01 Bond Fees - Admin.	\$ 1,500	\$ 1,500	\$ 1,538	\$ 1,576	\$ 1,615	\$ 1,656	\$ 1,697	\$ 1,740	\$ 1,783	\$ 1,828	\$ 1,873
299 008-0292-567.46-02 Classifieds - Overhead	\$ 13,400	\$ 14,000	\$ 14,350	\$ 14,709	\$ 15,076	\$ 15,453	\$ 15,840	\$ 16,236	\$ 16,642	\$ 17,058	\$ 17,484

WATER & SEWER RATE STUDY

APPENDIX A

Schedule 5 – Operating Expenditures

		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Expense Item												
300	008-0292-567.46-04 Misc.Expense-Admin	\$ 10,500	\$ 7,500	\$ 7,688	\$ 7,880	\$ 8,077	\$ 8,279	\$ 8,486	\$ 8,698	\$ 8,915	\$ 9,138	\$ 9,366
301	008-0292-567.46-05 Employment Advertising	\$ 6,000	\$ 6,000	\$ 6,150	\$ 6,304	\$ 6,461	\$ 6,623	\$ 6,788	\$ 6,958	\$ 7,132	\$ 7,310	\$ 7,493
302	008-0292-567.48-01 Dues&Subscrip-Overhead	\$ 11,300	\$ 11,670	\$ 11,962	\$ 12,261	\$ 12,567	\$ 12,881	\$ 13,204	\$ 13,534	\$ 13,872	\$ 14,219	\$ 14,574
303	008-0292-567.50-01 Recv'y Cost-Admin-Grants	\$ (15,500)	\$ (20,054)	\$ (20,556)	\$ (21,070)	\$ (21,596)	\$ (22,136)	\$ (22,690)	\$ (23,257)	\$ (23,838)	\$ (24,434)	\$ (25,045)
304	Subtotal	\$ 873,072	\$ 933,818	\$ 958,013	\$ 982,908	\$ 1,008,526	\$ 1,034,888	\$ 1,062,018	\$ 1,089,942	\$ 1,118,684	\$ 1,148,270	\$ 1,178,728
305	Total - General Admin	\$ 3,917,225	\$ 3,853,014	\$ 4,034,512	\$ 4,226,839	\$ 4,430,728	\$ 4,646,970	\$ 4,876,409	\$ 5,119,954	\$ 5,378,582	\$ 5,653,339	\$ 5,945,351
306	IT											
307	Operational & Maintenance Expenses											
308	008-0292-568.32-01 Office Supply-IT	\$ 49,328	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
309	008-0292-568.42-01 Mileage-IT	\$ 2,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
310	008-0292-568.42-02 Staff Development - IT	\$ 152	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
311	008-0292-568.42-12 Training-Overnight Travel	\$ 15,348	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
312	Bank Fees/On-Line Bill Payment Fees	\$ -	\$ 20,000	\$ 20,500	\$ 21,013	\$ 21,538	\$ 22,076	\$ 22,628	\$ 23,194	\$ 23,774	\$ 24,368	\$ 24,977
313	Total - IT	\$ 67,328	\$ 20,000	\$ 20,500	\$ 21,013	\$ 21,538	\$ 22,076	\$ 22,628	\$ 23,194	\$ 23,774	\$ 24,368	\$ 24,977
314	Total - Admin	\$ 5,375,397	\$ 5,416,876	\$ 5,668,348	\$ 5,933,788	\$ 6,214,070	\$ 6,510,131	\$ 6,822,971	\$ 7,153,659	\$ 7,503,340	\$ 7,873,235	\$ 8,264,655
315	Engineering Expenses											
316	Departmental Placeholders											
317	Personal Services											
318	Department Salary Budget Expense	\$ 606,076	\$ 682,027	\$ 712,718	\$ 744,791	\$ 778,306	\$ 813,330	\$ 849,930	\$ 888,177	\$ 928,145	\$ 969,911	\$ 1,013,557
319	Department Contractual Labor Budget Expense	\$ 45,491	\$ 46,742	\$ 48,845	\$ 51,043	\$ 53,340	\$ 55,741	\$ 58,249	\$ 60,870	\$ 63,609	\$ 66,472	\$ 69,463
320	Subtotal	\$ 651,567	\$ 728,769	\$ 761,564	\$ 795,834	\$ 831,646	\$ 869,071	\$ 908,179	\$ 949,047	\$ 991,754	\$ 1,036,383	\$ 1,083,020
321	Operational & Maintenance Expenses											
322	Departmental Depreciation Placeholder	\$ 66,000	\$ 65,000	\$ 65,650	\$ 66,307	\$ 66,970	\$ 67,639	\$ 68,316	\$ 68,999	\$ 69,689	\$ 70,386	\$ 71,090
323	Professional Service	\$ -	\$ 59,000	\$ 60,475	\$ 61,987	\$ 63,537	\$ 65,125	\$ 66,753	\$ 68,422	\$ 70,132	\$ 71,886	\$ 73,683
324	Subtotal	\$ 66,000	\$ 124,000	\$ 126,125	\$ 128,293	\$ 130,506	\$ 132,764	\$ 135,069	\$ 137,421	\$ 139,821	\$ 142,271	\$ 144,772
325	Total - Departmental Placeholder	\$ 717,567	\$ 852,769	\$ 887,689	\$ 924,127	\$ 962,153	\$ 1,001,835	\$ 1,043,248	\$ 1,086,468	\$ 1,131,575	\$ 1,178,654	\$ 1,227,793
326	Inspections											
327	Personal Services											
328	008-0393-576.05-01 Regular	\$ 121,480	\$ 126,860	\$ 132,569	\$ 138,534	\$ 144,768	\$ 151,283	\$ 158,091	\$ 165,205	\$ 172,639	\$ 180,408	\$ 188,526
329	Subtotal	\$ 121,480	\$ 126,860	\$ 132,569	\$ 138,534	\$ 144,768	\$ 151,283	\$ 158,091	\$ 165,205	\$ 172,639	\$ 180,408	\$ 188,526
330	Operational & Maintenance Expenses											
331	008-0393-576.20-01 Veh Ops Inspections	\$ 17,250	\$ 21,750	\$ 22,294	\$ 22,851	\$ 23,422	\$ 24,008	\$ 24,608	\$ 25,223	\$ 25,854	\$ 26,500	\$ 27,163
332	008-0393-576.20-02 Veh Maint Inspections	\$ 4,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
333	008-0393-576.32-01 Inspector Supplies	\$ 425	\$ 425	\$ 436	\$ 447	\$ 458	\$ 469	\$ 481	\$ 493	\$ 505	\$ 518	\$ 531
334	Subtotal	\$ 22,175	\$ 22,175	\$ 22,729	\$ 23,298	\$ 23,880	\$ 24,477	\$ 25,089	\$ 25,716	\$ 26,359	\$ 27,018	\$ 27,694
335	Total - Inspections	\$ 143,655	\$ 149,035	\$ 155,298	\$ 161,832	\$ 168,648	\$ 175,760	\$ 183,180	\$ 190,921	\$ 198,998	\$ 207,426	\$ 216,220
336	General Engineering											
337	Personal Services											
338	008-0393-578.06-01 Casual&Contract Labor-Eng	\$ 3,000	\$ 3,000	\$ 3,135	\$ 3,276	\$ 3,423	\$ 3,578	\$ 3,739	\$ 3,907	\$ 4,083	\$ 4,266	\$ 4,458
339	Subtotal	\$ 3,000	\$ 3,000	\$ 3,135	\$ 3,276	\$ 3,423	\$ 3,578	\$ 3,739	\$ 3,907	\$ 4,083	\$ 4,266	\$ 4,458

