Final Report

COMPREHENSIVE WATER AND WASTEWATER COST OF SERVICE AND RATE STUDY

Phase 2 – Cost of Service and Rate Design – Executive Summary

BLACK & VEATCH PROJECT NO. 192366

PREPARED FOR

Washington Suburban Sanitary Commission

28 APRIL 2017

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27 April 2017

Mr. Joe Beach
Chief Financial Officer
Washington Suburban Sanitary Commission
14501 Sweitzer Lane
Laurel, MD 20707-5902

Subject: Comprehensive Cost of Service Analysis and Rate Study - Phase II Executive Summary Final Report

Dear Mr. Beach:

We are pleased to present herewith our *Comprehensive Water and Wastewater Cost of Service and Rate Study – Phase II Executive Summary Report* for the Washington Suburban Sanitary Commission.

We wish to acknowledge the cooperation and assistance of WSSC staff in providing guidance and information for the study.

We appreciate the opportunity to continue to be of service to the Commission in this very important matter. If you have any questions, please do not hesitate to contact us.

Very truly yours,
BLACK & VEATCH MANAGEMENT CONSULTING LLC

Prabha Kumar
Director

Pamela Lemoine
Principal Consultant

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Introduction

Over the last several years, Washington Suburban Sanitary Commission (WSSC) has been examining its financial and rate recovery structures with an eye towards building financial resiliency to meet its current and future financial needs while balancing revenue stability, equity of cost recovery, and customer affordability. As part of these continuing efforts, in 2016, WSSC initiated a two-phased comprehensive water and sewer rate study (Study).

The primary purpose of the Study is to evaluate the existing volumetric charge rate structure and recommend alternative rate structures that better meet WSSC's goals and objectives. The two phases defined for the study are:

Phase 1: Phase 1 of the Study includes a definition of the study objectives, an evaluation of the current rate structure and WSSC policies, and an identification of feasible rate structure alternatives. This phase of the work included significant input from stakeholders through the creation of a Bi-County Rate Structure Working Group and a Stakeholder Representatives Group.

Phase 2: Phase 2 of the Study involves a comprehensive cost of service analysis and a detailed evaluation of up to three rate structures based on the Phase 1 evaluation, and the development of rate schedules based on the recommended "best-fit" rate structure.

Phase 1

- Review current rate structure
- Evaluate alternative rate structures
- Select three viable alternative rate structures
- Deliver a Phase -1 Rate Structure Options Report

Phase 2

- Develop a multi-year financial plan
- Perform cost of service analysis for three viable options
- Develop draft rate schedules
- Perform bill impact comparison
- Develop a Phase 2 Rate Analysis Report
- Select the "best-fit" rate structure
- Finalize rate schedules for the recommended rate structure

This Phase 2 Executive Summary provides an overview of the results of a cost of service analysis for both the water and sewer systems, development of alternative rate designs, and rate design impacts and considerations for Fiscal Year (FY) 2019 rate design. The Phase 2 Report is a separate document and presents a complete discussion of the work and results from Phase 2. The Phase 1 report, dated March 31, 2017 summarizes all the Phase 1 work.

STUDY METHODOLOGY

The development of user rates and charges requires the integration of three critical components: (i) financial plan; (ii) cost of service allocations; and (iii) rate design. Figure 1 illustrates the three components and the key tasks within each component.

Financial Planning: The first building block in determining user rates and charges is the development of distinct water and sewer financial plans. The financial planning process helps to establish the annual revenue requirements that are necessary to meet all the water and sewer systems' operating fund obligations. WSSC undertakes a detailed evaluation of current and anticipated future needs through a Spending Affordability Guidelines (SAG) analysis that supports the development of WSSC's budget. This study utilized the results of WSSC's Fiscal Year (FY) 2018 SAG analysis.

