## PROPOSED BUDGET FY 2019 July 1, 2018 – June 30, 2019

1918-2018

A Century of Serving Our Community

(WSSC



### Fiscal Year 2019 Proposed Budget

Thomasina V. Rogers, Chair T. Eloise Foster, Vice Chair Fausto R. Bayonet, Commissioner Omar M. Boulware, Commissioner Howard A. Denis, Commissioner Chris Lawson, Commissioner

Carla A. Reid, General Manager/CEO

ATTEST: Sheila R. Finlayson, Esq., Corporate Secretary

On our cover: Triadelphia Reservoir is located on the Patuxent River and was created when the Brighton Dam was built in 1943. The reservoir is maintained as a drinking water source by WSSC. It also provides public recreational facilities for hiking, picnicking, fishing, boating, hunting and horseback riding. It is home to diverse wildlife including whitetail deer, striped bass, water fowl, eagles and other woodland birds.

### **BUDGET - LEGAL STATUS**

Section 17-202 of the Public Utilities Article, Annotated Code of Maryland: "The Commission: (1) before January 15 of each year, shall prepare capital and operating budgets for the next fiscal year that shall include projects and contracts authorized under SS17-204 and 17-205 of this subtitle; (2) shall make available to the public, on request, copies of the budgets described in item (1) of this subsection; (3) before February 15 of each year, shall hold a public hearing on the proposed capital and operating budgets after giving at least 21 days' notice of the hearing by publication in at least two newspapers of general circulation in Montgomery County and two newspapers of general circulation in Prince George's County."

### TIME SCHEDULE FOR THE FISCAL YEAR 2019 BUDGET

Public Hearings by the Commission Submission to County Executives Approval by the County Councils Budget Effective Date February 5 and 8, 2018 (held as scheduled) March 1, 2018 June 1, 2018 July 1, 2018

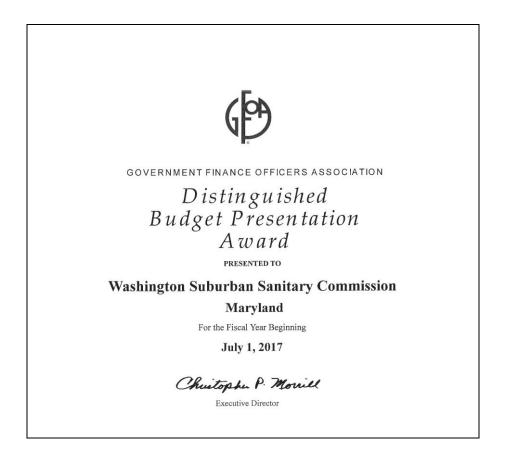
### THIS BUDGET WILL NOT BE ADOPTED BY THE COMMISSIONERS UNTIL ALL HEARINGS HAVE BEEN COMPLETED

### CONTAINED HEREIN IS WSSC'S FY'19 PROPOSED BUDGET DATED MARCH 1, 2018, WHICH REPLACES AND SUPERCEDES THE PREVIOUS JANUARY 15, 2018, EDITION.



### **OUR MISSION:**

We are entrusted by our community to provide safe and reliable water, life's most precious resource, and return clean water to our environment, all in an ethical, sustainable, and financially responsible manner.



The Government Finance Officers Association of the United States and Canada (GFOA) presented an award of Distinguished Budget presentation to the Washington Suburban Sanitary Commission for its annual budget for the fiscal year beginning July 1, 2017. This is the twenty-third consecutive year that the Washington Suburban Sanitary Commission has received this award.

In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communication device.

The award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.

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To The Honorable:

March 1, 2018

Rushern L. Baker, III, Prince George's County Executive Isiah Leggett, Montgomery County Executive

Dannielle M. Glaros, Chair, Prince George's County Council Hans Riemer, President, Montgomery County Council

Members of Prince George's County Council Members of Montgomery County Council

Elected Officials, Valued Customers, and Interested Citizens:

We are hereby transmitting the Proposed Fiscal Year 2019 (FY'19) Capital and Operating Budget Document for the Washington Suburban Sanitary Commission (WSSC). This document is released and distributed on this date for review by interested customers, citizens, and elected officials.

This proposed budget reflects our continued mission to provide safe and reliable water, life's most precious resource, and return clean water to the environment, all in an ethical, sustainable, and financially responsible manner. The programs, goals, and objectives included in this budget seek to achieve the Commission's mission through the following strategic priorities:

- Protect Our People, Infrastructure, Systems, and Resources
- Improve Infrastructure
- Enhance Customer Experience and Community Engagement
- Achieve Business Process Excellence and Maintain Financial Stability
- Inspire Employee Engagement

### FY'19 Proposed Capital and Operating Budgets

The proposed budget for FY'19 for all operating and capital funds totals \$1.438 billion or \$11.2 million (0.8%) more than the Approved FY'18 Budget. The proposed operating budget of \$781.6 million represents an increase of \$40.4 million (5.4%) over the FY'18 Approved Operating Budget of \$741.2 million. This increase is primarily driven by an increase of \$23.1 million to debt service to support infrastructure renewal in the FY19 capital budget. The proposed capital budget of \$656.3 million represents a decrease of \$29.2 million (-4.3%) from the FY'18 Approved Capital Budget of \$685.5 million.

The Preliminary Proposed Budget transmitted in January proposed was \$45 million higher and called for a 5.0% rate increase. Deferred capital project expenditures totaling \$50 million resulting in reduced operating debt service were required to lower the combined rate increase in water and sewer rates to 4.5%. In order to achieve this lower rate, we reduced the CIP by \$50 million resulting in lower debt service and PAYGO costs within the operating budget. These cuts to the capital budget are partially offset by a \$6.3 million increase in Blue Plains capital costs based on revised expenditure schedules from DC Water. We believe the amendments to the CIP will not have a significant impact on service levels. The reductions to the FY'19 capital budget are as follows:

- \$18.8 million Water Reconstruction Program
- \$13.0 million Large Diameter Water Pipe Rehabilitation
- \$2.0 million Engineering Support Program
- \$8.0 million Patuxent Raw Water Pipeline
- \$1.4 million Potomac WFP Submerged Channel Intake
- \$2.8 million Trunk Sewer Reconstruction Program
- \$4.0 million Piscataway WWTP Bio-Energy Project

The rate increase will allow for investments in our FY'19 Capital Improvements Program (CIP), continuing our efforts to repair and replace our aging infrastructure and support ongoing initiatives to improve customer service. We are extremely proud that in our century of service to our community, we have never had a single drinking water quality violation. Maintaining WSSC's current level of investment in the CIP is the driving force behind the need for this increase and will allow us to continue to meet strict Safe Drinking Water Act standards. It is important to know that nearly 80 percent of our proposed CIP cannot be cut as it involves projects either mandated by the federal and state governments or those already under construction. This includes work associated with the Sanitary Sewer Overflow and Potomac River federal consent decrees. Projects to enhance the safety/security of our water infrastructure, comply with environmental regulations and modernize Information Technology to streamline our business processes also are behind the need for this increase. WSSC will continue to look for opportunities to cut costs in this budget without negatively impacting customer service. Operating reductions of approximately \$17 million were made to departments in FY'18 and <u>no new positions</u> have been created since the FY'17 budget. Any new positions in the FY'19 budget will come from existing vacancies. This proposed rate increase falls within the Spending Affordability Guidelines as Prince George's and Montgomery Counties recommended 4.0% and 5.0% respectively. With this change, the average residential bill is less than 1% of the median household income and WSSC rates continue to be favorable when compared to similarly sized water and sewer utilities. A 4.5% rate increase will add \$2.04 per month to the bill of a customer using 143 gallons per day.

However, it should be noted that WSSC's budget is not driven by the consumer price index (CPI) but rather is capital intensive and is driven by the construction market, commodity prices and other factors including compliance with the Sanitary Sewer Overflow (SSO) Consent Decree and the Potomac River Consent Decree; environmental regulation compliance; maintaining the security of our water infrastructure and for our employees working in the field; and Information Technology improvements to streamline our business processes. Many of these costs are legally mandated and not easily deferred or reduced.

#### **Customer Affordability**

Like many utilities across the country, WSSC continues to face the challenge of balancing increasing costs for infrastructure and operations with affordability considerations for our customers. While the average costs to ensure access to clean, safe drinking water and efficient wastewater treatment remains a bargain when compared to other household utilities and expenses, there are still too many residents who struggle to meet their monthly expenses. WSSC's Customer Assistance Program (CAP) was created in FY'16 to help economically disadvantaged customers by providing financial assistance with water and sewer bills. The CAP has already benefitted 9,000 WSSC customers and our commitment to this vital program continues in FY'19 with \$888,000 in revenue offsets. Moving forward, we are working with a nationally-renowned customer affordability expert to enhance and improve our assistance program in time for the implementation of the new rate structure in FY'20.

#### **Spending Affordability Guideline Limitations**

WSSC staff had originally recommended a water and sewer rate increase of 6.2% as part of the FY'19 Spending Affordability Guideline process with Montgomery and Prince George's counties. In order to reconcile the Commission's planned FY'19 service program to the Counties' Spending Affordability Guidelines, it was necessary to uphold several very difficult decisions about previous reductions to existing programs during the FY'18 budgeting process and the continued deferral of the implementation of several initiatives to improve customer service and system reliability. This is the second consecutive year that the WSSC budget includes no new positions. This will prevent WSSC from implementing several important initiatives to support and advance our strategic priorities, including:

- Implementing a system-wide hydrant flushing program as a preventative maintenance practice to deliver on our clean water mission;
- Testing all 43,000 fire hydrants in our service area on a ten-year cycle: a best practice recommended by the American Water Works Association;
- Expanding our leak detection program to identify leak locations and provide proactive repairs; and
- Accelerating large water valve inspections from a four year to a three-year cycle.

In addition to deferring implementation of these and other important service improvements, it should be noted that approximately \$17 million in FY'18 reductions to existing budgets were not reinstated. We will work diligently over the next year to maintain service at current expected levels despite these reductions though it may be necessary to pull back on certain preventative and non-essential services during FY'19 in order to remain within approved budget limitations.

#### **Cost Saving Measures**

This budget reflects the Commission's continuing commitment to maintaining affordability through the active pursuit and implementation of cost savings measures. Our efforts in the Supply Chain Management Transformation project, which has been supported by the Commission and both Counties since FY'13, have produced significant cost reductions in excess of \$33 million in the operating and capital budgets since the inception of this program and cost avoidance savings of more than \$43 million in the same time period. If not for these intensive efforts in contract negotiation and cost management, additional rate increases or service reductions would have been necessary. During FY'17, our efforts resulted in \$11.3 million in cost reductions and \$18.5 million in cost avoidances over the terms of the contracts awarded.

WSSC has also seen a significant reduction in both bio-solids hauling requirements and lower energy costs for regional sewage disposal due to our investment in the Blue Plains digester program. This investment resulted in a \$5.3 million rebate from DC Water to WSSC in FY'16 and a \$6.8 million rebate in FY'17. In anticipation of continued savings, the FY'19 proposed regional sewage disposal budget remains flat as these adjustments have been reflected in the FY'18 budget. However, it should be noted that DC Water's operation and maintenance cost share methodology within the Blue Plains Inter-Municipal Agreement has been revised. As a result, the cost reductions for regional sewage disposal reflected in the budget may not be fully realized.

### Water and Sewer Infrastructure Reliability

The state of WSSC's infrastructure remains a significant concern as our buried assets continue to age. On the water side, the budget proposes the rehabilitation of 45 miles of smaller water mains (<16 inches in diameter). This represents a reduction of 10 miles from the approved FY'18 level of 55 miles and is based upon the prioritization and recommendations in the FY'19 Enterprise Asset Management Plan. This budget also proposes increased funding for house connection renewals and the ongoing replacement of large

water service meters and vaults. For large diameter water mains, the Pre-Stressed Concrete Cylinder Pipe (PCCP) Program provides for the ongoing Acoustic Fiber Optic (AFO) monitoring of 107 miles of pipe, inspection of 18 miles of PCCP, and repairs or replacements of large diameter pipes. Funding is also included for large valve inspection, replacement, and repairs as well as for the planning, design, and construction required for the implementation of short-term operational and long-term capital improvements at the Potomac Water Filtration Plant (WFP) to comply with the Potomac WFP Consent Decree. On the wastewater side, funding is provided for continued compliance with the Consent Decree which continues to be a major cost driver in both the operating and capital budgets.

#### System Development Charge

State law provides that the System Development Charge (SDC), a charge to new applicants for WSSC service that is intended to recover growth costs, may be adjusted annually by the change in the Consumer Price Index for the Washington, DC metropolitan area (CPI-W). Historically, we have adjusted the maximum allowable charge based on the change in the November CPI-W. We plan to increase the maximum allowable charge by the change in the CPI-W.