WATER & SEWER RATE STUDY

APPENDIX A

Schedule 5 – Operating Expenditures

Expense Item	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
340 Operational & Maintenance Expenses											
341 008-0393-578.20-01 Vehicle Operation-Eng	\$ 5,900	\$ 5,500	\$ 5,638	\$ 5,778	\$ 5,923	\$ 6,071	\$ 6,223	\$ 6,378	\$ 6,538	\$ 6,701	\$ 6,869
342 008-0393-578.20-02 Vehicle Maintenance-Eng	\$ 1,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
343 008-0393-578.32-01 Office Supplies-Eng	\$ 9,000	\$ 9,000	\$ 9,225	\$ 9,456	\$ 9,692	\$ 9,934	\$ 10,183	\$ 10,437	\$ 10,698	\$ 10,966	\$ 11,240
344 008-0393-578.32-02 Office Printing-Eng	\$ 700	\$ 500	\$ 513	\$ 525	\$ 538	\$ 552	\$ 566	\$ 580	\$ 594	\$ 609	\$ 624
345 008-0393-578.36-01 Inspec Prof Svcs	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
346 008-0393-578.38-01 Miss Utilitiy Svcs.-Eng	\$ 7,000	\$ 7,000	\$ 7,175	\$ 7,354	\$ 7,538	\$ 7,727	\$ 7,920	\$ 8,118	\$ 8,321	\$ 8,529	\$ 8,742
347 008-0393-578.40-01 Power-Bldg.Util-Eng	\$ 6,300	\$ 6,000	\$ 6,300	\$ 6,615	\$ 6,946	\$ 7,293	\$ 7,658	\$ 8,041	\$ 8,443	\$ 8,865	\$ 9,308
348 008-0393-578.40-02 Phone/Fax-Bldg.Util-Eng	\$ 5,400	\$ 4,800	\$ 4,968	\$ 5,142	\$ 5,322	\$ 5,508	\$ 5,701	\$ 5,900	\$ 6,107	\$ 6,321	\$ 6,542
349 008-0393-578.40-03 Waste Mgmt-Bldg.Util-Eng	\$ 1,000	\$ 1,000	\$ 1,025	\$ 1,051	\$ 1,077	\$ 1,104	\$ 1,131	\$ 1,160	\$ 1,189	\$ 1,218	\$ 1,249
350 008-0393-578.40-04 Cable-Bldg.Util-Eng	\$ 2,000	\$ 1,600	\$ 1,640	\$ 1,681	\$ 1,723	\$ 1,766	\$ 1,810	\$ 1,856	\$ 1,902	\$ 1,949	\$ 1,998
351 008-0393-578.40-05 Off.Fuel-Bldg.Util-Eng	\$ 1,000	\$ 1,000	\$ 1,050	\$ 1,103	\$ 1,158	\$ 1,216	\$ 1,276	\$ 1,340	\$ 1,407	\$ 1,477	\$ 1,551
352 008-0393-578.40-06 Cleaning-Bldg.Util-Eng	\$ 2,000	\$ 3,000	\$ 3,075	\$ 3,152	\$ 3,231	\$ 3,311	\$ 3,394	\$ 3,479	\$ 3,566	\$ 3,655	\$ 3,747
353 008-0393-578.42-01 Mileage-Eng	\$ 400	\$ 300	\$ 308	\$ 315	\$ 323	\$ 331	\$ 339	\$ 348	\$ 357	\$ 366	\$ 375
354 008-0393-578.42-02 Staff Development - Eng	\$ 4,110	\$ 4,807	\$ 4,927	\$ 5,050	\$ 5,177	\$ 5,306	\$ 5,439	\$ 5,575	\$ 5,714	\$ 5,857	\$ 6,003
355 008-0393-578.42-03 Uniforms-Eng	\$ 2,310	\$ 3,200	\$ 3,280	\$ 3,362	\$ 3,446	\$ 3,532	\$ 3,621	\$ 3,711	\$ 3,804	\$ 3,899	\$ 3,996
356 008-0393-578.42-05 Physicals-Eng	\$ 700	\$ 500	\$ 513	\$ 525	\$ 538	\$ 552	\$ 566	\$ 580	\$ 594	\$ 609	\$ 624
357 008-0393-578.42-12 Training-Overnight Travel	\$ 5,700	\$ 4,900	\$ 5,023	\$ 5,148	\$ 5,277	\$ 5,409	\$ 5,544	\$ 5,682	\$ 5,825	\$ 5,970	\$ 6,119
358 008-0393-578.46-01 Misc.Expense-Eng	\$ 1,000	\$ 500	\$ 513	\$ 525	\$ 538	\$ 552	\$ 566	\$ 580	\$ 594	\$ 609	\$ 624
359 008-0393-578.50-01 Recv'y of Cost-Eng	\$ (301,800)	\$ (337,213)	\$ (345,643)	\$ (354,284)	\$ (363,141)	\$ (372,220)	\$ (381,525)	\$ (391,064)	\$ (400,840)	\$ (410,861)	\$ (421,133)
360 Subtotal	\$ (235,680)	\$ (283,606)	\$ (290,473)	\$ (297,501)	\$ (304,695)	\$ (312,056)	\$ (319,590)	\$ (327,299)	\$ (335,188)	\$ (343,261)	\$ (351,520)
361 Total - General Engineering	\$ (232,680)	\$ (280,606)	\$ (287,338)	\$ (294,225)	\$ (301,271)	\$ (308,479)	\$ (315,851)	\$ (323,392)	\$ (331,106)	\$ (338,994)	\$ (347,062)
362 Total - Engineering	\$ 628,542	\$ 721,198	\$ 755,649	\$ 791,734	\$ 829,530	\$ 869,116	\$ 910,576	\$ 953,996	\$ 999,468	\$ 1,047,086	\$ 1,096,950
363 Inspection Overhead											
364 Operational & Maintenance Expenses											
365 Inspection Overhead	\$ 85,036	\$ 114,174	\$ 117,028	\$ 119,954	\$ 122,953	\$ 126,027	\$ 129,177	\$ 132,407	\$ 135,717	\$ 139,110	\$ 142,588
366 Total - Inspection Overhead	\$ 85,036	\$ 114,174	\$ 117,028	\$ 119,954	\$ 122,953	\$ 126,027	\$ 129,177	\$ 132,407	\$ 135,717	\$ 139,110	\$ 142,588
367 Transfers Out											
368 Capital Funding Transfer from Operations	\$ 181,825	\$ 4,000	\$ 46,769	\$ 93,984	\$ 77,717	\$ 104,770	\$ 125,118	\$ 136,268	\$ 157,633	\$ 176,778	\$ 195,125
369 Total - Transfer Out	\$ 181,825	\$ 4,000	\$ 46,769	\$ 93,984	\$ 77,717	\$ 104,770	\$ 125,118	\$ 136,268	\$ 157,633	\$ 176,778	\$ 195,125
370 Personal Services	\$ 8,372,615	\$ 8,714,454	\$ 9,132,543	\$ 9,572,496	\$ 10,035,554	\$ 10,523,034	\$ 11,036,336	\$ 11,576,945	\$ 12,146,443	\$ 12,746,508	\$ 13,378,927
371 Variable Operational & Maintenance Expenses	\$ 1,610,047	\$ 1,791,650	\$ 1,877,889	\$ 1,968,356	\$ 2,063,261	\$ 2,162,823	\$ 2,267,273	\$ 2,376,854	\$ 2,491,819	\$ 2,612,435	\$ 2,738,982
372 Fixed Operational & Maintenance Expenses	\$ 3,476,078	\$ 3,448,082	\$ 3,530,414	\$ 3,614,981	\$ 3,701,850	\$ 3,791,092	\$ 3,882,780	\$ 3,976,986	\$ 4,073,790	\$ 4,173,272	\$ 4,275,512
373 Transfers Out	\$ 181,825	\$ 4,000	\$ 46,769	\$ 93,984	\$ 77,717	\$ 104,770	\$ 125,118	\$ 136,268	\$ 157,633	\$ 176,778	\$ 195,125
374 Personal Services (1)	100%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
375 Variable Operational & Maintenance Expenses (1)	100%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
376 Fixed Operational & Maintenance Expenses (1)	100%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
377 Transfers Out	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
378 Personal Services	\$ 8,372,615	\$ 8,540,165	\$ 8,949,892	\$ 9,381,046	\$ 9,834,843	\$ 10,312,574	\$ 10,815,609	\$ 11,345,406	\$ 11,903,514	\$ 12,491,578	\$ 13,111,348
379 Variable Operational & Maintenance Expenses	\$ 1,610,047	\$ 1,755,817	\$ 1,840,331	\$ 1,928,989	\$ 2,021,995	\$ 2,119,566	\$ 2,221,928	\$ 2,329,316	\$ 2,441,982	\$ 2,560,186	\$ 2,684,203
380 Fixed Operational & Maintenance Expenses	\$ 3,476,078	\$ 3,379,120	\$ 3,459,805	\$ 3,542,681	\$ 3,627,813	\$ 3,715,271	\$ 3,805,124	\$ 3,897,447	\$ 3,992,315	\$ 4,089,806	\$ 4,190,002
381 Transfers Out	\$ 181,825	\$ 4,000	\$ 46,769	\$ 93,984	\$ 77,717	\$ 104,770	\$ 125,118	\$ 136,268	\$ 157,633	\$ 176,778	\$ 195,125
382 Total	\$ 13,640,565	\$ 13,679,102	\$ 14,296,798	\$ 14,946,701	\$ 15,562,368	\$ 16,252,180	\$ 16,967,779	\$ 17,708,438	\$ 18,495,444	\$ 19,318,348	\$ 20,180,679

(1) Execution rates in FY 2015 and forward are based on an analysis of historical budget execution