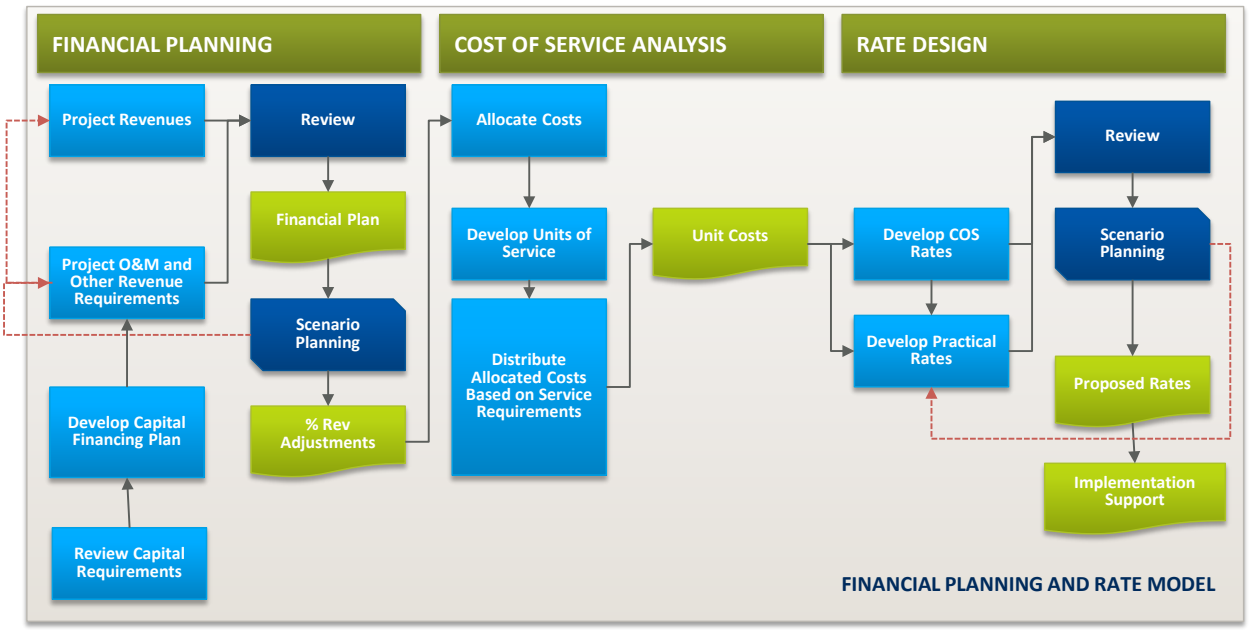

Figure 1 Rate Study Methodology

Cost of Service (COS): The second critical component in rate setting is the cost of service analysis. Simply put, cost of service is the amount of money that the Operating Fund needs to generate, *net of funding from other miscellaneous sources of revenues* (the "net revenue requirement"), through user rates and charges. The principle behind the COS analysis is to match the costs of providing service to the customer class that is generating the demand.

Because WSSC is a government agency *that cannot make a profit,* the equitable allocation of costs is a critical step that is necessary to establish a *reasonable nexus* between costs incurred in providing service and the fees charged from customers, and to establish defensible user rates and charges.

Rate Design: The third and final step is an evaluation of the existing rate structure elements and the development of proposed user rates. The user rates schedules typically include both fixed and volumetric components. Designed rates should recover the annual cost of service allocated to these different rate components, and incorporate local policy and practical considerations. Although WSSC is required by statute to charge a uniform rate to all customers (and therefore cannot charge different rates to different customer classes), a cost of service analysis is a useful tool for evaluating the recovery of costs by customer class.

WSSC currently has in place both fixed charges, in the form of a two-part Ready-to-Serve Charge (Account Maintenance Fee and Infrastructure Investment Fee) and a 16-tier volumetric rate schedule. For this Study, the Ready-to-Serve charges remain at FY 2017 levels throughout the study period. This Study evaluated alternative volumetric rate structures to replace the existing 16-tier rate structure.

The study methodology described above reflects the application of water and wastewater industry accepted rate setting approaches that are provided in the following two guidance manuals:

- American Water Works Association (AWWA) *Manual M-1: Principles of Water Rates, Fees, and Charges* for water rate setting; and
- Water Environment Foundation (WEF) *Financing and Charges for Wastewater Systems* for wastewater.