Looking at the charge itself, with no change from the current level of charges, our analyses show that over the upcoming six years, the SDC fund may encounter a deficit situation, whereby the Commission would need to issue debt for growth construction projects that would be supported by SDC revenue. Although we are not recommending an increase at this time, the Commission should begin to have conversations with both counties on the advisability of increasing the SDC in order to ensure that it continues to cover all growth-related costs.

### **Spending Affordability**

The Commission, in cooperation with the Montgomery County and Prince George's County governments, continues to participate in the spending affordability process. The spending affordability process focuses debate, analysis, and evaluation on balancing affordability considerations against the provision of resources necessary to serve existing customers (including infrastructure replacement/rehabilitation), meet environmental mandates, maintain affordable rates, and maintain operating and capital budgets and debt service at prudent and sustainable levels. In October 2017, the Montgomery County Council and Prince George's County Council approved resolutions establishing four limits on the WSSC's FY'19 budget. The following table compares the spending affordability limits.

WSSC F	SC FY'19 Proposed Budget vs. Spending Affordability Limits (\$ in Millions)							
	FY'19 Proposed Budget	Prince George's County <u>Limit</u>	Montgomery County <u>Limit</u>					
New Water and Sewer Debt	\$486.8	\$435.9	\$546.9					
Total Water and Sewer Debt Service	\$277.1	\$277.6	\$281.2					
Total Water/Sewer Operating Expenses	\$763.0	\$757.6	\$763.7					
Water/Sewer Bill Increase	4.5%	4.0%	5.0%					

In addition to reviewing expenses and revenues for water and sewer services, we have analyzed the cost and current fee levels for other WSSC services. Based upon these analyses, some new fees and adjustments to current fees are recommended in Table XI to align fees with program costs (pages 22 through 32).

#### **Budget Review Process**

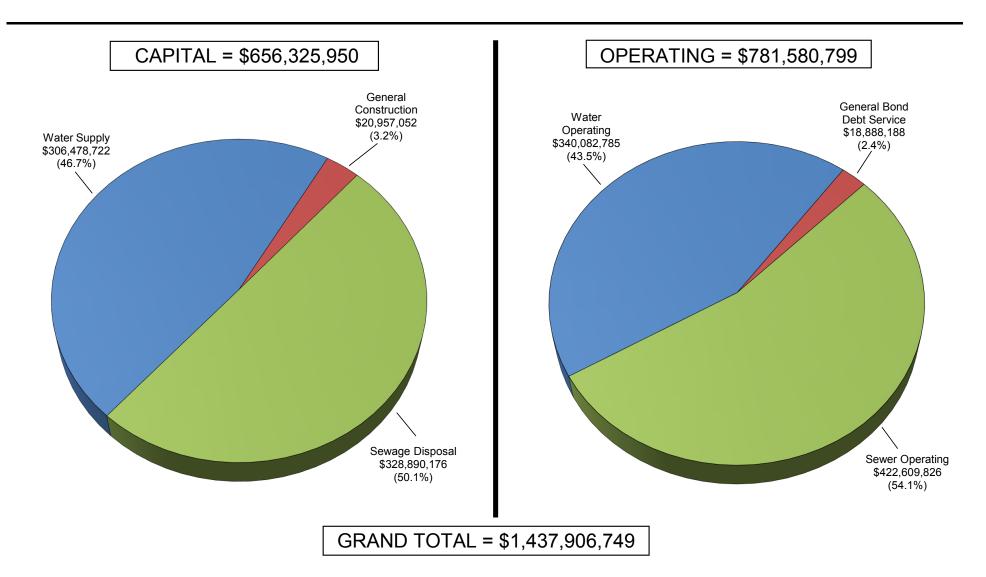
The Proposed Budget is subject to the Counties' hearings, procedures, and decisions, as provided under Section 17-202 of the Public Utilities Article, of the Annotated Code of Maryland, before the final budget is adopted for the fiscal year beginning July 1, 2018.

Thomasina V. Rogers Thomasina V. Rogers, Chair

Washington Suburban Sanitary Commission

**OVERVIEW & BUDGET SUMMARIES** 

### FY 2019 PROPOSED BUDGET BY FUND

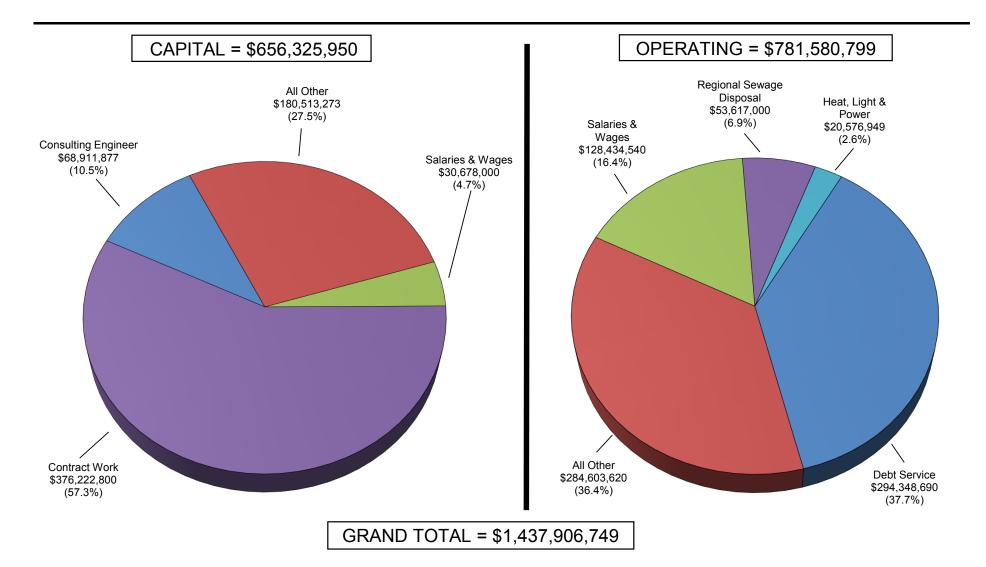


### TABLE I

### Comparative Expenditures by Fund

	FY'16 Actual	FY'17 Actual	FY'18 Approved	FY'19 Proposed	FY'19 Over / (Under) FY'18	% Change
Capital Funds						
Water Supply	\$ 249,907,950	\$ 263,568,816	\$ 342,444,918	\$ 306,478,722	\$ (35,966,196)	-10.5%
Sewage Disposal	387,241,984	280,632,043	323,054,156	328,890,176	5,836,020	1.8%
General Construction	13,048,998	12,783,881	20,010,242	20,957,052	946,810	4.7%
Total Capital	650,198,932	556,984,740	685,509,316	656,325,950	(29,183,366)	-4.3%
Operating Funds						
Water Operating	282,951,957	300,598,657	321,017,005	340,082,785	19,065,780	5.9%
Sewer Operating	343,235,028	374,234,124	404,331,357	422,609,826	18,278,469	4.5%
General Bond Debt Service	19,852,305	15,557,107	15,887,815	18,888,188	3,000,373	18.9%
Total Operating	646,039,290	690,389,888	741,236,177	781,580,799	40,344,622	5.4%
GRAND TOTAL	\$ 1,296,238,222	\$ 1,247,374,628	\$ 1,426,745,493	\$ 1,437,906,749	\$ 11,161,256	0.8%

### **FY 2019 PROPOSED BUDGET** BY MAJOR EXPENSE CATEGORY

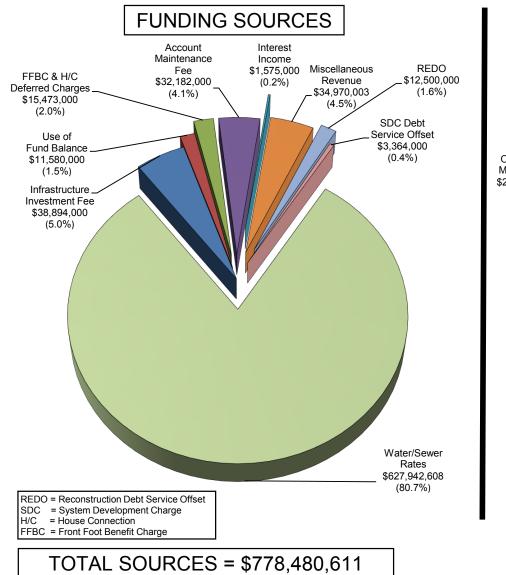


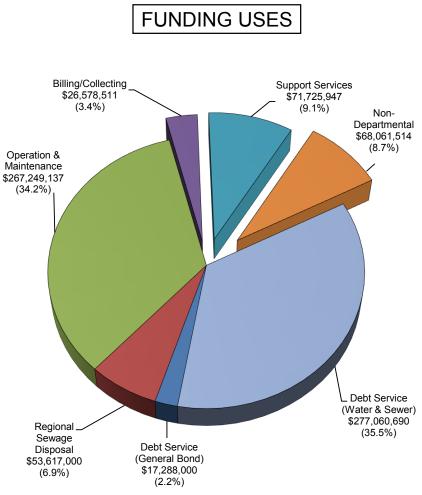
### TABLE II

### Comparative Expenditures by Major Expense Category (\$ in Thousands)

FY'17 Actual			FY'18 Approved			FY'19 Proposed			
Expense Categories	Capital	Operating	Total	Capital	Operating	Total	Capital	Operating	Total
Salaries & Wages	\$30,229	\$109,747	\$139,976	\$30,009	\$120,919	\$150,928	\$30,678	\$128,434	\$159,112
Heat, Light & Power	-	22,099	22,099	-	22,028	22,028	-	20,577	20,577
Regional Sewage Disposal	-	53,946	53,946	-	53,617	53,617	-	53,617	53,617
Contract Work	328,614	-	328,614	453,397	-	453,397	376,223	-	376,223
Consulting Engineers	53,763	-	53,763	57,814	-	57,814	68,912	-	68,912
All Other	144,379	253,853	398,232	144,289	273,456	417,745	180,513	284,604	465,117
Debt Service		250,745	250,745	-	271,216	271,216	-	294,349	294,349
TOTAL	\$556,985	\$690,390	\$1,247,375	\$685,509	\$741,236	\$1,426,745	\$656,326	\$781,581	\$1,437,907

### FY 2019 PROPOSED BUDGET OPERATING





TOTAL USES = \$781,580,799

### TABLE III

### FY 2018 - FY 2019 Summary of Revenue & Expenses

	Water Operating Fund		Sewer Operating Fund			al Bond vice Fund	Capital Funds		
	2018 Approved		2019 Proposed	2018 Approved	2019 Proposed	2018 Approved	2019 Proposed	2018 Approved	2019 Proposed
REVENUES									
Water Consumption Charges	\$267,080,000	\$	273,316,145	\$-		\$-	\$ -	\$-	\$-
Sewer Use Charges	-			333,822,000	354,626,463	-	-	-	-
Front Foot Benefit & House Connection Charges (Deferred)	-			-		18,852,000	15,473,000	-	-
Account Maintenance Fees	16,380,000		16,412,820	15,738,000	15,769,180	-	-	-	-
Infrastructure Investment Fee	19,796,560		19,835,940	19,019,440	19,058,060	-	-	-	-
Interest Income	100,000		100,000	600,000	1,400,000	20,000	75,000	-	-
Miscellaneous	17,660,445		18,090,000	15,871,917	16,640,003	240,000	240,000	-	-
Use of Fund Balance									
Other	-		5,905,800	11,580,000	5,674,200	7,700,000	12,500,000	-	-
Reconstruction Debt Service Offset	-		4,000,000	7,700,000	8,500,000	(7,700,000)	(12,500,000)	-	-
SDC Debt Service Offset	-		2,422,080	-	941,920	-	-	-	-
Bonds & Cash	-		-	-	-	-	-	614,459,316	605,936,950
Anticipated Contributions:									
Federal & State Grants	-		-	-	-	-	-	10,780,000	6,122,000
System Development Charge	-		-	-	-	-	-	32,189,000	23,647,000
Other								28,081,000	20,620,000
TOTAL REVENUES	\$ 321,017,005	\$	340,082,785	\$ 404,331,357	\$ 422,609,826	<u>\$ 19,112,000</u>	\$ 15,788,000	\$ 685,509,316	\$656,325,950
EXPENSES									
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Salaries & Wages	\$ 64,169,215	\$	68,672,298	\$ 56,106,695	\$ 59,229,223	\$ 643,475	\$ 533,019	\$ 30,008,906	\$ 30,678,000
Heat, Light & Power	11,760,491		10,641,982	10,254,440	9,934,967	13,330	-	-	-
Regional Sewage Disposal Contract Work	-		-	53,617,000	53,617,000	-	-	452 207 020	-
	-		-	-	-	-	-	453,397,029	376,222,800
Consulting Engineers	-		-	-	-	-	-	57,813,906	68,911,877
Contribution to Required Reserve All Other	-		-	-	-	-	-	-	400 540 070
	125,604,299		129,381,123	116,572,222	123,139,816	1,086,010	1,067,169	144,289,475	180,513,273
Debt Service	106,320,000		117,727,929	150,751,000	159,332,761	14,145,000	17,288,000	-	-
PAYGO	13,163,000		13,659,453	17,030,000	17,356,059			-	
TOTAL EXPENSES	<u>\$ 321,017,005</u>	\$	340,082,785	<u>\$ 404,331,357</u>	<u>\$ 422,609,826</u>	<u>\$ 15,887,815</u>	<u>\$ 18,888,188</u>	<u>\$ 685,509,316</u>	\$656,325,950
Net Increase (Decrease) in Fund Balance	-		-	-	-	3,224,185	(3,100,188)	-	-
Fund Balance - July 1	\$ 39,968,000	\$	39,968,000	\$ 148,545,000	\$ 136,965,000	\$ 54,839,000	\$ 50,363,185	<b>\$</b> -	\$-
Net Increase (Decrease) in Fund Balance	-	•	- , ,- ,	-	-	3,224,185	(3,100,188)	-	-
Use of Fund Balance	-		(5,905,800)	(11,580,000)	(5,674,200)	(7,700,000)	( , , ,	-	-
Fund Balance - June 30	\$ 39,968,000	\$	34,062,200	\$ 136,965,000	( ) )	( , , , ,	\$ 34,762,997	\$-	\$-