WATER & SEWER RATE STUDY

APPENDIX A

Schedule 6 – Operating Revenues

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
1 Rate Revenue Growth Assumptions											
2 Water Growth											
3 Growth in Accts & Use	N/A	0.88%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%
4 Sewer Growth											
5 Growth in Accts & Use	N/A	0.00%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%
6 Assumed Rate Revenue Increases											
7 Assumed Water Rate Increase	N/A	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
8 Assumed Sewer Rate Increase (1)	N/A	3.67%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%
9 Water Revenue											
10 Non-Metered Water Revenue	\$ 245,392	\$ 247,551	\$ 257,502	\$ 267,853	\$ 278,620	\$ 289,820	\$ 301,470	\$ 313,589	\$ 326,195	\$ 339,307	\$ 352,946
11 Metered Water Rate Revenue											
12 Base Facility Charges	\$ 3,146,653	\$ 3,174,337	\$ 3,301,939	\$ 3,434,670	\$ 3,572,737	\$ 3,716,354	\$ 3,865,744	\$ 4,021,140	\$ 4,182,781	\$ 4,350,921	\$ 4,525,819
13 Usage Charges	\$ 1,295,028	\$ 1,307,978	\$ 1,356,608	\$ 1,407,045	\$ 1,459,358	\$ 1,513,616	\$ 1,569,890	\$ 1,628,257	\$ 1,688,795	\$ 1,751,582	\$ 1,816,705
14 Ready-to-Serve-Lrg. W.Mtrs	\$ 76,500	\$ 77,500	\$ 77,500	\$ 77,500	\$ 77,500	\$ 77,500	\$ 77,500	\$ 77,500	\$ 77,500	\$ 77,500	\$ 77,500
15 Water Tower Rental Fees	\$ 157,700	\$ 163,223	\$ 163,223	\$ 163,223	\$ 163,223	\$ 163,223	\$ 163,223	\$ 163,223	\$ 163,223	\$ 163,223	\$ 163,223
16 Cut-on Cut-Off Fees	\$ 55,525	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
17 Total Water Revenue	\$ 4,976,798	\$ 5,020,589	\$ 5,206,772	\$ 5,400,292	\$ 5,601,438	\$ 5,810,513	\$ 6,027,828	\$ 6,253,709	\$ 6,488,494	\$ 6,732,533	\$ 6,986,194
18 Sewer Rate Revenue											
19 Non-Metered Sewer Revenue	\$ 7,130,650	\$ 7,392,345	\$ 7,745,494	\$ 8,115,514	\$ 8,503,211	\$ 8,909,428	\$ 9,335,052	\$ 9,781,009	\$10,248,270	\$10,737,853	\$11,250,825
20 Metered Sewer Rate Revenue											
21 Base Facility Charges	\$ 200,297	\$ 207,648	\$ 217,568	\$ 227,962	\$ 238,852	\$ 250,263	\$ 262,218	\$ 274,745	\$ 287,870	\$ 301,622	\$ 316,032
22 Usage Charges	\$ 736,170	\$ 760,386	\$ 769,278	\$ 795,133	\$ 821,857	\$ 849,479	\$ 878,030	\$ 907,540	\$ 938,042	\$ 969,569	\$ 1,002,155
23 Navy Use	\$ 537,289	\$ 514,405	\$ 544,969	\$ 569,320	\$ 594,858	\$ 621,649	\$ 649,761	\$ 679,265	\$ 710,237	\$ 742,759	\$ 776,917
24 Septage Haulers Revenue	\$ 139,000	\$ 139,000	\$ 139,000	\$ 139,000	\$ 139,000	\$ 139,000	\$ 139,000	\$ 139,000	\$ 139,000	\$ 139,000	\$ 139,000
25 Other Income-Sewer	\$ 53,700	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
26 Total Sewer Rate Revenue	\$ 8,797,107	\$ 9,053,784	\$ 9,456,310	\$ 9,886,929	\$10,337,778	\$10,809,820	\$11,304,061	\$11,821,558	\$12,363,419	\$12,930,804	\$13,524,928
27 Engineering Revenue											
28 REC Review/Concept Plan	\$ 115,000	\$ 102,617	\$ 102,617	\$ 102,617	\$ 102,617	\$ 102,617	\$ 102,617	\$ 102,617	\$ 102,617	\$ 102,617	\$ 102,617
29 Water Inspection for CO	\$ 250,000	\$ 199,414	\$ 199,414	\$ 199,414	\$ 199,414	\$ 199,414	\$ 199,414	\$ 199,414	\$ 199,414	\$ 199,414	\$ 199,414
30 Request for Info/Copies	\$ 45,000	\$ 32,787	\$ 32,787	\$ 32,787	\$ 32,787	\$ 32,787	\$ 32,787	\$ 32,787	\$ 32,787	\$ 32,787	\$ 32,787
31 Total Reclaimed Water Rate Revenue	\$ 410,000	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818
32 Other Operating Revenue											
33 Late Charge Income	\$ 101,000	\$ 135,000	\$ 135,000	\$ 135,000	\$ 135,000	\$ 135,000	\$ 135,000	\$ 135,000	\$ 135,000	\$ 135,000	\$ 135,000
34 Misc Income	\$ 5,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
35 Meters to Developers	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
36 Meter Installation Expense	\$ (30,000)	\$ (40,000)	\$ (40,000)	\$ (40,000)	\$ (40,000)	\$ (40,000)	\$ (40,000)	\$ (40,000)	\$ (40,000)	\$ (40,000)	\$ (40,000)
37 Total Other Operating Revenue	\$ 111,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000
38 Non-Operating Revenues											
39 Interest Income	\$ 16,867	\$ 18,774	\$ 41,802	\$ 69,068	\$ 100,925	\$ 165,571	\$ 240,946	\$ 262,082	\$ 283,567	\$ 305,267	\$ 327,141
40 Total Non-Operating Revenues	\$ 16,867	\$ 18,774	\$ 41,802	\$ 69,068	\$ 100,925	\$ 165,571	\$ 240,946	\$ 262,082	\$ 283,567	\$ 305,267	\$ 327,141
41 Total Revenue	\$14,311,772	\$14,532,965	\$15,144,702	\$15,796,106	\$16,479,960	\$17,225,722	\$18,012,653	\$18,777,167	\$19,575,298	\$20,408,422	\$21,278,082

(1) Fiscal year 2015 sewer rate increase was approved prior to this rate study

WATER & SEWER RATE STUDY

APPENDIX A

Schedule 7 – Sewer Wholesale Rate Analysis (Navy Rate)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Sewer Cost	\$ 8,126,759	\$ 8,561,473	\$ 8,942,536	\$ 9,342,106	\$ 9,761,176	\$ 10,200,797	\$ 10,662,086	\$ 11,146,222	\$ 11,654,459	\$ 12,188,122	\$ 12,748,619
Marley-Taylor Percent of Budget	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%
Marley-Taylor Portion of Sewer Budget	\$ 3,663,896	\$ 3,859,883	\$ 4,031,684	\$ 4,211,827	\$ 4,400,762	\$ 4,598,962	\$ 4,806,931	\$ 5,025,201	\$ 5,254,336	\$ 5,494,934	\$ 5,747,631
Non Navy Volume	1,313,283	1,316,805	1,316,805	1,316,805	1,316,805	1,316,805	1,316,805	1,316,805	1,316,805	1,316,805	1,316,805
Calculated Cost of Service	\$ 2.79	\$ 2.93	\$ 3.06	\$ 3.20	\$ 3.34	\$ 3.49	\$ 3.65	\$ 3.82	\$ 3.99	\$ 4.17	\$ 4.36
Current Navy Rate	\$ 2.89	\$ 2.89	\$ 2.89	\$ 2.89	\$ 2.89	\$ 2.89	\$ 2.89	\$ 2.89	\$ 2.89	\$ 2.89	\$ 2.89
New Navy Rate	\$ 2.89	\$ 2.89	\$ 3.06	\$ 3.20	\$ 3.34	\$ 3.49	\$ 3.65	\$ 3.82	\$ 3.99	\$ 4.17	\$ 4.36
Percentage Increase		0.0%	5.9%	4.5%	4.5%	4.5%	4.5%	4.5%	4.6%	4.6%	4.6%
Navy Volume (1,000 Gal)	185,913	177,995	177,995	177,995	177,995	177,995	177,995	177,995	177,995	177,995	177,995
Navy Revenue	\$ 537,289	\$ 514,405	\$ 544,969	\$ 569,320	\$ 594,858	\$ 621,649	\$ 649,761	\$ 679,265	\$ 710,237	\$ 742,759	\$ 776,917

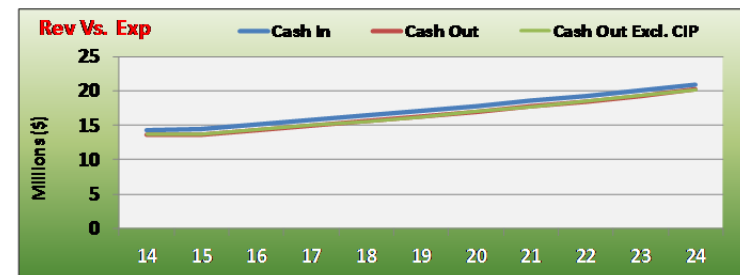
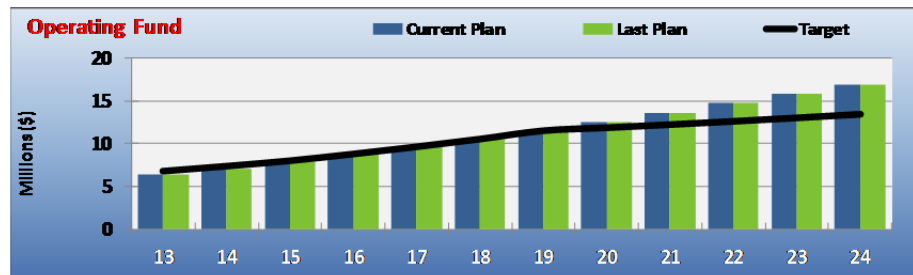
WATER & SEWER RATE STUDY