Rate Structure Overview

The purpose of this study is to evaluate and provide recommendations on WSSC's current volumetric charge structure that could better support WSSC's goals and objectives. Changes to WSSC's current fixed charges are not part of this study.

WSSC currently recovers necessary revenues for water and sewer system operations through both fixed charges and volume charge components. Following is an overview of WSSC's existing volumetric rate structure.

VOLUMETRIC (USAGE) CHARGES

In the utility industry, usage charges recover those costs (except those recovered through fixed charge) associated with the treatment and delivery of water service and the collection, treatment, and disposal of wastewater. In Phase 1 of the Study, WSSC sought significant stakeholder input regarding potential rate structures. The Bi-County Rate Structure Working Group selected three alternative rate structures for further study in Phase 2.

WSSC's Current Volumetric Rate Structure

In addition to the Ready-to-Serve Charges, WSSC 's water and sewer customers pay a variable fee based on metered water usage and a 16-tier inclining rate structure. Under this structure, the rate charged for all water used is the rate at the highest tier reached during the billing cycle based on the customer's average daily consumption (ADC), calculated as total volume divided by the number of days in the billing cycle.

All customers, regardless of customer type, have the same rate structure and rates. Table 1 summarizes the current volumetric rates.

Table 1 Current Volumetric Charge Rate Structure (FY 2017)

Tier (gallons/day)	Water Rates ($/1,000 gal)	Sewer Rates ($/1,000 gal)	Combined Rates ($/1,000 gal)
0 - 49	3.38	4.30	7.68
50 - 99	3.78	5.03	8.81
100 - 149	4.18	5.85	10.03
150 - 199	4.67	6.76	11.43
200 - 249	5.46	7.36	12.82
250 - 299	5.92	7.97	13.89
300 - 349	6.27	8.50	14.77
350 - 399	6.53	8.92	15.45
400 - 449	6.78	9.12	15.90
450 - 499	6.98	9.40	16.38
500 - 749	7.10	9.60	16.70
750 - 999	7.27	9.81	17.08
1,000 - 3,999	7.41	10.23	17.64
4,000 - 6,999	7.58	10.46	18.04
7,000 - 8,999	7.68	10.62	18.30
9,000 & Greater	7.81	10.90	18.71

WSSC's current rate structure is unique in the water and wastewater utility industry. This study evaluates options for replacing the current volumetric rate structure with a more commonly used structure and one that would improve equity between customer classes.

Alternative Rate Structures

Based on input from the Stakeholder Representatives Group, the Bi-County Rate Structure Working Group selected the following volumetric charge structures for further evaluation:

- Uniform Volume Charge
- 4 Tier Structure with the following tier breaks (4 Tier Option 1):
  - 0-99 gallons per day (gpd)
  - 100-249 gpd
  - 250-8,999 gpd
  - 9,000 gpd and over
- 4 Tier Structure with the following tier breaks (4 Tier Option 2):
  - 0-240 gpd
  - 241-600 gpd
  - 601-9,000 gpd
  - Over 9,000 gpd

This Study assumes that the same rate structure will be implemented for both water and sewer. While the exact rates themselves are based on each system's revenue requirements, the Bi-County Rate Structure Working Group determined that utilizing the same rate structure for both water and sewer rates will enhance customer understanding, and is consistent with the current rate structure.

Cost of Service Allocations

A key step in developing an equitable rate structure involves the cost of service analysis. The cost of service analysis provides a mechanism to defensibly allocate the total annual revenue requirements to the various customer classes, recognizing customer demand characteristics. The COS analysis generally uses a single specific year ("Test Year") to illustrate the design of rates and charges. For the Study, the new rate structure under consideration is for FY 2019; however, the SAG analysis has not yet been completed for FY 2019, and therefore the revenue required to be met by volume charges in FY 2019 is not yet known. Consequently, for this analysis, FY 2018 shall serve as the Test Year for allocating costs of service and determining cost of service based rates. The analysis compares alternative rates using FY 2018 requirement with FY 2018 rates that will be in effect using the current rate structure. Based on the impact of cost of service based rates on certain customers, WSSC should consider developing phase-in plans, allowing implementation of the new rate structure over a number of years.