### **TABLE IV**

### FY 2018 Projected Budget Compared to FY 2019 Proposed - Change in Ending Fund Balance

	FY 2018 Projected Ending Fund Balance	FY 2019 Proposed Ending Fund Balance	Change in Fund Balance	% Change
Water Operating Fund	\$ 39,968,000	\$ 34,062,200	\$ (5,905,800)	-14.8%
Sewer Operating Fund	136,965,000	131,290,800	(5,674,200)	-4.1
General Bond Debt Service Fund	50,363,185	34,762,997	(15,600,188)	-31.0
Capital Fund	-	-	-	-
	\$ 227,296,185	\$ 200,115,997	\$ (27,180,188)	-12.0%

#### **Explanation of Changes in Fund Balance**

<u>Water and Sewer Operating Funds</u> – The FY 2019 proposed ending fund balances are lower than the projected FY 2018 ending fund balances for the combined Water and Sewer Operating Funds. A majority of the change is due to planned use of fund balance to finance the IT Strategic Plan.

<u>General Bond Debt Service Fund</u> – The FY 2019 proposed ending fund balance is 31.0% lower than the projected FY 2018 ending fund balance for the General Bond Debt Service Fund. Revenues for this fund are derived from Front Foot Benefit and House Connection Charges. These types of mains and lines are now built by developers. The revenues that are currently collected are from prior assessments that are paid over a multi-year period. Surplus funds that have accumulated in the General Bond Debt Service Fund are transferred to the Water and Sewer Operating Funds to benefit all rate payers.

#### TABLE V

### FINANCIAL FORECAST WATER AND SEWER OPERATING FUNDS FY 2019 - 2024

(\$ in Thousands)

		A	FY'18 dopted	P	FY'19 Proposed	P	FY'20* Projected	F	FY'21 Projected		FY'22 Projected	Р	FY'23 rojected	Р	FY'24 rojected
SUMMARY	New Water and Sewer Debt Issues Total Water and Sewer Debt Service Total Water and Sewer Expenditures Water and Sewer Combined Rate Increase (Avg.)	\$	522,825 257,071 725,348 3.5%	\$	486,848 277,061 762,693 4.5%	\$	517,119 312,911 784,330 6.0%	\$	518,616 343,724 821,010 6.0%	\$	420,530 364,806 860,085 6.0%	\$	355,144 383,403 901,400 6.0%	\$	307,976 400,852 941,813 6.0%
FUNDS	Operating Revenues Transfers from Other Funds	*	706,068 19,280	*	735,249 27,444	*	773,634 16,258	*	817,711 14,484		860,787 12,383	*	906,416 10,982	*	954,754 4,984
	Total Funds Available	\$	725,348	\$	762,693	\$	789,892	\$	832,195	\$	873,170	\$	917,398	\$	959,738
EXPENDITURES	Operating Expenses Debt Service Adjustments PAYGO (Contribution to bond fund)		438,084 257,071 0 30,193		454,616 277,061 0 31,016		468,023 312,911 (35,896) 39,292		480,937 343,724 (51,595) 47,944		494,266 364,806 (54,680) 55,694		508,025 383,403 (52,208) 62,180		522,230 400,852 (49,068) 67,798
EX	Total Expenditures	\$	725,348	\$	762,693	\$	784,330	\$	821,010	\$	860,085	\$	901,400	\$	941,813
ŝ	Required Contribution to Operating Reserve	\$	0	\$	0	\$	5,562	\$	11,185	\$	13,085	\$	15,998	\$	17,926
BALANCES	Beginning Fund Balance - July 1	\$	188,513	\$	176,933	\$	165,353	\$	170,915	\$	182,100	\$	195,185	\$	211,183
BAL	Use of Fund Balance/Other Adjustments		(11,580)		(11,580)		0		0		0		0		0
	Ending Fund Balance - June 30	\$	176,933	\$	165,353	\$	170,915	\$	182,100	\$	195,185	\$	211,183	\$	229,109
METRICS	Debt Service Coverage Debt Service as a % of Total Expenditures** Operating Reserve Required 10% Level	\$	1.0 35.4% 70,607	\$	1.0 36.3% 73,525	\$	1.0 38.1% 77,363	\$	1.0 39.4% 81,771	\$	1.0 39.9% 86,079	\$	1.0 40.2% 90,642	\$	1.1 40.5% 95,475
Z	Days Cash-on-Hand Operating Reserve Total Workyears (All Funds)		91 1,776		80 1,776		81 1,776		82 1,776		84 1,776		87 1,776		90 1,776

\*FY 2020 is the planned implementation of new rate structure.

\*\* Target is  $\leq 40\%$ 

Notes: 1) New Water & Sewer Debt Issues are based on WSSC Proposed FY19-24 CIP with Proposed Mid-Cycle Adjustments. 2) Water & Sewer Combined Rate increase for FY20-24 is illustrative only and intended to show the rate increases needed and unspecified adjustments required to produce a balanced fiscal plan maintaining adequate reserves and a debt service coverage ratio at >1.0. 3) FY19-24 Operating Expenditures assumes no increase in workyears and no new programs. Expenditure increases reflect only negotiated wage increases and inflationary impacts on budget. 4) PAYGO contributions to the Capital Budget are at adopted policy levels of prior year PAYGO plus 25% of new annual debt payments. 5) Transfers for FY20-24 reflect continued transfers from Reconstruction Debt Service Offset (REDO) and for Systems Development Charge (SDC) repayment for debt but no additional use of Water & Sewer Fund Balance.

PROPOSED RATES, FEES, & RATE IMPACTS

### TABLE VI

sands) (4.5% AVERAGE RATE INCREASE PROPOSED FOR FY'19)	
(4.5% AVERAGE RATE INCREASE PROPOSED FOR IT 13)	FY'19
Funding Sources	Propose
Revenues at Current Rates	
Consumption Charges	\$ 600,9
Account Maintenance Fee	32,
Infrastructure Investment Fee	38,8
Miscellaneous Revenues	36,2
Sub-Total	708,2
Reconstruction Debt Service Offset	12,
SDC Debt Service Offset	3,3
Use of Fund Balance	11,
Total Funding Sources	735,
Requirements	
Operating, Maintenance & Support Services Expenses	454,0
Debt Service	277,0
PAYGO	31,0
Total Requirements	762,0
Shortfall to be Covered by Rate Increase	\$ (27,

### TABLE VII

### Annual Customer Bills At Various Consumption Levels

Average Daily Consumption (ADC) Gallons Per Day	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
100 (36,500 GAL/YR) 3/4" Residential Meter	\$ 395.86	\$ 443.51	\$ 478.10	\$ 490.87	\$ 508.03
143 (52,195 GAL/YR) 3/4" Residential Meter	547.16	596.38	635.52	653.78	678.32
500 (182,500 GAL/YR) 3/4" Residential Meter	2,973.13	3,046.33	3,159.75	3,265.60	3,407.95
1,000 (365,000 GAL/YR) 2" Meter	6,394.40	6,730.45	7,286.60	7,512.90	7,808.55
5,000 (1,825,000 GAL/YR) 3" Meter	32,031.75	33,408.00	35,527.00	36,676.75	38,209.75
10,000 (3,650,000 GAL/YR) 6" Meter	66,611.50	69,466.50	73,967.60	76,340.00	79,515.50

Annual customer bills include the Account Maintenance Fee shown on page 20 and the Infrastructure Investment Fee shown on page 21.

### TABLE VIII

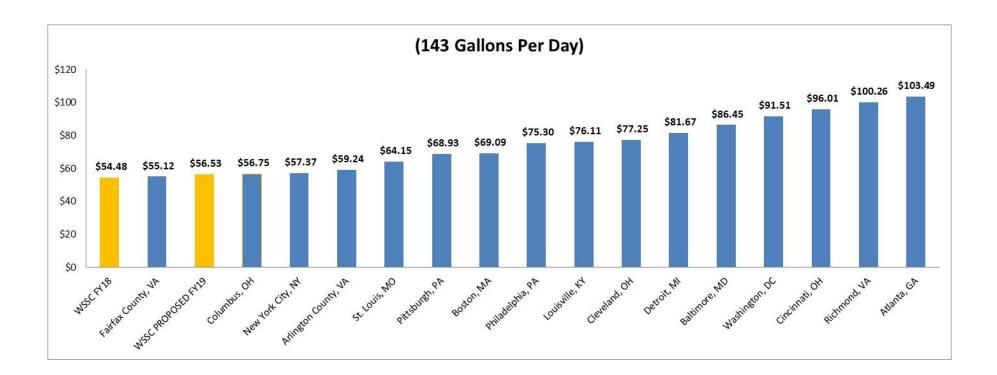
### WSSC Water/Sewer Rate Schedules Effective July 1, 2017 & Proposed for Implementation July 1, 2018

	Water Per 1,000	) Gallons	Per 1,000		Per 1,000	ewer Rates 0 Gallons
Average Daily Consumption	Effe	ctive	Effe	ctive	Effe	ctive
by Customer Unit During Billing Period (Gallons Per Day)	July 1, 2017	July 1, 2018	July 1, 2017	July 1, 2018	July 1, 2017	July 1, 2018
0-49	\$ 3.53	\$ 3.61	\$ 4.42	\$ 4.70	\$ 7.95	\$ 8.31
50-99	3.95	4.04	5.17	5.49	9.12	9.53
100-149	4.37	4.47	6.01	6.38	10.38	10.85
150-199	4.88	4.98	6.95	7.37	11.83	12.35
200-249	5.71	5.83	7.56	8.03	13.27	13.86
250-299	6.19	6.32	8.19	8.70	14.38	15.02
300-349	6.55	6.70	8.74	9.27	15.29	15.97
350-399	6.83	6.97	9.16	9.73	15.99	16.70
400-449	7.09	7.24	9.37	9.95	16.46	17.19
450-499	7.29	7.46	9.66	10.25	16.95	17.71
500-749	7.42	7.59	9.86	10.47	17.28	18.06
750-999	7.60	7.77	10.08	10.71	17.68	18.48
1,000-3,999	7.75	7.91	10.51	11.16	18.26	19.07
4,000-6,999	7.92	8.10	10.75	11.41	18.67	19.51
7,000-8,999	8.03	8.20	10.91	11.58	18.94	19.78
9,000 & Greater	8.16	8.34	11.20	11.89	19.36	20.23

### (4.5% AVERAGE RATE INCREASE PROPOSED FOR FY'19)

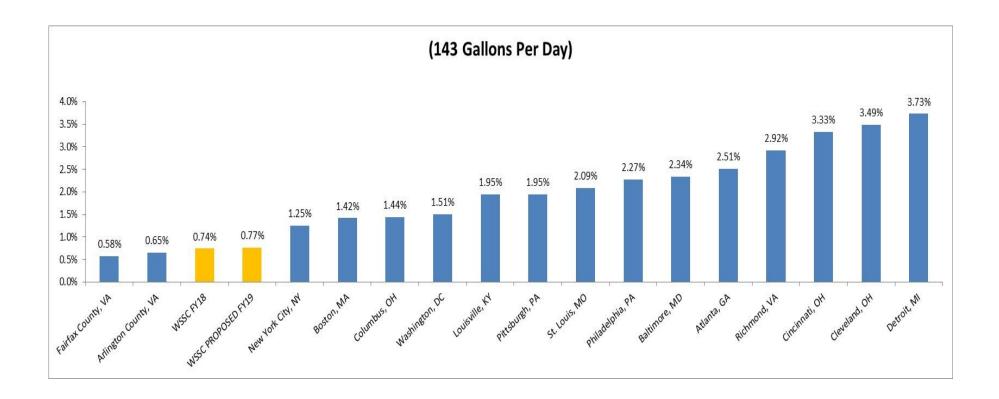
Current Flat Rate Sewer Charge - \$108.00 per quarter Proposed Flat Rate Sewer Charge - \$115.00 per quarter

### RESIDENTIAL MONTHLY WATER/SEWER BILL COMPARISON



Presented is a comparison of WSSC's rates to other cities and communities, both nationally and locally, for residential customers using 143 gallons of water per day. The rates used in this comparison were in effect November 2017. The chart includes WSSC bills at FY'18 approved and FY'19 proposed rates.