APPENDIX A

Schedule 8 – Cost of Service Allocation

Expenses	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Administration	\$ 5,375,397	\$ 5,416,876	\$ 5,668,348	\$ 5,933,788	\$ 6,214,070	\$ 6,510,131	\$ 6,822,971	\$ 7,153,659	\$ 7,503,340	\$ 7,873,235	\$ 8,264,655
Engineering	\$ 628,542	\$ 721,198	\$ 755,649	\$ 791,734	\$ 829,530	\$ 869,116	\$ 910,576	\$ 953,996	\$ 999,468	\$ 1,047,086	\$ 1,096,950
- Depreciation	\$ (66,000)	\$ (65,000)	\$ (65,650)	\$ (66,307)	\$ (66,970)	\$ (67,639)	\$ (68,316)	\$ (68,999)	\$ (69,689)	\$ (70,386)	\$ (71,090)
Engineering (Min Dep.)	\$ 562,542	\$ 656,198	\$ 689,999	\$ 725,427	\$ 762,560	\$ 801,477	\$ 842,260	\$ 884,997	\$ 929,779	\$ 976,700	\$ 1,025,861
Engineering G&A	\$ 593,981	\$ 450,619	\$ 476,092	\$ 503,081	\$ 531,685	\$ 562,008	\$ 594,163	\$ 628,271	\$ 664,461	\$ 702,871	\$ 743,649
Engineering G&A %	11%	8%	8%	8%	9%	9%	9%	9%	9%	9%	9%
+ Depreciation	\$ 66,000	\$ 65,000	\$ 65,650	\$ 66,307	\$ 66,970	\$ 67,639	\$ 68,316	\$ 68,999	\$ 69,689	\$ 70,386	\$ 71,090
Engineering Revenue	\$ 410,000	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818	\$ 334,818
Total Engineering Exp.	\$ 812,523	\$ 836,999	\$ 896,923	\$ 959,997	\$ 1,026,397	\$ 1,096,306	\$ 1,169,921	\$ 1,247,449	\$ 1,329,111	\$ 1,415,139	\$ 1,505,781
Sewer	\$ 4,750,230	\$ 4,981,932	\$ 5,177,922	\$ 5,382,293	\$ 5,595,417	\$ 5,817,687	\$ 6,049,513	\$ 6,291,321	\$ 6,543,560	\$ 6,806,699	\$ 7,081,227
- Depreciation	\$ (240,000)	\$ (240,000)	\$ (242,400)	\$ (244,824)	\$ (247,272)	\$ (249,745)	\$ (252,242)	\$ (254,765)	\$ (257,312)	\$ (259,886)	\$ (262,484)
Sewer (Min Dep.)	\$ 4,510,230	\$ 4,741,932	\$ 4,935,522	\$ 5,137,469	\$ 5,348,145	\$ 5,567,942	\$ 5,797,270	\$ 6,036,556	\$ 6,286,248	\$ 6,546,813	\$ 6,818,743
Sewer G&A	\$ 3,081,715	\$ 3,256,341	\$ 3,405,460	\$ 3,562,815	\$ 3,728,920	\$ 3,904,326	\$ 4,089,620	\$ 4,285,432	\$ 4,492,432	\$ 4,711,339	\$ 4,942,924
Sewer G&A %	57%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
+ Depreciation	\$ 240,000	\$ 240,000	\$ 242,400	\$ 244,824	\$ 247,272	\$ 249,745	\$ 252,242	\$ 254,765	\$ 257,312	\$ 259,886	\$ 262,484
Eng. Allocation	\$ 487,514	\$ 502,199	\$ 538,154	\$ 575,998	\$ 615,838	\$ 657,784	\$ 701,953	\$ 748,470	\$ 797,467	\$ 849,083	\$ 903,469
Eng. Allocation %	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
Total Sewer Exp.	\$ 8,319,459	\$ 8,740,473	\$ 9,121,536	\$ 9,521,106	\$ 9,940,176	\$ 10,379,797	\$ 10,841,086	\$ 11,325,222	\$ 11,833,459	\$ 12,367,122	\$ 12,927,619
Sewer Revenue	\$ 8,760,522	\$ 8,791,086	\$ 9,167,825	\$ 9,585,041	\$ 10,021,867	\$ 10,479,236	\$ 10,958,125	\$ 11,459,560	\$ 11,984,615	\$ 12,534,417	\$ 12,118,346
Cost Recovery	105.3%	100.6%	100.5%	100.7%	100.8%	101.0%	101.1%	101.2%	101.3%	101.4%	93.7%
Water	\$ 2,619,535	\$ 2,720,005	\$ 2,821,898	\$ 2,928,064	\$ 3,038,695	\$ 3,153,989	\$ 3,274,152	\$ 3,399,403	\$ 3,529,968	\$ 3,666,085	\$ 3,808,002
- Depreciation	\$ (220,000)	\$ (230,000)	\$ (232,300)	\$ (234,623)	\$ (236,969)	\$ (239,339)	\$ (241,732)	\$ (244,150)	\$ (246,591)	\$ (249,057)	\$ (251,548)
Water (Min Dep.)	\$ 2,399,535	\$ 2,490,005	\$ 2,589,598	\$ 2,693,441	\$ 2,801,726	\$ 2,914,650	\$ 3,032,420	\$ 3,155,253	\$ 3,283,376	\$ 3,417,027	\$ 3,556,454
Water G&A	\$ 1,699,701	\$ 1,709,916	\$ 1,786,796	\$ 1,867,891	\$ 1,953,465	\$ 2,043,797	\$ 2,139,187	\$ 2,239,956	\$ 2,346,447	\$ 2,459,025	\$ 2,578,083
Water G&A %	32%	32%	32%	31%	31%	31%	31%	31%	31%	31%	31%
+ Depreciation	\$ 220,000	\$ 230,000	\$ 232,300	\$ 234,623	\$ 236,969	\$ 239,339	\$ 241,732	\$ 244,150	\$ 246,591	\$ 249,057	\$ 251,548
Eng. Allocation	\$ 325,009	\$ 334,800	\$ 358,769	\$ 383,999	\$ 410,559	\$ 438,522	\$ 467,968	\$ 498,980	\$ 531,644	\$ 566,056	\$ 602,312
Eng. Allocation %	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
Total Water Exp.	\$ 4,644,245	\$ 4,764,721	\$ 4,967,463	\$ 5,179,955	\$ 5,402,719	\$ 5,636,308	\$ 5,881,307	\$ 6,138,338	\$ 6,408,058	\$ 6,691,165	\$ 6,988,397
Water Revenue	\$ 4,976,798	\$ 5,020,589	\$ 5,067,549	\$ 5,255,580	\$ 5,451,021	\$ 5,654,164	\$ 5,865,314	\$ 6,084,787	\$ 6,312,910	\$ 6,550,025	\$ 6,796,487
Cost Recovery	107.2%	105.4%	102.0%	101.5%	100.9%	100.3%	99.7%	99.1%	98.5%	97.9%	97.3%
Total EXP	\$ 12,963,704	\$ 13,505,193	\$ 14,088,999	\$ 14,701,061	\$ 15,342,894	\$ 16,016,105	\$ 16,722,393	\$ 17,463,561	\$ 18,241,517	\$ 19,058,287	\$ 19,916,016
Sewer Deficit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (809,273)
Water Deficit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (15,993)	\$ (53,552)	\$ (95,149)	\$ (141,140)	\$ (191,910)
Total Deficit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (15,993)	\$ (53,552)	\$ (95,149)	\$ (141,140)	\$ (1,001,183)
Sewer Allocation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	81%
Water Allocation	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	19%