WATER SYSTEM COST OF SERVICE

The methodology used in performing a cost of service analysis for the water system is the same regardless of the test year selected. The key components of the cost of service analysis are:

- Determination of Cost of Service (net revenue requirements);
- Determination of Functional Costs;
- Allocation of Functional Costs to Cost Components; and
- Determination of Unit Cost of Service.

The Phase 2 report provides a comprehensive discussion of the cost of service process.

Determination of Cost of Service

The first key step is to determine the cost of service that is to be recovered from user rates and charges. As briefly discussed in Section 1, Cost of Service is defined as and is synonymous with the "net revenue requirement" that is to be recovered, for the test year, through user rates and charges. In determining costs of service to be met from charges for water service, the following are deducted from total revenue requirements:

- Income from non-rate revenues; and
- Any projected operating deficit.

Table 3 presents the derivation of the cost of service to be recovered through water charges. As Line 8 in Table 2 indicates, the water cost of service for FY 2018 is projected to be $303,023,600. This cost of service consists of $183,540,500 of operations and maintenance (O&M) expenditures and $119,483,100 of capital costs.

Table 2 Total Cost of Service (COS) to be Recovered from Water Rates

LINE NO.	DESCRIPTION	OPERATING EXPENSE ($)	CAPITAL COST ($)	TOTAL COST ($)
Revenue Requirements				
1	O&M Expenses	201,301,700	0	201,301,700
2	Debt Service	0	106,320,100	106,320,100
3	Cash Financed Capital	0	13,163,000	13,163,000
4	Subtotal	$201,301,700	$119,483,100	$320,784,800
Less Revenue Requirements Met from Other Sources and Adjustments				
5	Other Operating Revenues	17,760,000	0	17,760,000
6	Annual Cash Balance Adjustments	1,200	0	1,200
7	Subtotal	$17,761,200	$0	$17,761,200
8	**COS to be Recovered from Rates (Line 4 – Line 7)**	**$183,540,500**	**$119,483,100**	**$303,023,600**

The allocation of costs of service result in the total cost of service to be recovered from each customer class, compared to revenue under existing rates, as summarized in Table 3. As shown, the total increase in revenue from user charges is projected as 3.9 percent, with indicated revenue increases/decreases by customer class varying when compared to revenue under existing FY 2017 rates.

Table 3 Total Cost of Service to be Recovered from Water Rates

LINE NO.	CUSTOMER CLASS	TOTAL COS ($)	REVENUE UNDER EXISTING RATES ($)	INDICATED REVENUE INCREASE (%)
1	Residential	225,637,200	190,577,100	18.4%
2	Non-Residential	69,389,100	93,218,800	-25.6%
3	Contract Wholesale	3,949,800	2,392,300	65.1%
4	Private Fire*	4,047,500	5,401,800	-25.1%
5	**Total Water System**	**$303,023,600**	**$291,590,000**	**3.9%**

**Private Fire refers to the costs associated with having the capability to provide private fire suppression services (individual fire sprinklers).*

SEWER SYSTEM COST OF SERVICE

The methodology used in performing a cost of service analysis for the sewer system is the same regardless of the test year being evaluated. The key components of the cost of service analysis are:

- Determination of Cost of Service (net revenue requirements);
- Determination of Functional Costs;
- Allocation of Functional Costs to Cost Components; and
- Determination of Unit Cost of Service.

A comprehensive discussion of the cost of service process can be found in the full Phase 2 report.

Determination of Cost of Service

The first key step is to determine the cost of service that is to be recovered from user rates and charges. As briefly discussed above, Cost of Service is defined as and synonymous with the "net revenue requirement" that is to be recovered, for the test year, through user rates and charges. In determining costs of service to be met from charges for sewer service, the following are deducted from total revenue requirements:

- Income from non-rate revenues; and
- Any projected operating deficit.

Table 4 presents the derivation of the cost of service to be recovered through sewer charges. As Line 9 in Table 4 indicates, the sewer cost of service for FY 2018 is projected to be $368,356,800. This cost of service consists of $207,889,700 of O&M expenditures and $160,467,100 of capital costs.