# AVERAGE MONTHLY BILL COMPARISON AS A PERCENTAGE OF MEDIAN INCOME



Median household income (in 2016 dollars) 2012-2016. Figures gathered from www.census.gov

### TABLE IX

Meter Size	FY'18	Approved FY'18 Quarterly Charges		Proposed FY'19 Quarterly Charges	
Small Meters					
5/8" to 1"	\$	16.00	\$	16.00	
Large Meters					
1-1/2"		16.00		16.00	
2"		27.00		27.00	
3"		66.00		66.00	
4"		142.00		142.00	
6"		154.00		154.00	
8"		200.00		200.00	
10" Detector Check Maters		246.00		246.00	
Detector Check Meters					
5/8" to 1"		16.00		16.00	
2"		33.00		33.00	
4"		177.00		177.00	
6"		255.00		255.00	
8"		461.00		461.00	
10"		633.00		633.00	
Fire Service Meters					
4"		182.00		182.00	
6"		293.00		293.00	
8"		452.00		452.00	
10"		682.00		682.00	
12"		989.00		989.00	

### Account Maintenance Fees Proposed for Implementation July 1, 2018

This is a quarterly fee which is prorated based on the length of the billing cycle.

### TABLE X

### Infrastructure Investment Fees Proposed for Implementation July 1, 2018

Meter Size	FY'18 G	roved Quarterly rges	FY'19	oposed Quarterly harges
Small Meters				
5/8" 3/4" 1"	\$	11.00 12.00 14.00	\$	11.00 12.00 14.00
Large Meters				
1-1/2" 2" 3" 4" 6" 8" 10"		90.00 185.00 585.00 813.00 1,265.00 2,845.00 4,425.00		90.00 185.00 585.00 813.00 1,265.00 2,845.00 4,425.00
Fire Service Meters				
4" 6" 8" 10" 12"		499.00 616.00 2,524.00 2,714.00 5,214.00		499.00 616.00 2,524.00 2,714.00 5,214.00

This is a quarterly fee which is prorated based on the length of the billing cycle.

### TABLE XI

### **Miscellaneous Fees and Charges – Proposed Changes**

The Commission provides a number of services for which separate fees or charges have been established. Recent review of the costs required to provide these services indicates a need to change the amounts charged for some of the services. The fee and charge changes listed below are proposed to be effective July 1, 2018.

ITEM	CURRENT CHARGE	
1. INSPECTION FEES	CHARGE	EFFECTIVE JULY 1, 2018
	ting Increations	
Water/Sewer Connection Hookup, Well/Septic Hookup, Plumbing and Gasfit	\$726	\$835
New Single Family Detached Dwellings and Townhouses All Other Residential:	\$720	φουυ
Water/Well Hookup	99	109
	99	109
Meter Yoke Inspection (meter only installation)	198	218
Water Hookup Converting from Well (includes 2 inspections)	99	109
Sewer/Septic Hookup		109
First Plumbing Fixture Each Additional Fixture	99 33	40
	33	
SDC Credit Fixture Inspection (per fixture)		40
Minimum Permit Fee	200	*200 *60
Permit Reprocessing Fee	60	
Long Form Permit Refund Fee	200	*200
Long Form Permit Re-Issue Fee	200	*200
All Non-Residential:		
Plan Review (without Permit Application)	205	454
50 Fixtures or Less	395	454
51 - 200 Fixtures	1,340	1,541
Over 200 Fixtures	2,670	3,070
2 <sup>nd</sup> or 3 <sup>rd</sup> Review (with or without Permit Application)	400	*400
50 Fixtures or Less	160	*160
51 - 200 Fixtures	300	345
Over 200 Fixtures	640	736
Water/Well Hookup	170	195
Meter Yoke Inspection (meter only installation)	170	195
Sewer/Septic Hookup	170	195
FOG Interceptor	170	195
First Plumbing Fixture	170	195
Each Additional Fixture	44	51
SDC Credit Fixture Inspection (per fixture)	27	31

### Miscellaneous Fees and Charges – Proposed Changes

Continued)	CURRENT	PROPOSED CHARGE
TEM	<u>CHARGE</u>	EFFECTIVE JULY 1, 2018
Minimum Permit Fee	\$253	\$278
Permit Reprocessing Fee	60	*60
Long Form Permit Refund Fee	253	291
Long Form Permit Re-Issue Fee	253	291
2. SITE UTILITY (ON-SITE) REVIEW FEE		
Base Fee	3,301	*3,301
Additional Fee per 100 feet	302	*302
Minor (Waived) Site Utility (On-Site) Fee	874	1,005
3. LICENSE FEES FOR THE REGULATED TRADES		
Reciprocal Master Plumber, Gasfitter		
Initial Registration per type	93/2 years	102/2 years
Registration Renewal all types	85/2 years	88/2 years
Late Registration Renewal	50	52
Examined Master Plumber, Gasfitter		
Initial Registration per type	105/4 years	108/4 years
Registration Renewal all types	105/4 years	108/4 years
Late Registration Renewal	50	52
Cross-connection Technician Registration	25	26
Sewer and Drain Registration and Renewal	40/2 years	*40/2 years
Sewer and Drain Cleaner Late Registration Renewal	20	*20
Journeyman License		
Initial Registration per type	30/2 years	31/2 years
Registration Renewal	30/2 years	31/2 years
Late Registration Renewal	20	21
License Transfer Fee	30	31
License Replacement Fee	15	16
Apprentice License Registration/Renewal	10	11
I. SHORT FORM PERMIT FEE (up to 3 fixtures) – Non-Refundable	82	94

### TABLE XI

Miscellaneous Fees and Charges – Proposed Changes

ontinued) E <u>M</u>	CURRENT <u>CHARGE</u>	PROPOSED CHARGE EFFECTIVE JULY 1, 2018
FEE FOR SALE OF WSSC PLUMBING AND FUEL GAS CO		\$20.4 J
Sale of Plumbing Regulation (per book)	\$33/book	\$38/book
SEPTIC HAULER DISCHARGE PERMIT STICKER		
<u>CATEGORY I</u>		
Residential & Septic Waste & Grease		
1 - 49 gallons	250/vehicle	255/vehicle
50 - 799 gallons	4,009/vehicle	4,610/vehicle
800 - 2,999 gallons	11,434/vehicle	13,149/vehicle
3,000 - gallons and up	27,120/vehicle	31,188/vehicle
January through June	50% of fee	*50% of fee
Transfer and/or Replacement Permit Sticker	93	107
Industrial/Special Waste Disposal Fee	325/1,000 gallons	355/1,000 gallons
Zero Discharge Permit Fee	93	107 00 - Course Date /1 000 mallana
Temporary Discharge Permit Fee	85 + Sewer Rate/1,000 gallons	98 + Sewer Rate/1,000 gallons
Sewer Rate – Domestic Low Strength Wastewater	10.14/1,000 gallons of truck capacity	11.14/1,000 gallons of truck capacity
Sewer Rate – Domestic High Strength Wastewater	54.00/1,000 gallons of truck capacity	56.00/1,000 gallons of truck capacity
LONG FORM PERMIT TRANSFER FEE	152	160
METER REPLACEMENT FEE (Damaged or Stolen Meter)		
5/8" Encoder (outside)	150	*150
5/8" Encoder	150	*150
3/4" Encoder (outside)	151	*151
3/4" Encoder	160	*160
1" Encoder (outside)	196	*196
1" Encoder	198	202
1-1/2" Encoder	750	*750
2" Standard	1,100	*1,100
3" Compound	3,190	*3,190
4" Compound 6" Compound	3,960 5,830	*3,960 *5,830

### TABLE XI

### Miscellaneous Fees and Charges – Proposed Changes

	CURRENT	PROPOSED CHARGE
EM	CHARGE	EFFECTIVE JULY 1, 2018
2" MVR	\$1,210	*\$1,210
3" MVR	2,239	2,296
4" MVR	3,207	3,216
6" MVR	4,921	4,970
4" FM w/2" MVR	8,239	*8,239
6" FM w/3" MVR	9,820	*9,820
8" FM w/4" MVR	11,495	*11,495
10" FM w/6" MVR	14,225	*14,225
12" FM	16,250	*16,250
	10,200	10,200
METER TESTING FEES		
5/8" to 1"	253	261
1-1/2"	424	*424
2" and up	473	*473
'		
. SUB-METER INSTALLATION FEES		
One-time Sub-Meter Charge - Small	261	*261
One-time Sub-Meter Charge - Large	528	*528
One-time Inspection Fee	50	57
Minimum Permit Inspection Fee	200	*200
. TAPPER LICENSE FEE		
Permit Fee	363	*363
Duplicate	33	36
. TEMPORARY FIRE HYDRANT CONNECTION FEE		
3/4" Meter – Deposit		
2 Weeks or Less w/approved payment record	0	*0
Over 2 Weeks/Less than 2 weeks w/unapproved payment record	376	379
3" Meter - Deposit	570	515
2 Weeks or Less w/approved payment record	0	*0
Over 2 Weeks/Less than 2 weeks w/unapproved payment record	2,420	*2,420
Service Charge	2,420	2,420
2 Weeks or Less (3/4" meter)	49	56
	130	*130

# Miscellaneous Fees and Charges – Proposed Changes

Continue	ed)	CURRENT	PROPOSED CHARGE
<u>FEM</u>		CHARGE	EFFECTIVE JULY 1, 2018
	Over 2 Weeks (3/4" and 3" Meters)	\$159	\$175
	Water Consumption Charge – 3/4" Meter	Current approved rate for 1,000 gallons ADC; \$30 minimum	*Current approved rate for 1,000 gallons ADC; \$30 minimum
	Water Consumption Charge – 3" Meter	Current approved rate for 1,000 gallons ADC; \$195 minimum	*Current approved rate for 1,000 gallons ADC; \$195 minimum
	Late Fee for Return of Meter	7/day	10/day
	Fee on Unpaid Temporary Fire Hydrant Meter Billings	1½%/month	*1½%/month
	Loss/Destruction of Meter	Replacement Cost	*Replacement Cost
	Loss/Destruction Wrench	40	*40
3. FEE F	FOR TRUCK INSPECTIONS WITH ATTACHED FIRE HYD	DRANT METER 50/2 years	52/2 years
4. WATI	ER TURN-OFF, TURN-ON FEE		
5	Small Meter Turn-Off	77	80
	Small Meter Turn-On	77	89
	Large Meter Turn-Off	203	*203
l	Large Meter Turn-On	214	241
5. F	FEASIBILITY REVIEW FEE (Non-SEP)		
	Feasibility Review & Report Fee Deposit (can be deferred as de	ficit when extension is completed) 9,377	10,784
F	Feasibility Submission Fee (Non-refundable)	1,512	1,618
	STRIAL DISCHARGE CONTROL PROGRAM FEES BY C Industrial users subject to Categorical Pretreatment Standa		
	Less than 5,000 gpd (double visit)	4,020	4,623
	Greater than 5,000 gpd (double visit)	6,160	7,084
	Non-discharging Categorical Industries (zero discharge) Significant Industrial User	1,083	1,245
	Less than 25,000 gpd (single visit - priority pollutant sa	mpling) 4,020	4,623
	Greater than 25,000 gpd (double visit - priority pollutar		7,084
	Penalty Charge for Late Fee Payment	5% of fee	*5% of Fee