FINANCIAL ANALYSIS AND MANAGEMENT SYSTEM (FAMS) SUMMARY																	
SAVE	CALC	ROLL		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Cumulative Change		
Override ▶					0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%		FY 2019	FY 2024
Water Rate Increases					0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%		0.00%	0.00%
Last Plan					0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%		0.00%	0.00%
Override ▶					3.67%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%		PS FY15 ▶	98.0%
Sewer Rate Increases					0.00%	3.67%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%		OMV FY15 ▶	98.0%
Last Plan					0.00%	3.67%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%		OMF FY15 ▶	98.0%
Operating Reserve Mo ▶					3.5	4.0	4.5	5.0	5.5	6.0	6.0	6.0	6.0	6.0	Misc Rev.		
Capital Reserve \$ ▶					\$3.5	\$3.5	\$3.5	\$3.5	\$3.5	\$3.5	\$3.5	\$3.5	\$3.5	\$3.5			
Water																	
Metered Rate-Monthly	\$18.42			\$18.42	18.42	18.97	19.54	20.13	20.73	21.35	21.99	22.65	23.33	24.03			
Usage Rate	\$3.07			\$3.07	3.07	3.16	3.25	3.35	3.45	3.55	3.66	3.77	3.88	4.00			
Non-Metered Rate per EDU	\$23.03			\$23.03	23.03	23.72	24.43	25.16	25.91	26.69	27.49	28.31	29.16	30.03			
Hydrant Meter Charge	\$6.14			\$6.14	6.14	6.32	6.51	6.71	6.91	7.12	7.33	7.55	7.78	8.01			
Sewer																	
Metered Rate-Monthly	\$29.48			\$29.48	30.56	31.71	32.90	34.13	35.41	36.74	38.12	39.55	41.03	42.57			
Usage Rate	\$5.46			\$5.46	5.66	5.87	6.09	6.32	6.56	6.81	7.07	7.34	7.62	7.91			
Non-Metered Rate per EDU	\$34.56			\$34.56	35.83	37.17	38.56	40.01	41.51	43.07	44.69	46.37	48.11	49.91			
Navy Rate	\$2.89			\$2.89	2.89	3.06	3.20	3.34	3.49	3.65	3.82	3.99	4.17	4.36			
															Check	\$	-
Water		\$18.42		\$18.42	\$18.42	\$18.97	\$19.54	\$20.13	\$20.73	\$21.35	\$21.99	\$22.65	\$23.33	\$24.03			
Sewer		\$34.94		\$34.94	\$36.22	\$37.58	\$38.99	\$40.45	\$41.97	\$43.55	\$45.19	\$46.89	\$48.65	\$50.48			
Average Bill (6000 gals.)				\$53.36	54.64	56.55	58.53	60.58	62.70	64.90	67.18	69.54	71.98	74.51			
Last Plan				\$53.36	54.64	56.55	58.53	60.58	62.70	64.90	67.18	69.54	71.98	74.51			



WATER & SEWER RATE STUDY

APPENDIX A

Schedule 10 – Pro Forma

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
1 Total Rate Revenue											
2 Water And Sewer Rate Revenue	\$ 12,754,190	12,754,190	13,090,246	13,648,389	14,248,178	14,874,635	15,528,960	16,212,405	16,926,280	17,671,952	18,450,855
3 Additional Rate Revenue From Partial Py Rate Increase	\$ -	-	-	-	-	-	-	-	-	-	-
4 Additional Revenue From Growth	\$ -	42,793	106,085	127,650	133,338	139,281	145,491	151,981	158,763	165,849	173,255
5 Weather Normalization And Other Adjustments	\$ -	-	-	-	-	-	-	-	-	-	-
6 Subtotal: Base Revenue With Growth	\$ 12,754,190	12,796,983	13,196,331	13,776,040	14,381,516	15,013,916	15,674,452	16,364,386	17,085,042	17,837,802	18,624,110
7 Weighted Average Rate Increase	0.0%	2.3%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
8 Additional Rate Revenue From Rate Increase	\$ -	296,063	459,036	479,365	500,605	522,796	545,983	570,209	595,523	621,973	649,611
9 Price Elasticity Adjustment	\$ -	(2,801)	(6,978)	(7,227)	(7,485)	(7,752)	(8,029)	(8,316)	(8,613)	(8,920)	(9,239)
10 Total Rate Revenue	\$ 12,754,190	13,090,246	13,648,389	14,248,178	14,874,635	15,528,960	16,212,405	16,926,280	17,671,952	18,450,855	19,264,482
11 Plus: Other Operating Revenue	\$ 1,540,714	1,423,946	1,454,510	1,478,861	1,504,399	1,531,190	1,559,302	1,588,806	1,619,778	1,652,300	1,686,458
12 Equals: Total Operating Revenue	\$ 14,294,905	14,514,191	15,102,900	15,727,039	16,379,035	17,060,151	17,771,707	18,515,085	19,291,731	20,103,155	20,950,940
13 Less: Operating Expenses											
14 Personal Services	\$ (8,372,615)	(8,540,165)	(8,949,892)	(9,381,046)	(9,834,843)	(10,312,574)	(10,815,609)	(11,345,406)	(11,903,514)	(12,491,578)	(13,111,348)
15 Variable O&M	\$ (1,610,047)	(1,755,817)	(1,840,331)	(1,928,989)	(2,021,995)	(2,119,566)	(2,221,928)	(2,329,316)	(2,441,982)	(2,560,186)	(2,684,203)
16 Fixed O&M	\$ (3,476,078)	(3,379,120)	(3,459,805)	(3,542,681)	(3,627,813)	(3,715,271)	(3,805,124)	(3,897,447)	(3,992,315)	(4,089,806)	(4,190,002)
17 Equals: Net Operating Income	\$ 836,165	\$ 839,090	\$ 852,871	\$ 874,322	\$ 894,383	\$ 912,740	\$ 929,047	\$ 942,916	\$ 953,920	\$ 961,585	\$ 965,387
18 Plus: Non-Operating Income/(Expense)											
19 Non-Operating Revenue	\$ -	-	-	-	-	-	-	-	-	-	-
20 Interest Income	\$ 16,867	18,774	41,802	69,068	100,925	165,571	240,946	262,082	283,567	305,267	327,141
21 Transfer In	\$ -	-	-	-	-	-	-	-	-	-	-
22 Equals: Net Income	\$ 853,032	\$ 857,863	\$ 894,673	\$ 943,390	\$ 995,308	\$ 1,078,311	\$ 1,169,992	\$ 1,204,997	\$ 1,237,487	\$ 1,266,851	\$ 1,292,528
23 Less: Revenues Excluded From Coverage Test											
24 Transfers In	\$ -	-	-	-	-	-	-	-	-	-	-
25 Equals: Net Income Available For Debt Service	\$ 853,032	\$ 857,863	\$ 894,673	\$ 943,390	\$ 995,308	\$ 1,078,311	\$ 1,169,992	\$ 1,204,997	\$ 1,237,487	\$ 1,266,851	\$ 1,292,528
26 Cash Flow Test											
27 Net Income Available	\$ 853,032	\$ 857,863	\$ 894,673	\$ 943,390	\$ 995,308	\$ 1,078,311	\$ 1,169,992	\$ 1,204,997	\$ 1,237,487	\$ 1,266,851	\$ 1,292,528
28 Less: Non-Operating Expenditures	\$ -	-	-	-	-	-	-	-	-	-	-
29 Net Interfund Transfers (In - Out)	\$ (181,825)	(4,000)	(46,769)	(93,984)	(77,717)	(104,770)	(125,118)	(136,268)	(157,633)	(176,778)	(195,125)
30 Capital Outlay	\$ -	-	-	-	-	-	-	-	-	-	-
31 Net Cash Flow	\$ 671,207	\$ 853,863	\$ 847,903	\$ 849,406	\$ 917,591	\$ 973,542	\$ 1,044,874	\$ 1,068,729	\$ 1,079,854	\$ 1,090,074	\$ 1,097,403
32 Unrestricted Reserve Fund Test											
33 Balance At Beginning Of Fiscal Year	\$ 6,411,329	\$ 7,082,536	\$ 7,936,400	\$ 8,784,303	\$ 9,633,709	\$ 10,551,300	\$ 11,524,842	\$ 12,569,716	\$ 13,638,445	\$ 14,718,299	\$ 15,808,373
34 Cash Flow Surplus/(Deficit)	\$ 671,207	\$ 853,863	\$ 847,903	\$ 849,406	\$ 917,591	\$ 973,542	\$ 1,044,874	\$ 1,068,729	\$ 1,079,854	\$ 1,090,074	\$ 1,097,403
35 Reserve Fund Balance Used For Cash Flow Deficit	\$ -	-	-	-	-	-	-	-	-	-	-
36 Projects Designated To Be Paid With Cash	\$ -	-	-	-	-	-	-	-	-	-	-
37 Projects Paid With Reserve Funds (Non Specified Funds)	\$ -	-	-	-	-	-	-	-	-	-	-
38 Balance At End Of Fiscal Year	\$ 7,082,536	7,936,400	8,784,303	9,633,709	10,551,300	11,524,842	12,569,716	13,638,445	14,718,299	15,808,373	16,905,776
39 Minimum Working Capital Reserve Target	\$ 7,410,466	8,043,367	8,828,761	9,673,632	10,582,132	11,558,705	11,906,330	12,271,085	12,653,905	13,055,785	13,477,777
40 Excess/(Deficiency) Of Working Capital To Target	\$ (327,930)	\$ (106,968)	\$ (44,458)	\$ (39,923)	\$ (30,832)	\$ (33,864)	\$ 663,385	\$ 1,367,360	\$ 2,064,393	\$ 2,752,588	\$ 3,427,999