Table 4 Total Cost of Service (COS) to be Recovered from Sewer Rates

LINE NO.	DESCRIPTION	OPERATING EXPENSE ($)	CAPITAL COST ($)	TOTAL COST ($)
Revenue Requirements				
1	O&M Expenses	235,941,100	0	235,941,100
2	Debt Service	0	151,137,100	151,137,100
3	Cash Financed Capital	0	17,030,000	17,030,000
4	Subtotal	$235,941,100	$168,167,100	$404,108,200
Less Revenue Requirements Met from Other Sources and Adjustments				
5	Other Operating Revenues	16,472,000	0	16,472,000
6	Reconstruction Debt Service Offset		7,700,000	7,700,000
7	Annual Cash Balance Adjustments	11,579,400	0	11,579,400
8	Subtotal	$28,051,400	7,700,000	$35,751,400
9	**COS to be Recovered from Rates (Line 4 – Line 8)**	**$207,889,700**	**$160,467,100**	**$368,356,800**

The allocation of costs of service result in the total cost of service to be recovered from each customer class, compared to revenue under existing rates, as summarized in Table 5. As shown, the total increase in revenue from user charges is projected as 2.5 percent, with indicated revenue increases/decreases by customer class varying when compared to revenue under existing FY 2017 rates.

Table 5 Total Cost of Service to be Recovered from Sewer Rates

LINE NO.	DESCRIPTION	TOTAL COS ($)	REVENUE UNDER EXISTING RATES ($)	INDICATED REVENUE INCREASE (%)
Customer Class				
1	Residential	295,307,100	247,259,200	19.4%
2	Non-Residential	73,049,700	112,209,400	-34.9%
3	**Total Sewer System**	**$368,356,800**	**$359,468,600**	**2.5%**

Rate Design

The cost of service analysis discussed in the previous section provides a guideline for evaluating the proportionate cost responsibility by customer class. In addition, it provides a reasonable basis for the development of water and sewer volumetric charges that recover the allocated cost of service under the three alternative rate structures identified by the Bi-County Rate Structure Working Group. Customer demand characteristics influence the magnitude of cost of service that is calculated for each customer class, and rate structure when designed distinctly for *each class* allows the precise recovery of the calculated cost of service from each customer class. However, WSSC is restricted by statute to have a single rate structure for all customer classes. In such a situation, it is only feasible under recognized Cost of Service Study principles to design a rate schedule that closely recovers the calculated cost of service by customer class.

It should be recognized that the cost allocation process involves engineering estimates, consideration of historical data and assumptions based on practical considerations such as customer bill impact, stakeholder acceptance, administrative concerns and other policy objectives that should be recognized in making rate adjustments. The following rates have been developed to meet cost of service recovery to the extent possible. Determination of proposed rates under the selected rate structure should take into consideration the additional factors previously mentioned.

Following is a summary of the calculated rates based on cost of service for the three alternative rate structures. As previously discussed, this study does not reflect any changes to the existing Ready-to-Serve charges.

UNIFORM VOLUMETRIC CHARGE

Under a uniform volumetric charge, all usage, regardless of amount, is billed at the same unit rate. For FY 2018, the uniform volume charge is calculated to be $5.94 per thousand gallons (Kgal) for water and $8.29/Kgal for sewer, for a total combined rate of $14.23/Kgal. Table 6 provides a comparison of calculated revenue under a uniform volume charge with revenue existing rates for water and sewer combined.

Table 6 Comparison of Calculated Revenue under Uniform Volume Charge with Revenue Under Existing Rates

LINE NO.	CUSTOMER CLASS	TOTAL COS ($)	REVENUE UNDER NEW RATES ($)	PERCENT RECOVERY OF COS (%)
1	Residential	520,944,300	500,301,700	96.0%
2	Non-Residential	142,438,800	163,622,700	114.9%
3	Contract Wholesale	3,949,800	3,408,300	86.3%
4	Private Fire	4,047,500	4,047,500	100.0%
5	**Total Water and Sewer System**	**$671,380,400**	**$671,380,200**	**100.0%**

Table 7 presents a comparison of typical bills for customers with a ¾-inch, 2-inch and 6-inch meter based on the average volume per bill for each meter size.