# Miscellaneous Fees and Charges – Proposed Changes

(Continued)	CURRENT	
ITEM	<u>CHARGE</u>	PROPOSED CHARGE EFFECTIVE JULY 1, 2018
17. FEES FOR SALE OF CONTRACT SPECIFICATIONS, CONTRACT SPECIFICATIONS		
DRAWINGS, DESIGN MANUALS, STANDARD DETAILS, AND GENERAL CON	DITIONS	
Construction Specifications/Drawings Utility Contracts	\$15	\$17
Facility Contracts	40-450	*40-450
Construction Standard Details	55	*55
Construction General Conditions & Standard Specifications	44	46
SEP Construction General Conditions & Standard Specifications	44	46
Procurement Specifications/Drawings/General Conditions		
With Routine Specifications	No charge	*No charge
With Complex/Voluminous Specifications	35-200	40-200
18. CALL BACK FEE (small meters, plumbers)	91	93
19. CALL BACK FEE (large meters, plumbers)	198	228
20. MISSED APPOINTMENT FEE		
First Missed Appointment or Turn-On	88	97
Each Additional Missed Appointment	110	*110
21. CONNECTION REDEMPTION FEE	38	44
22. CONNECTION ABANDONMENT FEE		
County Roads (Except Arterial Roads) - Water	1,452	1,474
County Roads (Except Arterial Roads) - Sewer	1,847	1,873
State Roads and County Arterial Roads - Water	1,760	1,778
State Roads and County Arterial Roads - Sewer	2,200	*2,200
23. FIRE HYDRANT INSPECTION FEE	121/hydrant	137/hydrant
Controlled Access Surcharge Fee	25	26

# Miscellaneous Fees and Charges – Proposed Changes

Continued)	CURRENT	PROPOSED CHARGE
<u>rem</u>	<u>CHARGE</u>	EFFECTIVE JULY 1, 2018
4. UTILITY EROSION AND SEDIMENT CONTROL PERMIT FEE		
Minor Projects	\$.14 per linear foot	\$.20 per linear foot
Major Projects	.18 per linear foot	.30 per linear foot
Minimum for Major Projects	120	124
	120	121
5. EROSION AND SEDIMENT CONTROL TRAINING CERTIFICATION SESSION FEE	66/session, per participant	79/session, per participant
6. CHARGE FOR PHOTOCOPIES OF WSSC DOCUMENTS (per copied pa	age, single side)	
Readily Available Source Material	.25/page	.30/page
Certified Copy of Readily Available Source Material	.50/page	.60/page
Scanning Documents	.25/page	.30/page
(A reasonable fee may be charged for time in excess of two hours expended in searching for requested records or preparing such records for inspection		
7. DISHONORED CHECK FEE & ELECTRONIC PAYMENT FEE		
(applies to all dishonored checks and dishonored electronic payments)	38	46
8. FIRE HYDRANT FLOW TEST FEE		
No Current Test	645	693
Current Test	78	83
9. SHUT DOWN/CHARGE WATER MAIN FEE	995	1,144
Shut Down/Complex Water Main Fee	1,864	2,144
0. RIGHT-OF-WAY RELEASE REVIEW FEE	995/document	1,144/document
1. FEE FOR REVIEW AND INSPECTION OF SITE WORK POTENTIALLY IMPACTING WSSC PIPELINES		
Simple Review	363	399
•	1,895	2,179
		/ //9
Complex Review Inspection	242/inspection	266/inspection

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# Miscellaneous Fees and Charges – Proposed Changes

Continued)	CURRENT	PROPOSED CHARGE
TEM	<u>CHARGE</u>	EFFECTIVE JULY 1, 2018
2. CHLORINATION CONFIRMATION TEST FEE Re-Test or Additional Tests	\$237/first test 150/hour	\$247/first test 157/hour
3. METER REINSTALLATION CORRECTION FEE	374	388
4. SEWER METER MAINTENANCE FEE Quarterly Calibrations	10,912/year 2,728/quarter	12,003/year 3,001/quarter
B5. DISCHARGE AUTHORIZATION PERMIT FEE Significant Industrial User – Initial Permit Significant Industrial User – Renewal Initial zero-discharge CIU Permit Reissued zero-discharge CIU Permit Temporary Discharge Permit (Non – SIU)	4,779/4 years 2,343/4 years 1,815/4 years 1,210/4 years 4,779	5,496/4 years 2,694/4 years 2,087/4 years 1,392/4 years 5,496
36. SALE OF WSSD LAWS Bound Volume Supplements	75 36	83 42
37. PROPERTY INSPECTION FEE	93	107
8. CONSTRUCTION SERVICES FEE	12% of construction bond less design review fee	9.3% of WSSC unit cost estimate or 12.0% of contractor's cost estimate
Re-Test or Additional Tests or Inspector Overtime	190/hour	206/hour
9. SYSTEMS INSPECTION GROUP REVIEW FEE FOR ADDITIONAL REVIEWS OF CONTRACT DOCUMENTS AND AS-BUILTS	190/hour	206/hour
IO. EXTRA REVIEW FEE Minor Additional Reviews of Unsigned or Signed Plans (per review) Major/Splitting Additional Reviews of Unsigned or Signed Plans (per r Per Site Utility/Minor Additional Signed or Unsigned Plan Review Site Utility Minor Utility	1,045 review) 2,133 1,268 330	1,202 2,453 1,458 379

# Miscellaneous Fees and Charges – Proposed Changes

(Continued)	CURRENT	PROPOSED CHARGE
ITEM	CHARGE	EFFECTIVE JULY 1, 2018
Per Hydraulic Planning Analysis/Systems Planning Forecast Application Additional Review of Required Data (per application)	on \$715	\$822
41. HYDRAULIC PLANNING ANALYSIS AND SYSTEM PLANNING Modeling and Re-Modeling Fee - Up to 3 parts Modeling and Re-Modeling Fee - per part over 3 Pressure Sewer System Review Fee (per system)	<b>FORECAST</b> 1,391 605/part 319	1,600 696/part 367
<b>42. ENVIRONMENTAL SITE REVIEW FEE</b> With Database Search Conducted By WSSC With Database Search Submitted By Applicant	330 250	379 288
43. PARTIAL RELEASE	1,210	1,331
44. SERVICE CONNECTION APPLICATION AND INSPECTION FEE (per permit)	2,178/water and/or sewer connection	2,434/water and/or sewer connection
45. FACILITIES DESIGN GUIDELINES FEE	30	35
46. DISCHARGE FEE – Food Service Establishment (FSE) Full Permit FSE Best Management Practices Permit FSE	467 132	537 152
47. FEASIBILITY REVIEW FEE FOR ON-SITE TAKEOVER PROJE	<b>CTS</b> 847	974
48. FEE FOR THE PREPARATION OF HOLD HARMLESS AGREE	<b>MENT</b> 929	1,068
49. GOVERNMENT REFERRED PLAN REVIEW FEE Major Development – Over 10 Units Minor Development – 10 or Less Units Re-Review Fee for Major Development Re-Review Fee for Minor Development	1,513 726 726 363	1,583 791 791 396
50. RESIDENTIAL OUTSIDE METER HOUSING UPGRADE/PIPE A	LTERATION 5,687	6,540

# Miscellaneous Fees and Charges – Proposed Changes

(Continued)		
ITEM	CURRENT <u>CHARGE</u>	PROPOSED CHARGE EFFECTIVE JULY 1, 2018
51. PRE-SCREEN RE-SUBMISSION FEE	\$330	\$338
52. CROSS CONNECTION FEE		
Test Report Fee (per sheet)	30	35
Base Fee for High Hazard Commercial Water Customer (per month)	13	*13
Base Fee for All Other Commercial Water Customer (per month)	7	*7
53. SITE UTILITY INSPECTION FEE		
Base Fee	1,100	1,133
Pipeline (per foot)	5.60	6
54. NAME/TRANSFER OF OWNERSHIP FEE	198	228
55. PROTEST FILING FEE	605	700
56. PLUMBING/FUEL GAS PLANS REVIEW PRE-SCREEN FEE	0	255

# Miscellaneous Fees and Charges – Proposed Changes

(Continued)				
ITEM	CURRENT <u>CHARGE</u>	PROPOSED CHARGE EFFECTIVE JULY 1, 2018	CURRENT MAXIMUM ALLOWABLE CHARGE	PROPOSED MAXIMUM ALLOWABLE CHARGE
57. *** System Development Charge				
Apartment				
Water	\$896	\$896	\$1,289	\$1,310
Sewer	1,140	1,140	1,643	1,669
1-2 toilets/residential				
Water	1,344	1,344	1,937	1,968
Sewer	1,710	1,710	2,461	2,500
3-4 toilets/residential				
Water	2,240	2,240	3,227	3,279
Sewer	2,850	2,850	4,105	4,171
5 toilets/residential				
Water	3,135	3,135	4,517	4,589
Sewer	3,991	3,991	5,749	5,841
6+ toilets/residential (per fixture unit)				
Water	88	88	128	130
Sewer	115	115	167	170
Non-residential (per fixture unit)				
Water	88	88	128	130
Sewer	115	115	167	170

\*\*\* No increase is proposed for the System Development Charge for FY'19 in any category. The maximum allowable charge is being adjusted pursuant to Division II, Section 25-403(c) of the Public Utilities Article of the Annotated Code of Maryland, based on the 1.6% change in the Consumer Price Index for Urban Wage Earners and Clerical Workers for all items in the Washington, D.C. metropolitan area from November 2016 to November 2017.

# **CUSTOMER SUMMARY**

This customer summary is designed to provide a quick overview of the WSSC budget for someone new to the Commission's budget process. Specifically, this section explains:

- The Commission's role,
- The Commission's powers and responsibilities,
- The Commission's fiscal and service policies,
- The budget's basis in state law,
- How the budget is formulated,
- Who is responsible for budget decisions,
- The Commission's fund structure,
- Key provisions of the Proposed Budget,
- Funding sources, and
- Funding uses.

**SECTION 1** 

## I. <u>THE WASHINGTON SUBURBAN SANITARY COMMISSION</u>

The Washington Suburban Sanitary Commission (WSSC) provides water and sewer services to nearly 1.8 million residents of Maryland's Montgomery and Prince George's Counties, which border Washington, D.C. Established by the Maryland General Assembly in 1918 as a regional (bi-County) organization under Article 29 and later recodified into Division II of the Public Utilities Article of the Annotated Code of Maryland, the WSSC ranks among the largest water and sewer utilities in the country encompassing a service area of nearly 1,000 square miles.

To fulfill its primary mission of providing safe and reliable water and returning clean water to the environment, WSSC operates and maintains an extensive array of highly automated facilities. The Commission's two water filtration plants, drawing raw water from the Potomac and Patuxent rivers, are projected to produce an average of 164 million gallons of water per day in FY'19 and deliver that water to homes and businesses in Montgomery and Prince George's Counties. WSSC currently serves over 451,000 customer accounts through a system of over 5,600 miles of water mains. To ensure a reliable water supply for all seasons and conditions, WSSC operates three reservoirs with a total capacity exceeding 14 billion gallons.

Sewage treatment is provided by six wastewater treatment plants operated by the WSSC, and the Blue Plains Wastewater Treatment Plant operated by the District of Columbia Water and Sewer Authority. In FY'19 it is projected that an average of 201.4 million gallons of wastewater per day from Montgomery and Prince George's Counties will move to these facilities through over 5,500 miles of sewer lines maintained by WSSC. The six wastewater treatment plants owned by WSSC have a combined capacity of 95 million gallons per day (MGD). Blue Plains is a regional facility that services the District of Columbia and several northern Virginia jurisdictions as well as the WSSC. Under the Intermunicipal Agreement that governs this arrangement, the WSSC is allocated 169 MGD of Blue Plains' 370 MGD capacity. The WSSC, in turn, pays a proportionate share of Blue Plains' operating and capital expenses. All but one of these facilities (the Hyattstown plant) go beyond conventional wastewater treatment to provide "tertiary treatment" - advanced treatment processes which ensure that the quality of the treated wastewater is better than the quality of the natural water to which it is returned. Other WSSC responsibilities include promulgation and enforcement of plumbing and gasfitting regulations in suburban Maryland and participation in numerous environmental initiatives.

A six-member commission governs the WSSC - three members from each County. The Commissioners are appointed to fouryear terms by their respective County Executives and confirmed by their County Councils.

(Continued)

## II. POWERS AND RESPONSIBILITIES

The Commission's powers and responsibilities are set forth in Division II of the Public Utilities Article of the Annotated Code of Maryland and in any subsequent legislative amendments. The Maryland General Assembly conferred these powers upon the WSSC to enable it to fulfill its principal functions:

- To provide for the construction, operation, and maintenance of water supply and sanitary sewerage systems in Montgomery and Prince George's Counties;
- To provide for the construction of water and sewer house connection lines from the Commission's mains to abutting property lines;
- To approve the locations of, and issue permits for, utilities installed in public ways; and
- To establish water consumption rates, sewer usage rates, connection charges, front foot benefit charges, and permit fees and, if required, to cause appropriate ad valorem taxes to be levied.

The Commission also:

- Reviews preliminary subdivision plats as to suitability of water and sewer design, and reviews street grades for those streets in which there are Commission facilities;
- Formulates regulations, issues permits for, and inspects all plumbing and gasfitting installations; and
- Conducts examinations for master and journeyman plumbers and gasfitters, and issues licenses to those qualified to perform plumbing and gasfitting work.