WATER & SEWER RATE STUDY

APPENDIX A

Schedule 11 – Funding Summary

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
1 CAPITAL FUNDING ACCOUNT											
2 Balance At Beginning Of Fiscal Year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3 Additional Annual Revenues	812,825	664,000	713,369	767,250	757,715	791,568	818,785	836,872	865,242	891,463	916,957
4 Less: Payment Of Debt Service	-	-	-	-	-	-	-	-	-	-	-
5 Subtotal	812,825	664,000	713,369	767,250	757,715	791,568	818,785	836,872	865,242	891,463	916,957
6 Less: Restricted Funds	-	-	-	-	-	-	-	-	-	-	-
7 Total Amount Available For Projects	812,825	664,000	713,369	767,250	757,715	791,568	818,785	836,872	865,242	891,463	916,957
8 Amount Paid For Projects	(812,825)	(664,000)	(713,369)	(767,250)	(757,715)	(791,568)	(818,785)	(836,872)	(865,242)	(891,463)	(916,957)
9 Subtotal	-	-	-	-	-	-	-	-	-	-	-
10 Add Back: Restricted Funds	-	-	-	-	-	-	-	-	-	-	-
11 Plus: Interest Earnings	-	-	-	-	-	-	-	-	-	-	-
12 Less: Interest Allocated To Cash Flow	-	-	-	-	-	-	-	-	-	-	-
13 Balance At End Of Fiscal Year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14 REVENUE FUND											
15 Additional Annual Revenues	\$ 6,411,329	\$ 7,082,536	\$ 7,936,400	\$ 8,784,303	\$ 9,633,709	\$ 10,551,300	\$ 11,524,842	\$ 12,569,716	\$ 13,638,445	\$ 14,718,299	\$ 15,808,373
16 Less: Cash-Funded Capital Projects	671,207	853,863	847,903	849,406	917,591	973,542	1,044,874	1,068,729	1,079,854	1,090,074	1,097,403
17 Less: Payment Of Debt Service	-	-	-	-	-	-	-	-	-	-	-
18 Subtotal	-	-	-	-	-	-	-	-	-	-	-
19 Less: Restricted Funds	7,082,536	7,936,400	8,784,303	9,633,709	10,551,300	11,524,842	12,569,716	13,638,445	14,718,299	15,808,373	16,905,776
20 Total Amount Available For Projects	(7,082,536)	(7,936,400)	(8,784,303)	(9,633,709)	(10,551,300)	(11,524,842)	(11,906,330)	(12,271,085)	(12,653,905)	(13,055,785)	(13,477,777)
21 Amount Paid For Projects	-	-	-	-	-	-	663,385	1,367,360	2,064,393	2,752,588	3,427,999
22 Subtotal	-	-	-	-	-	-	-	-	-	-	-
23 Add Back: Restricted Funds	-	-	-	-	-	-	663,385	1,367,360	2,064,393	2,752,588	3,427,999
24 Plus: Interest Earnings	7,082,536	7,936,400	8,784,303	9,633,709	10,551,300	11,524,842	11,906,330	12,271,085	12,653,905	13,055,785	13,477,777
25 Less: Interest Allocated To Cash Flow	16,867	18,774	41,802	69,068	100,925	165,571	240,946	262,082	283,567	305,267	327,141
26 Balance At End Of Fiscal Year	\$ (16,867)	\$ (18,774)	\$ (41,802)	\$ (69,068)	\$ (100,925)	\$ (165,571)	\$ (240,946)	\$ (262,082)	\$ (283,567)	\$ (305,267)	\$ (327,141)
27	\$ 7,082,536	\$ 7,936,400	\$ 8,784,303	\$ 9,633,709	\$ 10,551,300	\$ 11,524,842	\$ 12,569,716	\$ 13,638,445	\$ 14,718,299	\$ 15,808,373	\$ 16,905,776

APPENDIX B – RATE STRUCTURE MODIFICATIONS

Supporting Schedules

WATER & SEWER RATE STUDY

Schedule 1 – FY 16 Recommended Rates

APPENDIX B

Water Rates

	Current (FY 15)	Proposed (FY 16)
Non-Metered Rate Per EDU	\$ 23.03	\$ 16.16

Metered Service Charges		Current (FY 15)	Proposed (FY 16)
Fixed Charge	Meter Size	Includes 6,000 Gal.	Readiness-To-Serve Charge
	5/8"	\$ 18.42	\$ 8.51
	1"	\$ 18.42	\$ 21.28
	1.5"	\$ 25.08	\$ 42.55
	2"	\$ 28.42	\$ 68.08
	3"	\$ 38.42	\$ 136.16
	4"	\$ 48.42	\$ 212.75
	6"	\$ 68.42	\$ 425.50
	8"	\$ 88.42	\$ 680.80
	10"	\$ 98.42	\$ 978.65

Usage Charges (per 1,000 Gal.)		Current (FY 15)	Proposed (FY 16)		
Res. & Com.	Meter Size	Consumption Ranges	Tier 1	Tier 2	Tier 3
	5/8"	All Use > 6,000 Gallons	0 - 5,000	5,001 - 20,000	20,000 +
	1"	All Use > 6,000 Gallons	0 - 12,500	12,501 - 50,000	50,000 +
	1.5"	All Use > 6,000 Gallons	0 - 25,000	25,001 - 100,000	100,000 +
	2"	All Use > 6,000 Gallons	0 - 40,000	40,001 - 160,000	160,000 +
	3"	All Use > 6,000 Gallons	0 - 80,000	80,001 - 320,000	320,000 +
	4"	All Use > 6,000 Gallons	0 - 125,000	125,001 - 500,000	500,000 +
	6"	All Use > 6,000 Gallons	0 - 250,000	250,001 - 1,000,000	1,000,000 +
	8"	All Use > 6,000 Gallons	0 - 400,000	400,001 - 1,600,000	1,600,000 +
	10"	All Use > 6,000 Gallons	0 - 575,000	575,001 - 2,300,000	2,300,000 +
	Rate	\$3.14	\$1.53	\$3.06	\$6.12
Hydrant (All Use)	Rate	\$6.28	\$3.06		
Irrigation Meters	Meter Size	Consumption Ranges	Tier 1	Tier 3	
	5/8"	All Use > 6,000 Gallons	0 - 15,000	15,000 +	
	1"	All Use > 6,000 Gallons	0 - 37,500	37,500 +	
	1.5"	All Use > 6,000 Gallons	0 - 75,000	75,000 +	
	2"	All Use > 6,000 Gallons	0 - 120,000	120,000 +	
	3"	All Use > 6,000 Gallons	0 - 240,000	240,000 +	
	4"	All Use > 6,000 Gallons	0 - 375,000	375,000 +	
	6"	All Use > 6,000 Gallons	0 - 750,000	750,000 +	
	8"	All Use > 6,000 Gallons	0 - 1,200,000	1,200,000 +	
	10"	All Use > 6,000 Gallons	0 - 1,725,000	1,725,000 +	
	Rate	\$3.14	\$3.06	\$6.12	

WATER & SEWER RATE STUDY

Schedule 1 – FY 16 Recommended Rates

APPENDIX B

Sewer Rates

	Current (FY 15)	Proposed (FY 16)
Non-Metered Rate Per EDU	\$ 35.83	\$ 36.30

Metered Service Charges		Current (FY 15)	Proposed (FY 16)
<u>Fixed Charge</u>	<u>Meter Size</u>	<u>Includes 5,400 Gal.</u>	<u>Readiness-To-Serve Charge</u>
	5/8"	\$ 30.56	\$ 15.39
	1"	\$ 30.56	\$ 38.48
	1.5"	\$ 30.56	\$ 76.95
	2"	\$ 30.56	\$ 123.12
	3"	\$ 30.56	\$ 246.24
	4"	\$ 30.56	\$ 384.75
	6"	\$ 30.56	\$ 769.50
	8"	\$ 30.56	\$ 1,231.20
	10"	\$ 30.56	\$ 1,769.85
		<u>Use Above 5,400 Gal.</u>	<u>All Metered Use</u>
<u>Usage Charge (per 1,000 Gal.)</u>		\$ 5.66	\$ 4.18
		<u>All Metered Use</u>	<u>All Metered Use</u>
Navy*		\$ 2.89	\$ 3.06