Table 7 Comparison of Calculated Typical Bills with Bills under Current Rate Structure (Uniform Rates)

LINE NO.	DESCRIPTION	CALCULATED QUARTERLY BILL		
		¾ inch	2 inch	6 inch
1	Average Daily Consumption (gallons per day)	137	2,170	11,638
2	Average Billed Volume per Quarter (gallons)[1]	13,000	198,000	1,062,000
3	Existing Rate Structure (FY 2018 Rates)	$162.94	$3,827.48	$21,979.32
4	Uniform Volumetric Charge	$213.02	$3,030.05	$16,534.01
5	Increase/Decrease - $	$50.08	($797.43)	($5,445.31)
6	Increase/Decrease - %	30.7%	-20.8%	-24.8%

4 TIER VOLUMETRIC CHARGE STRUCTURE (OPTION 1)

Under the 4 tier volumetric charge structure, volume would be billed incrementally within each block, rather than all volume being billed at the highest tier reached. Table 8 provides a summary of the percentage of volume billed within each tier by customer class. Table 9 provides a summary of the cost of service rates for Option 1. Table 10 provides a summary of revenue recovery under Option 1 compared to revenue under existing rates.

Table 8 Summary of Billed Volume under Option 1

LINE NO.	DESCRIPTION	RESIDENTIAL	NON-RESIDENTIAL
1	0 – 99 gallons/day	48.5%	4.3%
2	100 – 249 gallons/day	22.7%	3.9%
3	250 – 8,999 gallons/day	20.02%	42.4%
4	9,000 and over gallons/day	8.8%	49.4%
5	**Total**	**100.0%**	**100.0%**

[1] Calculated as gallons per day times 365, divided by 4; rounded to nearest 1,000 gallons.

Table 9 Summary of 4 Tier Volumetric Charge Structure (Option 1)

LINE NO.	DESCRIPTION	WATER	SEWER	COMBINED
4-Tier Option 1				
1	0 – 99 gallons/day	$7.31	$10.06	$17.37
2	100 – 249 gallons/day	$6.58	$9.05	$15.63
3	250 – 8,999 gallons/day	$4.75	$6.54	$11.29
4	9,000 and over gallons/day	$4.39	$6.04	$10.43

Table 10 Comparison of Calculated Revenue under 4 Tier Volumetric Charge with Revenue Under Existing Rates (Option 1)

LINE NO.	CUSTOMER CLASS	TOTAL COS ($)	REVENUE UNDER NEW RATES ($)	PERCENT RECOVERY OF COS (%)
1	Residential	520,944,300	530,375,300	101.8%
2	Non-Residential	142,438,800	133,604,100	93.8%
3	Contract Wholesale	3,949,800	3,353,100	84.9%
4	Private Fire	4,047,500	4,047,500	100.0%
5	**Total Water and Sewer System**	**$671,380,400**	**$671,380,000**	**100.0%**

Table 11 presents a comparison of typical bills for customers with a ¾-inch, 2-inch and 6-inch meter based on the average volume per bill for each meter size.

Table 11 Comparison of Calculated Typical Bills with Bills under Current Rate Structure (4 Tier Option 1)

LINE NO.	DESCRIPTION	CALCULATED QUARTERLY BILL		
		¾ inch	2 inch	6 inch
1	Average Daily Consumption (gallons per day)	137	2,170	11,638
2	Average Billed Volume per Quarter (gallons)[2]	13,000	198,000	1,062,000
3	Existing Rate Structure (FY 2018 Rates)	$162.94	$3,827.48	$21,979.32
4	4 Tier Structure (Option 1)	$246.91	$2,561.75	$13,316.19
5	Increase/Decrease - $	$83.97	($1,265.73)	($8,663.13)
6	Increase/Decrease - %	51.5%	-33.1%	-39.4%

4 TIER VOLUMETRIC CHARGE STRUCTURE (OPTION 2)

Under the 4 tier volumetric charge structure, volume would be billed incrementally within each block, rather than all volume being billed at the highest tier reached. Table 12 provides a summary of the percentage of volume billed within each tier by customer class. Table 13 provides a summary of the cost of service rates for Option 2. Table 14 provides a summary of revenue recovery under Option 1 compared to revenue under existing rates.