(Continued)

## III. FISCAL AND SERVICE POLICIES

The Washington Suburban Sanitary Commission pursues the following fiscal and service policies. These policies are reviewed periodically and revised as necessary to support the Commission's long-term goals and strategic plans.

## **Long-Term Fiscal Policies**

The WSSC adheres to the following long-term fiscal policies to preserve and strengthen its financial integrity:

- Conform, to the extent possible, to the County Councils' established spending affordability limits in preparing the capital and operating budgets.
- Employ conservative assumptions when forecasting revenues.
- Fund recurring expenditures from a stable stream of revenue, with minimal reliance on non-recurring (one-time) revenues or resources.
- Annually set user charges for water and sewer services at levels sufficient to ensure that revenues equal or exceed expenses in each fiscal year.
- Utilize an account maintenance fee to recover the fixed costs of servicing a customer's account costs that are independent of the amount of water used or sewage generated by a customer. Such costs include purchasing and reading water meters; processing meter readings; generating, mailing, and collecting bills; and providing related customer services.
- Utilize an infrastructure investment fee to provide a dedicated source of funding for the debt service associated with the Commission's large and small diameter water and sewer pipe reconstruction programs.
- Regularly analyze expenditures for services other than basic water and sewer to ensure that miscellaneous fees and charges are sufficient to defray the cost of providing these services.
- Manage current assets to ensure reasonable interest income.

(Continued)

- Maintain a reserve in the water and sewer operating funds equal to at least 10 percent of water and sewer revenue to offset unanticipated variations in water and sewerage system revenues that may occur in future years.
- Ensure that the aggregate principal amount of bonds and notes issued by the Commission does not exceed the legislated allowable level of the total assessable tax base for all property assessed for County tax purposes within the Sanitary District, in conformance with state law governing the WSSC.
- Reduce water and sewer debt service as a percentage of the combined water and sewer operating budget through judicious use of PAYGO financing, use of accumulated net revenue (fund balance), reduction or deferral of planned capital expenditures, and other debt limitation strategies. Specific debt reduction actions should always be balanced against affordability considerations and the demands for the resources necessary to serve existing customers, meet environmental mandates, and build the facilities needed to support economic growth.
- Finance capital facilities needed to accommodate growth through a System Development Charge (SDC) on new development in order to maintain fair and equitable rates for water and sewer services to existing customers, while providing funds needed for growth-related capital expenditures.
- Utilize SDC revenue to pay the debt service on growth-related bonds issued since FY'94 (the first year of the SDC). Debt service on bonds issued to fund growth-related CIP projects in subsequent years (due to inadequate SDC revenue) will be paid from SDC revenues, if sufficient revenues exist, or from operating revenues, if SDC funds are not available.
- Preserve and improve services for current customers by employing an annual Systems Reconstruction Program that utilizes both capital and operating funds to reconstruct aging capital infrastructure.
- Employ surplus funds from refinancing General Bond Fund debt to pay a portion of the debt service for the Systems Reconstruction Program (this payment is referred to as the Reconstruction Debt Service Offset or REDO).
- Charge all debt service requirements for new water supply and sewage disposal bonds to operations in the first year incurred.
- Accelerate debt retirement to the extent possible.
- Finance all retirement plans in a manner that systematically funds liabilities, including current requirements as well as the amortization of unfunded liabilities.

## (Continued)

- Provide regular, updated six-year projections of the WSSC's operating and capital budgets revenues and expenditures to ensure that the Commission has the best possible knowledge of the impacts of contemplated actions and emerging conditions.
- Continue to improve and strengthen financial management and controls, while streamlining operations and increasing the efficiency and effectiveness of Commission programs and staff.
- Maintain full funding of the annual required contribution for Post-Employment Benefits Other Than Pensions (OPEB). All WSSC OPEB contributions are deposited into an irrevocable OPEB trust established for this purpose.
- In accordance with a Bi-County Working Group recommendation, utilize a portion of the debt service differential associated with a change from 20-year to 30-year debt for PAYGO financing of capital projects.

## **Long-Term Service Policies**

The various units of the Washington Suburban Sanitary Commission adhere to the following key long-term service policies to ensure that the Commission continues to provide value to customers by furnishing high quality products and services at the lowest possible price:

- Deliver safe and reliable drinking water to customers in a manner that meets or surpasses Safe Drinking Water Act standards.
- Treat wastewater and responsibly manage biosolids in a manner that meets or surpasses federal and state permit requirements and regulations.
- Provide maintenance services at a level consistent with the objective of responding to the customer within 2 hours of receiving notification of a maintenance problem, and restoring service to the customer within 24 hours from the time a service interruption occurs.
- Answer 100 percent of all customer billing calls received.
- Treat customers and the general public with courtesy, sensitivity, and respect while remaining responsive to their concerns, inquiries, and requests for service.
- Encourage innovation, excellence, and economy in all phases of service delivery.

(Continued)

## **Short-Term Fiscal and Service Policies**

Short-term policies are specific to the budget year. They address key issues and concerns that frame the task of preparing a balanced budget that achieves Commission priorities within the context of current and expected economic and political realities. The General Manager and the Commission adopted the following key policies in preparing the FY'19 Approved Budget.

- Forecast FY'19 water production conservatively at 164.0 million gallons per day.
- Propose a 4.5 percent average increase in water and sewer rates for FY'19.
- Continue to address the WSSC's aging infrastructure by proposing the following:
  - ▶ Rehabilitation of 45 miles of small diameter and 6 miles of large water diameter mains.
  - ► Inspection and repair of 18 miles of Prestressed Concrete Cylinder Pipe (PCCP).
  - ► Acoustical fiber optic monitoring of 107 miles of PCCP.
  - ► Continuation of the Trunk Sewer Reconstruction Program.
- Ensure adequate funding for regulatory compliance requirements.
- Fund the implementation of the Information Technology Strategic Plan to include a new Customer Billing system.
- Fund the annual required contribution for other post-employment benefits in accordance with Governmental Accounting Standards Board Statement No. 45.
- Offset \$12.5 million of debt service with REDO.

(Continued)

## IV. <u>BUDGET FORMULATION</u>

Maryland State law requires that the WSSC prepare capital and operating budgets each fiscal year. The FY'19 Proposed Budget shows funding and staff requirements, organizational components, and program and fund sources.

The budgets for all funds are prepared on a full accrual basis. Expenses are recognized when goods and services are received, and revenues are recognized when water is delivered to the system. Annual audited financial statements of the WSSC are prepared on the basis of Generally Accepted Accounting Principles (GAAP), whereas both the budget and internal financial statements are prepared on a debt service basis. The debt service basis recognizes certain cash expenses not recognized under GAAP (such as principal payments on debt, and pension contributions based on a level percentage of payroll). Similarly, certain non-cash expenditures that are included under GAAP are not recognized under the debt service basis (such as depreciation on capital assets, and pension expenses as defined by Accounting Principles Board Pronouncement No. 8).

The budget process begins with submission of requests by all organizational units following the guidance provided by the General Manager (see the accompanying chart). Management reviews these requests before the General Manager presents recommendations to the Commissioners. The Commissioners review the budget and make recommendations before approving a proposed budget document for public hearing. A proposed budget document must be available to the public by January 15. Hearings on the WSSC budget are held in each County before February 15. The Commission considers comments and testimony given at the public hearings before the proposed budget is transmitted to the Counties.

State law requires that the Commission transmit its proposed budget to the Counties by March 1 of each year. The County Councils and County Executives and their staffs review the budget and make recommendations. Both Counties must approve any amendments to the budget on or before June 1. Once the Counties' actions have been received, the Commission adopts an Approved Budget and sets the levels for charges, fees, and taxes to finance approved expenditures. The Approved Budget takes effect on July 1.

Once the budget is adopted, total expenditures may not exceed the final total approved budget without an approved budget supplement. Budget supplements must be approved by the Montgomery and Prince George's County Councils, and are transmitted to them through their respective County Executives.

(Continued)

Preparation of the six-year Capital Improvements Program (CIP) spans 13 months, beginning in May of each year. After a preliminary staff-level review in June, the General Manager and key management personnel review all CIP project submissions in July to assess the justification for new projects, the criticality and priority of on-going projects, and the overall financial impacts of these projects on spending affordability. Only the debt service requirements for capital expenditures in the first (budget) year of the six-year CIP are included in the operating budget. By August, the General Manager submits a draft CIP to the WSSC's Commissioners for their consideration, and work sessions are conducted to solicit input from County governments, Maryland-National Capital Park and Planning Commission, and local municipality representatives. Public hearings on the CIP are held in September. The WSSC is required by state law to transmit the Proposed CIP to both County governments by October 1 of each year.

The approved Capital Budget for a given budget year consists largely of spending for the first year of the six-year Capital Improvements Program including those projects in the Information Only Section. Projects shown in the Information Only Section are not required to be in the CIP, but may be included to provide more comprehensive information on important programs or projects. Budget year expenditures in connection with relocations, house connections, new water meters, and similar items constitute the remainder of the capital budget for a given year.

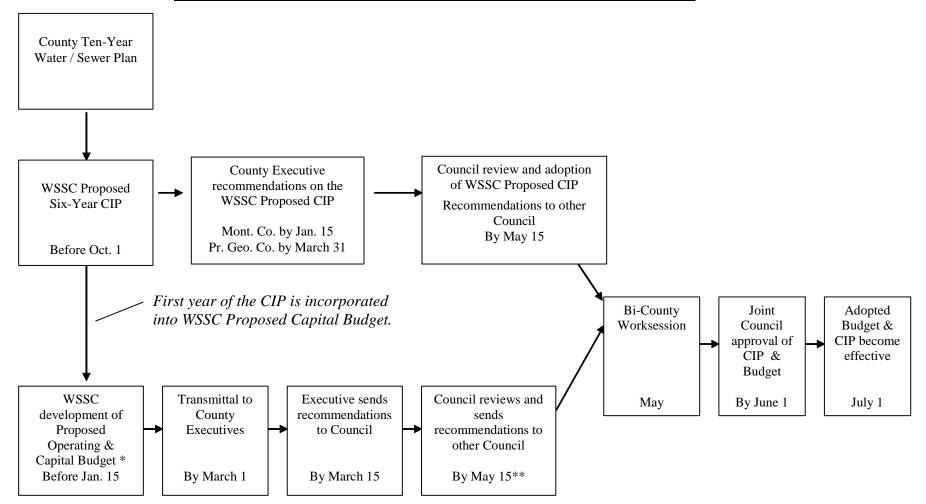
Between January and May of the following year, each County approves, modifies, or deletes projects, and by mid-May the County Councils meet jointly to resolve any differences. By June 1, each Council must enact formal resolutions approving new projects and other program modifications. The Commission then has 30 days to adopt these changes before the beginning of the fiscal year on July 1.

Preparation of the proposed Operating Budget requires integrating several other planning efforts with the budget formulation process. The annual spending affordability review, undertaken jointly with Montgomery and Prince George's Counties, uses a six-year financial model to examine the impacts and affordability of various scenarios involving the WSSC's future capital and operating needs. This analysis results in the development of maximum "affordable" levels for rate increases, operating expenditures, debt service, and new debt in the budget year. These limits, which are formally adopted by the Montgomery and Prince George's County Councils, play a key role in guiding the annual budget process.

Capital needs, developed independently in planning for the six-year Capital Improvements Program, also shape the operating budget by helping to determine debt service requirements, the need for Pay-As-You-GO (PAYGO) financing, revenues from the System Development Charge (and the corresponding need, if any, for rate-payer supported debt to pay for growth), and the operating impacts of projects expected to be completed during the budget year (additional operating costs, if present, as well as any expected efficiencies). The annual debt service on outstanding bonds is paid from the Commission's operating funds, primarily through water consumption and sewer use charges paid by customers. Thus, the size of the CIP affects the size of the water and sewer bond issues needed in the budget year, which in turn affects customer water and sewer bills.

(Continued)

## WSSC Budget & Capital Improvements Program Processes



\* Includes first year of Proposed CIP plus Information Only Projects and General Construction Projects.

\*\*Incorporates changes to funding in budget year for CIP projects.

(Continued)

The CIP is, in turn, driven in part by the development planning and authorization processes of Montgomery and Prince George's Counties, especially as manifested in the Counties' ten-year water and sewer plans. (These plans, which guide development activity within the Counties, are updated annually.) In addition, since the WSSC must contribute to the capital and operating expenses of the Blue Plains Wastewater Treatment Plant, budget planning by the District of Columbia Water and Sewer Authority (DCWASA) - and the budget's subsequent review and approval by DCWASA's multi-jurisdictional Board of Directors - can have important impacts on planning for the WSSC's capital and operating budgets.