*Dependent upon FY 2016 Budget; FY 2016 rate may vary from amount presented

WATER & SEWER RATE STUDY

Schedule 2 – Single Family Residential Customer Impacts

APPENDIX B

Single Family 5/8" Meter Monthly Water & Sewer Bill Calculations					
<u>Monthly Use (Gal)</u>	<u>Est. % of Bills</u>	<u>Agg. %</u>	<u>FY 14/15</u>	<u>FY 15/16</u>	<u>\$ Chg</u>
0	1.4%	1.4%	\$ 54.25	\$ 23.90	\$ (30.35)
1,000	5.2%	6.6%	\$ 54.25	\$ 29.61	\$ (24.64)
2,000	10.5%	17.0%	\$ 54.25	\$ 35.32	\$ (18.93)
3,000	13.9%	30.9%	\$ 54.25	\$ 41.03	\$ (13.22)
4,000	15.6%	46.5%	\$ 54.25	\$ 46.74	\$ (7.51)
5,000	13.8%	60.3%	\$ 54.25	\$ 52.45	\$ (1.80)
6,000	12.4%	72.7%	\$ 54.25	\$ 59.69	\$ 5.44
7,000	7.7%	80.3%	\$ 57.32	\$ 66.93	\$ 9.61
8,000	5.3%	85.6%	\$ 60.39	\$ 74.17	\$ 13.78
9,000	3.5%	89.2%	\$ 63.46	\$ 81.41	\$ 17.95
10,000	2.5%	91.7%	\$ 66.53	\$ 88.65	\$ 22.12
11,000	1.8%	93.4%	\$ 69.60	\$ 95.89	\$ 26.29
12,000	1.2%	94.7%	\$ 72.67	\$ 103.13	\$ 30.46
13,000	0.9%	95.6%	\$ 75.74	\$ 110.37	\$ 34.63
14,000	0.7%	96.3%	\$ 78.81	\$ 117.61	\$ 38.80
15,000	0.6%	97.0%	\$ 81.88	\$ 124.85	\$ 42.97
16,000	0.5%	97.4%	\$ 84.95	\$ 132.09	\$ 47.14
17,000	0.4%	97.8%	\$ 88.02	\$ 139.33	\$ 51.31
18,000	0.3%	98.2%	\$ 91.09	\$ 146.57	\$ 55.48
19,000	0.3%	98.5%	\$ 94.16	\$ 153.81	\$ 59.65
20,000	0.3%	98.7%	\$ 97.23	\$ 161.05	\$ 63.82
21,000	0.2%	98.9%	\$ 100.30	\$ 171.35	\$ 71.05
22,000	0.2%	99.1%	\$ 103.37	\$ 181.65	\$ 78.28
23,000	0.1%	99.2%	\$ 106.44	\$ 191.95	\$ 85.51
24,000	0.1%	99.3%	\$ 109.51	\$ 202.25	\$ 92.74
25,000	0.1%	99.4%	\$ 112.58	\$ 212.55	\$ 99.97
26,000	0.1%	99.5%	\$ 115.65	\$ 222.85	\$ 107.20
27,000	0.1%	99.6%	\$ 118.72	\$ 233.15	\$ 114.43
28,000	0.0%	99.7%	\$ 121.79	\$ 243.45	\$ 121.66
29,000	0.1%	99.8%	\$ 124.86	\$ 253.75	\$ 128.89
30,000	0.1%	99.8%	\$ 127.93	\$ 264.05	\$ 136.12

WATER & SEWER RATE STUDY

Schedule 3 – Non-Residential Customer Impact Analysis

APPENDIX B

Select Non-Residential Monthly Water & Sewer Bill Calculations					
User	Monthly Use (Gal)	Meter Size	FY 14/15	FY 15/16	\$ Chg
Texas Roadhouse Restaurant	30,000	5/8" & 2"	\$ 153.04	\$ 310.36	\$ 157.32
Lenny's Restaurant	20,000	1"	\$ 163.28	\$ 185.43	\$ 22.15
McDonald's	30,000	1.5"	\$ 251.58	\$ 298.45	\$ 46.87
Great Mills High School	580,000	4"	\$ 4,765.12	\$ 4,850.25	\$ 85.13
Lundeberg MD Seamanship School	2,580,000	2" & 8"	\$ 21,143.11	\$ 22,618.40	\$ 1,475.29
Extended Stay America	120,000	8"	\$ 1,049.68	\$ 2,597.20	\$ 1,547.52
Car Wash	60,000	5/8"	\$ 489.84	\$ 573.05	\$ 83.21
Executive Salons Suites	20,000	1"	\$ 163.28	\$ 185.43	\$ 22.15
5th Exploration Corporate Office	30,000	4"	\$ 274.92	\$ 768.80	\$ 493.88
Food Lion	30,000	6"	\$ 294.92	\$ 1,366.30	\$ 1,071.38
Target	110,000	8"	\$ 968.04	\$ 2,540.10	\$ 1,572.06
BH's Wholesale Club	80,000	2"	\$ 663.12	\$ 709.20	\$ 46.08
Bank Of America	10,000	5/8"	\$ 81.64	\$ 88.65	\$ 7.01

WATER & SEWER RATE STUDY

Schedule 4 – Multi-Family Residential Customer Impact Analysis

APPENDIX B

Select Multi-Family Residential Monthly Water & Sewer Bill Calculations								
User	Monthly Use (Gal)	EDU's	USE Per EDU	Meter Size	FY 14/15	FY 15/16	\$ Chg.	
Green's at Hilton Run	992,050	333	2,979	5/8 & 1.5" (23) & 2" (12)	\$ 15,262.47	\$ 10,841.08	\$ (4,421.40)	
Hickory Hills Townhouses	275,360	171	1,610	1.5" (13)	\$ 7,067.06	\$ 3,152.08	\$ (3,914.99)	
Indian Bridge Apts	249,360	112	2,226	6" (2)	\$ 4,878.50	\$ 3,813.85	\$ (1,064.65)	
Victory Woods	155,610	75	2,075	5/8" & 4"	\$ 3,194.97	\$ 2,103.05	\$ (1,091.92)	
Lex Park Senior Apts	139,790	112	1,248	5/8" & 8"	\$ 4,521.54	\$ 2,734.10	\$ (1,787.44)	

APPENDIX C – MISCELLANEOUS SERVICE CHARGES

Supporting Schedules

Schedule 1 – Miscellaneous Fee Developer Main Menu Screen

BURTON & ASSOCIATES MISCELLANEOUS SERVICE CHARGE DEVELOPER									
St. Mary's Metropolitan Commission									
-- User input in areas shaded light green --									
Basic Instructions ►		Data Tables ►							
Fee/Charge Title				Current Charge	Full Cost Recovery Charge	Current Percent of Cost Recovery	Desired Percent of Cost Recovery	Proposed Charge	Percent Change
Example Water Meter Installation Fee:				(calculated)					
1	Go To ►	Water Meter & Installation - Standard 5/8" X 3/4" Outdoor Radio Read - EXAMPLE	\$246.00	\$269.00	91%	95%	\$256.00	4.07%	
Connection and Service Fees:									
2	Go To ►	Water Meter-Standard 5/8" X 3/4" Outdoor Radio Read Water Meter	\$186.00	\$0.00		100%			
3	Go To ►	Water Meter-Standard 5/8" X 3/4" Indoor Radio Read Water Meter	\$186.00	\$0.00		100%			
4	Go To ►	Residential Tap Fee-Water (per tap)	\$250.00	\$0.00		100%			
5	Go To ►	Residential Tap Fee-Sewer (per tap)	\$250.00	\$0.00		100%			
6	Go To ►	Meter Installation Fee (fee to be included in the connection permit)	\$60.00	\$0.00		100%			
7	Go To ►	Fire Hydrant Meters-Small Fire Hydrant Meter	\$320.00	\$0.00		100%			
8	Go To ►	Fire Hydrant Meters-Large Fire Hydrant Meter	\$820.00	\$0.00		100%			
9	Go To ►	Monthly Fire Hydrant Maintenance Fee (fee was never implemented)	\$20.00	\$0.00		100%			
10	Go To ►	Service Re-Connection Water (Turn Off/On) - Paid prior to 3:00 pm	\$50.00	\$0.00		100%			
11	Go To ►	Service Re-Connection Water (Turn Off/On) - Paid after 3:00 pm; Same day restoration	\$100.00	\$0.00		100%			
12	Go To ►	Service Re-Connection Grinder Pump/Sewer - Paid prior to 3:00 pm	\$125.00	\$0.00		100%			
13	Go To ►	Service Re-Connection Grinder Pump/Sewer - Paid after 3:00 pm; Same day restoration	\$225.00	\$0.00		100%			
14	Go To ►	Additional Trip or Recall	\$25.00	\$0.00		100%			
15	Go To ►	Non-Payment Administration Fee	\$25.00	\$0.00		100%			
16	Go To ►			\$0.00		100%			
17	Go To ►			\$0.00		100%			
18	Go To ►			\$0.00		100%			
19	Go To ►			\$0.00		100%			
20	Go To ►			\$0.00		100%			