[2] Calculated as gallons per day times 365, divided by 4; rounded to nearest 1,000 gallons.

Table 12 Summary of Billed Volume under Option 2

LINE NO.	DESCRIPTION	RESIDENTIAL	NON-RESIDENTIAL
1	0 – 240 gallons/day	70.6%	8.0%
2	241 - 600 gallons/day	7.0%	6.7%
3	601 – 9,000 gallons/day	12.7%	35.8%
4	Over 9,000 gallons/day	8.8%	49.4%
5	**Total**	**100.0%**	**100.0%**

Table 13 Summary of 4 Tier Volumetric Charge Structure (Option 2)

LINE NO.	DESCRIPTION	WATER	SEWER	COMBINED
4-Tier Option 2				
1	0 – 240 gallons/day	$6.84	$9.46	$16.30
2	241 - 600 gallons/day	$6.16	$8.51	$14.67
3	601 – 9,000 gallons/day	$5.13	$7.09	$12.22
4	Over 9,000 gallons/day	$4.10	$5.67	$9.77

Table 14 Comparison of Calculated Revenue under 4 Tier Volumetric Charge with Revenue Under Existing Rates (Option 2)

LINE NO.	DESCRIPTION	TOTAL COS ($)	REVENUE UNDER NEW RATES ($)	PERCENT RECOVERY OF COS (%)
Customer Class				
1	Residential	520,944,300	527,170,500	101.2%
2	Non-Residential	142,438,800	136,245,600	95.7%
3	Contract Wholesale	3,949,800	3,916,900	99.2%
4	Private Fire	4,047,500	4,047,500	100.0%
5	**Total Water and Sewer System**	**$671,380,400**	**$671,380,500**	**100.0%**

Table 15 presents a comparison of typical bills for customers with a ¾ inch, 2 inch and 6 inch meter based on the average volume per bill for each meter size.

Table 15 Comparison of Calculated Typical Bills with Bills under Current Rate Structure (4 Tier Option 2)

LINE NO.	DESCRIPTION	CALCULATED QUARTERLY BILL		
		¾ inch	2 inch	6 inch
1	Average Daily Consumption (gallons per day)	137	2,170	11,638
2	Average Billed Volume per Quarter (gallons)[3]	13,000	198,000	1,062,000
3	Existing Rate Structure (FY 2018 Rates)	$162.94	$3,827.48	$21,979.32
4	4 Tier Structure (Option 2)	$239.90	$2,802.83	$13,986.71
5	Increase/Decrease - $	$76.96	($1,024.65)	($7,992.61)
6	Increase/Decrease - %	47.2%	-26.8%	-36.4%

CONSIDERATIONS FOR DEVELOPMENT OF A RECOMMENDED FY2019 RATE STRUCTURE

The preceding discussion of three alternative rate structures provides an indication of the impact that would occur if the rate structures were to be implemented for FY 2018. In developing a recommended rate structure for FY 2019, similar impacts can be expected, with the specific dollar ($) impact varying depending upon decisions regarding total revenue needs for FY 2019.

Due to the significant shift in revenue recovery by customer class that would occur under any of the alternative rate structures, WSSC may want to consider developing a phase-in plan that would allow movement toward a final rate structure over a period of time. In addition, the above analysis is based on the results of the cost of service analysis only. While cost of service is an important element of rate design, it is important that WSSC also consider other policy objectives in developing a recommended rate structure for FY 2019 and beyond including whether the new rate structure supports WSSC's environmental protection policies for water conservation as well as maintaining affordable rates, especially for low-income and fixed-income individuals and families.

[3] Calculated as gallons per day times 365, divided by 4; rounded to nearest 1,000 gallons.