## V. <u>FUND STRUCTURE</u>

The FY'19 Proposed Budget consists of six separate funds, three in the operating budget (the Water Operating, Sewer Operating, and General Bond Debt Service Funds) and three in the capital budget (the Water Supply Bond, Sewage Disposal Bond, and General Construction Bond Funds). The Water Operating and Sewer Operating Funds are the primary funds for operating purposes. The Water Operating Fund pays for water treatment and distribution, and the Sewer Operating Fund pays for sewage collection and treatment. The General Bond Debt Service Fund receives front foot benefit payments to underwrite the debt service on smaller lateral water and sewer lines. Although each fund is essentially a separate entity authorized to expend funds for prescribed purposes and derive revenues from specific rates, charges, and/or taxes, as prescribed by state law, the capital and operating funds are interrelated as explained below.

## **Water**

The Commission issues Water Supply Bonds (Capital Fund) to finance the planning, design, and construction of major water treatment and transmission facilities and the reconstruction of the water distribution system. The facilities include dams, reservoirs, water filtration plants, water pumping stations, water storage facilities, and water supply lines 16 inches in diameter and larger. Water operating revenues - customer payments for water bills - in the Water Operating Fund are used to pay for operating and maintaining these water facilities, and also to pay the debt service (principal and interest that must be repaid) on Water Supply Bonds.

## Sewer

The Commission issues Sewage Disposal Bonds (Capital Fund) and receives grants to finance the planning, design, and construction of major sewage disposal and treatment facilities and the reconstruction of the sewerage collection system. The facilities include sewage pumping stations and force mains, sewer lines 15 inches in diameter and larger, sewage treatment facilities (including reimbursement to the District of Columbia Water and Sewer Authority for construction at Blue Plains), and improvements or modifications to these facilities. Sewer operating revenues - customer payments for sewer bills - in the Sewer Operating Fund are used to pay for operating and maintaining these facilities, and also to pay the debt service on Sewage Disposal Bonds. Sewer use charges are generally based upon metered water use.

(Continued)

## **General Construction**

The Commission issues General Construction Bonds (Capital Fund) to pay for the construction of minor water and sewer lines (water distribution lines 15 inches in diameter and smaller, and sewer lines 14 inches in diameter and smaller) and support facilities. General Bond Debt Service Fund revenues - customer payments for front foot benefit charges - are used to pay the debt service on construction of minor water and sewer lines. House connection construction costs are underwritten by a direct charge to the applicant.

The following table summarizes each of these funds.

#### **MAJOR PURPOSE MAJOR REVENUE SOURCE Capital Fund** Water Supply Bond Construct major water supply treatment and transmission Water Supply Bonds and System Development facilities; Reconstruct water distribution system Charge Sewage Disposal Bond Construct major sewage treatment and transmission Sewage Disposal Bonds, System Development facilities; Reconstruct sewerage collection system Charge, and Grants General Construction Bond Construct minor water and sewer lines and support facilities General Construction Bonds and House **Connection Charges Operating Fund** Water Operating Operate and maintain water facilities and pay debt service Customer Water Bill on Water Supply Bonds Sewer Operating Operate and maintain sewerage facilities and pay debt **Customer Sewer Bill** service on Sewage Disposal Bonds General Bond Debt Service Pay debt service on General Construction Bonds Front Foot Benefit Charges

## WSSC FUND STRUCTURE

(Continued)

## VI. MAJOR ASSUMPTIONS

The following major assumptions and workload indices were used in developing the FY'19 Proposed Budget.

- 1. <u>Water Consumption and Sewer Use Revenues</u> The estimated FY'19 revenues from water consumption and sewer use charges are \$273.3 million and \$354.6 million, respectively. Water production is assumed to be 164.0 MGD and water purchases are projected to remain the same.
- 2. <u>Reconstruction Debt Service Offset (REDO)</u> For FY'19, \$12.5 million will be transferred from the General Bond Debt Service Fund to the Water and Sewer Operating Funds. The transfer is made to help defray the debt service on funds borrowed to finance water and sewer system reconstruction activities.
- 3. <u>Accumulated Net Revenues</u> It was assumed for the purpose of preparing the FY'19 Proposed Budget that, at the end of FY'18, accumulated net revenues for the water and sewer operating funds would total \$176.9 million. For FY'19, approximately \$73.5 million will be held in accumulated net revenues in adherence to the Commission's reserve policy (see Long-Term Fiscal Policies, page 1-4). An additional \$14.2 million is earmarked for future operating reserve contributions. Fund balance will also be used to fund FY'19 one-time expenses as well as to help finance the IT Strategic Plan which includes a new Customer to Meter (C2M) system. This leaves an unallocated reserve of approximately \$31.3 million.
- 4. <u>Construction Estimates</u> The Capital Budget includes expenditure estimates for all projects for which work is reasonably expected to be accomplished. This provides management with maximum flexibility to proceed on the many and diverse projects approved each year in the budget. From an analysis of construction completed during previous fiscal years, it is estimated that the expenditures for all capital funds in FY'19 will be approximately \$588.3 million, of the \$656.3 million Capital Budget.
- 5. <u>New Debt</u> The debt service estimates for FY'19 assume that \$224.2 million in Water bonds and \$262.6 million in Sewer bonds will be issued in FY'19, in addition to repayment of existing debt. The WSSC water and sewer issues will be 30-year bonds with an estimated 4.5 percent net interest rate.
- 6. <u>Salary and Wage Increase</u> Funding for employee salary enhancements in a manner coordinated with the Counties is included in the budget.

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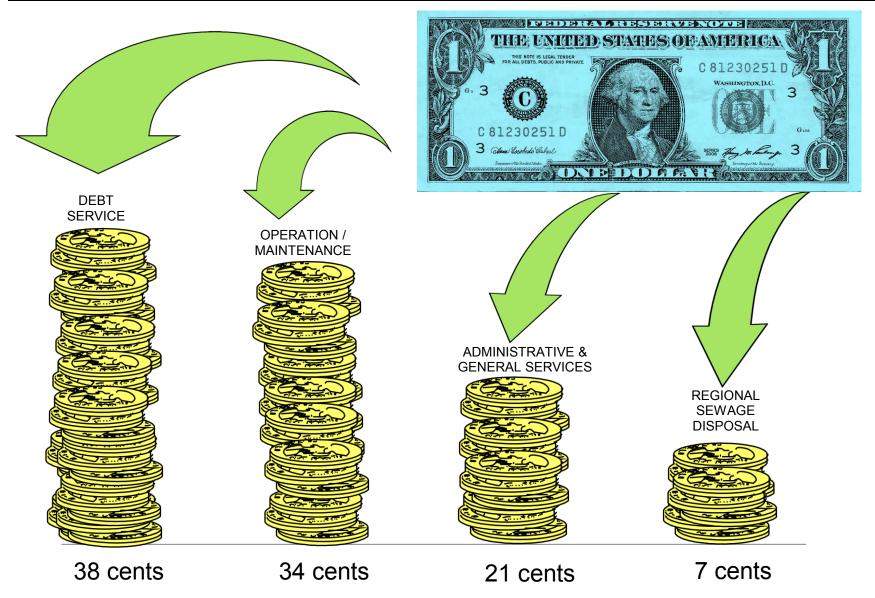
## VII. KEY PROVISIONS OF THE FY'19 BUDGET

The total approved budget for all funds is approximately \$1.4 billion - \$656.3 million in capital and \$781.6 million in operating. A 4.5 percent average increase in water and sewer rates is required to fund water and sewer operating expenses. In addition, we have performed a comprehensive review of fees and charges and have proposed various changes to align service costs with the fees charged. The budget provides for:

- Implementing the first year of the FYs 2019-2024 Capital Improvements Program;
- Treating and delivering 164.0 MGD of water to a projected 459,000 customer accounts in a manner that meets or exceeds the Safe Drinking Water Act standards;
- Treating 201.4 MGD of wastewater and responsibly managing up to 1,000 tons of biosolids per day in a manner that meets or exceeds federal and state permit requirements and regulations;
- Operating and maintaining a system of 3 water reservoirs impounding 14 billion gallons of water, 2 water filtration plants, 6 wastewater treatment plants, over 5,600 miles of water main, and over 5,500 miles of sewer main, 24 hours a day, 7 days a week;
- Paying the WSSC's share of the cost of operating the District of Columbia Water and Sewer Authority's Blue Plains Wastewater Treatment Plant;
- Maintaining an operating reserve of 10% of water and sewer revenues;
- Paying debt service of \$294.3 million of which \$277.1 million is in the Water and Sewer Operating Funds, on \$3.4 billion in outstanding debt to WSSC Stakeholders;
- Funding the annual required contribution for post-employment benefits other than retirement based on Government Accounting Standards Board Statement No. 45;
- Continuing to provide maintenance services at a level consistent with the objective of responding to the customer within 2 hours of receiving notification of a maintenance problem and restoring service to the customer within 24 hours from the time a service interruption occurs;
- Complying with the Sanitary Sewer Overflow and the Potomac WFP Consent Decrees;
- Answering 100 percent of all customer billing calls received;
- Maintaining and fueling 970 vehicles, 770 pieces of large field equipment; and operating 6 repair facilities;
- Funding employee salary enhancements in a manner coordinated with the Counties, and continuing other benefits.

# FY'19 PROPOSED BUDGET

(How Each Dollar of a Water and Sewer Bill is Spent)



PERFORMANCE AND OUTCOME MEASURES

**SECTION 2** 

# **OUR STRATEGIC PRIORITIES**

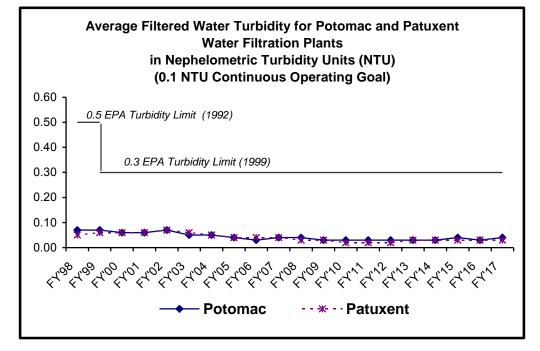
## Our methods for achieving our Mission and Vision

- Enhance Customer Experience and Community Engagement: Deliver an excellent customer experience and enhance community engagement through proactive communication, strategic partnerships, and providing exceptional products and services.
- **Improve Infrastructure:** Plan, invest in and renew our infrastructure to provide future generations with a sustainable system, through innovative, cost-effective technology and world class asset management.
- Achieve Business Process Excellence and Maintain Financial Stability: Achieve financial stability through an improved rate structure and improved business processes that drive performance and obtain cost-effective business outcomes.
- **Protect our People, Infrastructure, Systems and Resources:** Protect our community, employees and business through safe practices, mission-oriented security, proactive planning, emergency preparedness, and effective risk management and resilience strategies.
- **Inspire Employee Engagement:** Inspire and motivate employees by making WSSC a great place to work, thrive and serve.

## **Water Filtration and Treatment**

One of the WSSC's primary goals is to provide a safe and reliable supply of drinking water that meets or exceeds the requirements of the Safe Drinking Water Act and other federal and state regulations. The WSSC has *never* exceeded a maximum contaminant level (MCL) or failed to meet a treatment technique requirement established by the U.S. Environmental Protection Agency (EPA) in accordance with the Safe Drinking Water Act.

In addition to traditional approaches to ensuring drinking water quality, the WSSC continues to place particular emphasis on addressing low-level contaminants such as disinfection byproducts, and maintaining low levels of turbidity (suspended sediment) to

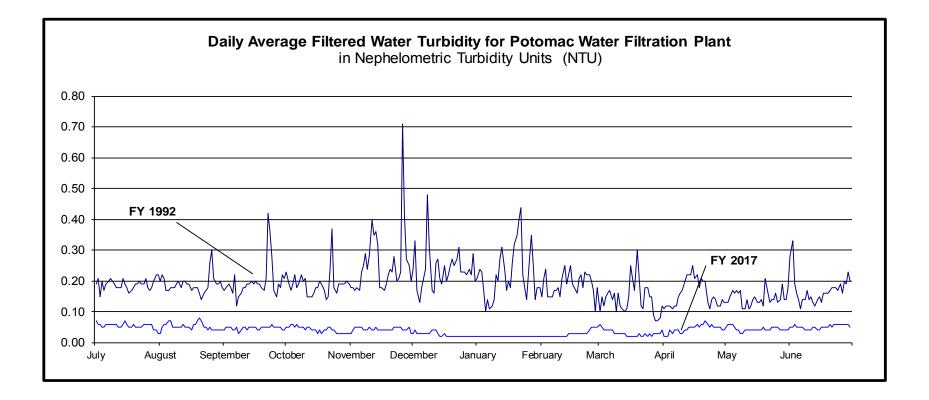


ensure public health protection. The Commission continues to work closely with local and national professional and research organizations, as well as with state and county agencies and the EPA, to ensure that our treatment methods are cost-efficient and consistent with current research findings.