Schedule 1 – Miscellaneous Fee Developer Main Menu Screen

BURTON & ASSOCIATES MISCELLANEOUS SERVICE CHARGE DEVELOPER								
St. Mary's Metropolitan Commission								
-- User input in areas shaded light green --								
		Basic Instructions ►		Data Tables ►				
		Fee/Charge Title	Current Charge	Full Cost Recovery Charge	Current Percent of Cost Recovery	Desired Percent of Cost Recovery	Proposed Charge	Percent Change
Pemitting and Inspection Fees:								
31	Go To ►	TEC Review/Concept Plan-No Public Water or Sewer	\$60.00	\$0.00		100%		
32	Go To ►	TEC Review/Concept Plan-Public Water or Sewer	\$120.00	\$0.00		100%		
33	Go To ►	Minor Subdivision(1-5 Lots)-Public Water and Sewer (Charge shown + \$250.00/Lot)	\$550.00	\$0.00		100%		
34	Go To ►	Minor Subdivision(1-5 Lots)-Public Water or Sewer (Charge shown + \$200.00/Lot)	\$400.00	\$0.00		100%		
35	Go To ►	Major Subdivision(1-5 Lots)-Public Water and Sewer (Charge shown + \$250.00/Lot)	\$1,500.00	\$0.00		100%		
36	Go To ►	Major Subdivision(1-5 Lots)-Public Water or Sewer (Charge shown + \$200.00/Lot)	\$1,125.00	\$0.00		100%		
37	Go To ►	Minor Site Plan-Public Water and Sewer (Charge shown + \$100.00/EDU)	\$125.00	\$0.00		100%		
38	Go To ►	Minor Site Plan-Public Water or Sewer (Charge shown + \$75.00/EDU)	\$90.00	\$0.00		100%		
39	Go To ►	Major Site Plan-Public Water and Sewer (Charge shown + \$100.00/EDU)	\$1,000.00	\$0.00		100%		
40	Go To ►	Major Site Plan-Public Water or Sewer (Charge shown + \$75.00/EDU)	\$750.00	\$0.00		100%		
41	Go To ►	Administrative Application Fee	\$100.00	\$0.00		100%		
42	Go To ►	Water Tower/Well Site Plan	\$2,500.00	\$0.00		100%		
43	Go To ►	Sewer Pump Station Plan	\$2,500.00	\$0.00		100%		
44	Go To ►	Sketch Plan	\$70.00	\$0.00		100%		
45	Go To ►	Water & Sewer Inspection for C/O	\$180.00	\$0.00		100%		
46	Go To ►	Water or Sewer Inspection for C/O	\$120.00	\$0.00		100%		
47	Go To ►	Grinder Pump Inspection for C/O	\$145.00	\$0.00		100%		
48	Go To ►	Re-Inspection Fee/Visit (per trip/visit)	\$60.00	\$0.00		100%		
49	Go To ►			\$0.00		100%		
50	Go To ►			\$0.00		100%		

Schedule 1 – Miscellaneous Fee Developer Main Menu Screen

BURTON & ASSOCIATES MISCELLANEOUS SERVICE CHARGE DEVELOPER								
St. Mary's Metropolitan Commission								
-- User input in areas shaded light green --								
Basic Instructions ►		Data Tables ►						
Fee/Charge Title			Current Charge	Full Cost Recovery Charge	Current Percent of Cost Recovery	Desired Percent of Cost Recovery	Proposed Charge	Percent Change
Pemitting and Inspection Fees:								
Administrative Fees								
51	Go To ►	Request for Information/Copies of Drawings/Files (Includes 1 hr of research)	\$30.00	\$0.00		100%		
52	Go To ►	Public Work Agreement-When Required	\$650.00	\$0.00		100%		
53	Go To ►	Public Work Agreement-Agreement Amendment	\$350.00	\$0.00		100%		
54	Go To ►	Boundary Line Adjustment Plat-Review and Processing Fee	\$100.00	\$0.00		100%		
55	Go To ►	Record Plat-Review and Processing Fee - per lot (\$100.00 min. / \$1,000.00 max.)	\$10.00	\$0.00		100%		
56	Go To ►	Easement Agreements	\$200.00	\$0.00		100%		
57	Go To ►	Water & Sewer Waiver Request-Non-Technical Review	\$100.00	\$0.00		100%		
58	Go To ►	Water & Sewer Waiver Request-Technical	\$225.00	\$0.00		100%		
59	Go To ►			\$0.00		100%		
60	Go To ►			\$0.00		100%		
Potential New Charges:								
76	Go To ►	Meter Testing Fee/Reread Fee (if meter is functionally correct)		\$0.00				
77	Go To ►	Return Check Fee	\$5.00	\$10.00		100%	\$10.00	
78	Go To ►	Residential Water Tap Fee - Across/within Roadway (per tap)		\$0.00				
79	Go To ►	Residential Sewer Tap Fee - Across/within Roadway (per tap)		\$0.00				
80	Go To ►			\$0.00				
81	Go To ►			\$0.00				
82	Go To ►			\$0.00				
83	Go To ►			\$0.00				
84	Go To ►			\$0.00				
85	Go To ►			\$0.00				

[illegible]

WATER & SEWER RATE STUDY

APPENDIX C

Schedule 3 – Example Cost of Service Developer Template

ST. MARY'S METROPOLITAN COMMISSION									
Determination of Specific Service Costs									
--- User input in areas shaded light green ---									
Type of Fee:		Water Meter & Installation - Standard 5/8" X 3/4" Outdoor Radio Read - EXAMPLE					Current Fee:		
							Current Fee: \$246.00		
A	B	C	D	E	F	G	H	I	
Labor Costs:			Average Direct Labor Rate per Hour	Average Indirect Labor %	Total Hourly Labor Rate	Time per Task per Occurrence (Minutes)	Number of Occurrences	Labor Costs per Occurrence	Total Labor Costs
Staff Position	Task		35.00%						
Customer Service Clerk	Prepare work order	\$12.50	\$4.38	\$16.88	15	1	\$4.22	\$4.22	
Warehouse Supervisor	Gather tools/materials	\$16.00	\$5.60	\$21.60	10	1	\$3.60	\$3.60	
Meter Technician	Water Meter & Installation - Standard 5/8" X 3/4" Outdoor Radio Read - EXAMPLE	\$14.50	\$5.08	\$19.58	60	1	\$19.58	\$19.58	
Util. Maintenance Spec.	Water Meter & Installation - Standard 5/8" X 3/4" Outdoor Radio Read - EXAMPLE	\$17.00	\$5.95	\$22.95	60	1	\$22.95	\$22.95	
			\$0.00	\$0.00			\$0.00	\$0.00	
			\$0.00	\$0.00			\$0.00	\$0.00	
Total Labor Costs								\$50.35	
Equipment/Computer Costs:			Average Equipment/Computer Usage Rate	Over Head to be Applied to Rate (%)	Total Hourly Rate	Time per Task per Occurrence (Minutes)	Number of Occurrences	Equipment/Computer Costs per Occurrence	Total Equipment/Computer Costs
Type of Computer/Equip.	Task		5.00%						
			\$0.00	\$0.00	\$0.00			\$0.00	\$0.00
			\$0.00	\$0.00	\$0.00			\$0.00	\$0.00
			\$0.00	\$0.00	\$0.00			\$0.00	\$0.00
			\$0.00	\$0.00	\$0.00			\$0.00	\$0.00
Total Equipment/Computer Costs								\$0.00	
Vehicle Costs:			Average Vehicle Usage Rate (per Mile)	Over Head to be Applied to Rate (%)	Total Vehicle Rate (per Mile)	Distance per Task per Occurrence (Miles)	Number of Occurrences	Vehicle Costs per Occurrence	Total Vehicle Costs
Type of Vehicle	Task		5.00%						
Utility Truck	Water Meter & Installation - Standard 5/8" X 3/4" Outdoor Radio Read - EXAMPLE	\$1.00	\$0.05	\$1.05	15	1	\$15.75	\$15.75	
Small Pick-Up/SUV	Water Meter & Installation - Standard 5/8" X 3/4" Outdoor Radio Read - EXAMPLE	\$0.50	\$0.03	\$0.53	15	2	\$7.95	\$15.90	
			\$0.00	\$0.00	\$0.00			\$0.00	\$0.00
			\$0.00	\$0.00	\$0.00			\$0.00	\$0.00
Total Vehicle Costs								\$31.65	
Materials Costs:			Average Cost per Unit	Over Head to be Applied Average Cost per Unit	Total Cost per Unit	Average Number of Units per Occurrence (No. of Units)	Number of Occurrences	Materials Costs per Occurrence	Total Materials Costs
Type of Material	Task		20.00%						
Meter - 5/8" x 3/4" Outdoor Radio Read	Water Meter & Installation - Standard 5/8" X 3/4" Outdoor Radio Read - EXAMPLE	\$150.00	\$30.00	\$180.00	1	1	\$180.00	\$180.00	
			\$0.00	\$0.00	1	1	\$0.00	\$0.00	
			\$0.00	\$0.00	1	1	\$0.00	\$0.00	
			\$0.00	\$0.00	1	1	\$0.00	\$0.00	
Total Materials Costs								\$180.00	
Total Cost								\$262.00	