The WSSC's continued participation in the Partnership for Safe Water Program is indicative of the Commission's commitment. A primary goal of this program is to maintain filtered water turbidity well below EPA established limits to effectively guard against *Cryptosporidium*. Although the WSSC was already meeting the established maximum average monthly turbidity requirement of 0.5 Nephelometric Turbidity Units (NTU), a substantial effort was made in FY'92 to further improve water quality to prevent emerging problems associated with *Cryptosporidium*. The graph above shows the average turbidity for the Potomac and Patuxent Water Filtration Plants for FY'98 through FY'17. The EPA reduced the turbidity limit to 0.3 NTU in 1999, still well above the levels being achieved by the WSSC. A maximum water turbidity of 0.1 NTU level has been and will continue to be a key objective for the WSSC's Production Department.

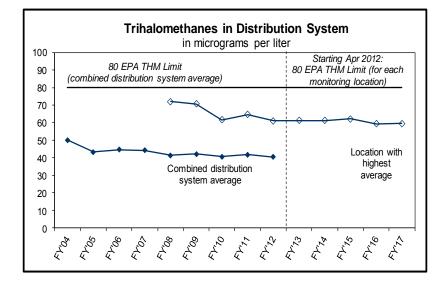
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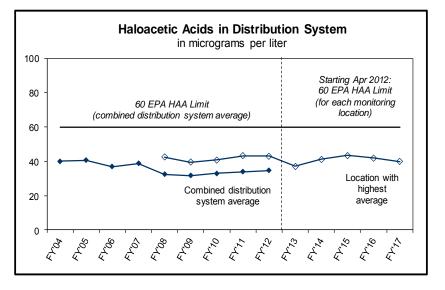
As shown in the graph below for the Potomac Water Filtration Plant, the FY'17 magnitudes of the daily peaks associated with variable raw water quality have been substantially reduced from FY'92 peak levels. This latter measure is of particular importance in ensuring the reliability of the *Cryptosporidium* barrier. In addition, the ultraviolet (UV) system incorporated in the treatment train at Potomac (and soon at Patuxent) further increases reliability of this barrier.



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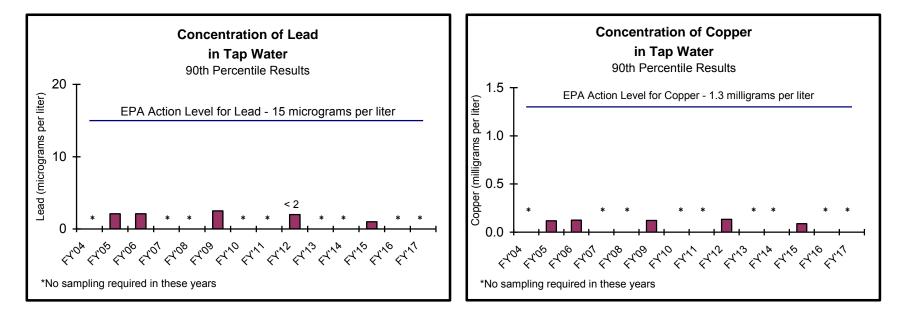
The WSSC has also been aggressively pursuing enhanced coagulation (optimization of coagulant doses and pH levels to improve total organic carbon removal) to enhance disinfection byproduct precursor removal, thereby lessening the formation of potential carcinogens in the finished water. Effective January 2001, the EPA standard for trihalomethanes (THMs) is 80 micrograms or lower of total THMs (TTHM) per liter in finished water. At the same time, the EPA also established a maximum finished water contaminant level for haloacetic acids (HAAs) of 60 micrograms of five HAAs (HAA5) per liter. As shown in the figures below, the WSSC is meeting the THM and HAA standards with the help of its enhanced coagulation initiatives. The Stage 2 Disinfection Byproducts (DBP) rule took effect in FY'12, and builds upon earlier rules to improve drinking water quality. The new rule strengthens public health protection from disinfection byproducts by requiring drinking water systems to meet maximum contaminant levels at each compliance monitoring location (as a locational annual average) instead of as a system-wide average as in previous rules. The annual average is shown below as the highest quarterly running annual average for a given fiscal year.





(Continued)

The Commission also continues its corrosion control program (using fine pH adjustment and addition of orthophosphate) to minimize potential lead and copper corrosion in customer plumbing. The state has confirmed that the WSSC's treatment is optimized for corrosion control against lead and copper. As a result, the state has allowed WSSC to be on a reduced monitoring schedule (both frequency of monitoring and number of samples) for much of the past two decades, with occasional periods of increased monitoring associated with treatment changes such as addition of orthophosphate. Results from the required annual or triennial monitoring continue to indicate the 90<sup>th</sup> percentile lead and copper levels are well below the tap water action levels. The most recent round of monitoring was performed in FY'15.



(Continued)

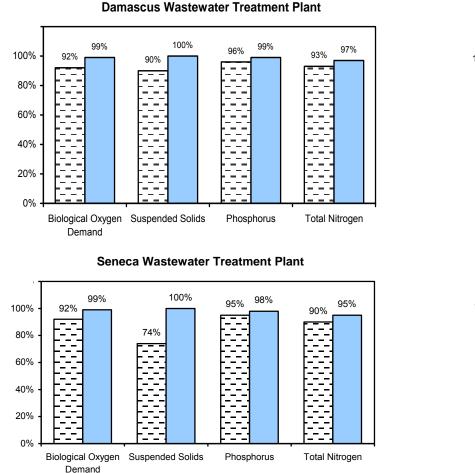
## **Wastewater Treatment**

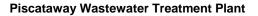
The following graphs present actual FY'17 plant performance for the WSSC's wastewater treatment plants, in terms of the percentage of specific substances removed compared to state/federal discharge permit requirements. The substances regulated differ from plant to plant, depending (in part) on the river or stream into which the treated water is discharged. For FY'19, the Production Department will continue to pursue its goal of meeting or surpassing the permit requirements for each plant.

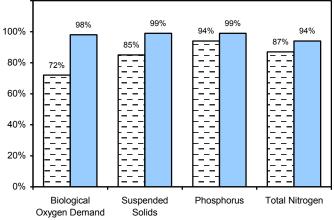
## Wastewater Treatment Plant Performance – FY'17 Percentage Removal of Substances Regulated by Discharge Permits

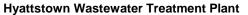


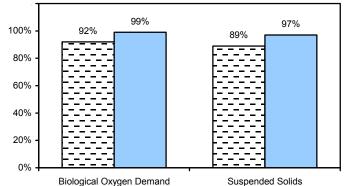
Plant Performance









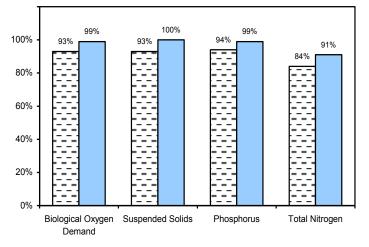


# PERFORMANCE OF KEY SERVICES (Continued)

Wastewater Treatment Plant Performance – FY'17 Percentage Removal of Substances Regulated by Discharge Permits

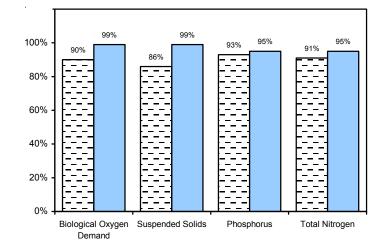
**Permit Requirement** 

Plant Performance



# Parkway Wastewater Treatment Plant

## Western Branch Wastewater Treatment Plant

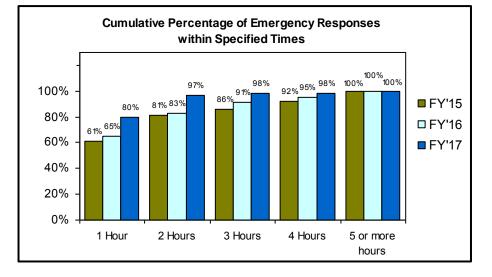


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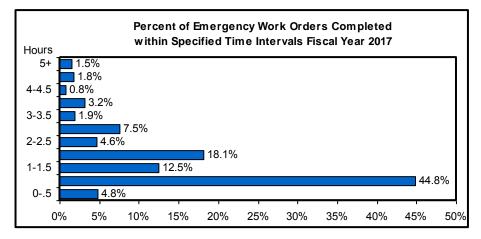
## **Emergency Response**

During FY'17, 31,914 emergency work orders were initiated in response to customer or system emergencies. The WSSC's objective is to provide a first response to these emergencies in less than 2 hours, based on feedback from our customers on what they consider a reasonable and necessary response time.

The top graph shows that in FY'17 we responded to approximately 80% of our emergency calls in less than 1 hour, and to 97% in less than our 2-hour goal with an average response time of 1.3 hours, the same as in FY'16. The percentage of calls responded to within our 2-hour goal improved, primarily due to 13% fewer emergency work orders in FY'17 than in FY'16. Emphasis on proper dispatching and on crew and inspector assignments generally allows us to keep our response time under 2 hours.



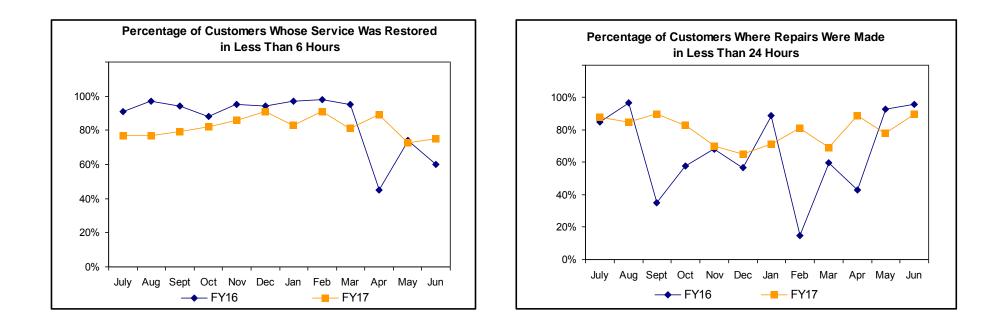
The bottom graph shows the distribution of emergency work order completion times in FY'17. Most emergency work orders required less than 2.0 hours to complete.



(Continued)

## **Restoration of Water Service**

The WSSC's objective is to restore normal service to our customers within 24 hours from the time the Commission is notified of an emergency, and to limit the actual time a customer is without water service to less than 6 hours. During FY'17, 40,333 customers, or approximately 9% of the WSSC's customers, experienced a temporary suspension in water service while a water main was shut down following a water main break or other emergency. The graph below on the left indicates the percentage of affected customers whose water service was restored in less than 6 hours after a water main was shut down and returned to service. For FY'17, the average time customers were without water service was 4.1 hours, with 84% having water service restored within the targeted 6-hour goal. The graph on the right indicates the percentage of affected customers where repairs were completed in less than 24 hours to restore normal or permanent water service. The average time from notification of a problem to restoration of normal service was 17.0 hours for FY'17, with 78.3% of customers having normal water service restored in less than the 24-hour goal.



(Continued)

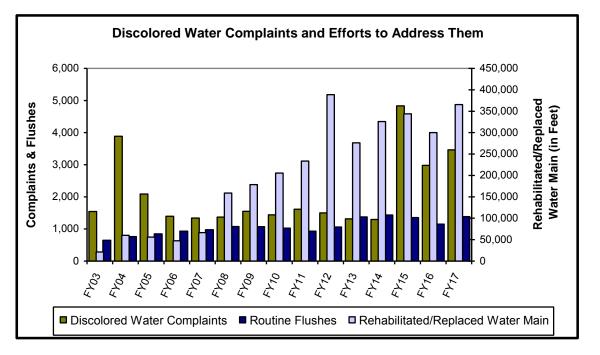
## **Discolored Water**

Unlined cast iron pipe eventually leads to discolored water in the distribution system as the water chemically reacts with the pipe to form iron oxides (rust) and accumulates deposits of iron and manganese that can become dislodged. This is a serious inconvenience for the

affected customers, limiting and disrupting their normal water use. To combat this problem, an aggressive program was begun in FY'96 to periodically flush water mains in the affected areas to keep the water clear. At the same time, the Commission augmented its ongoing program to resolve such problems by mechanically cleaning and relining the old mains with a new cement mortar lining.

The graph to the right shows the relative success the WSSC has had in dealing with these complaints over the years.

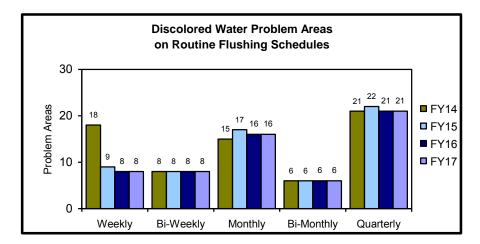
Beginning in FY'01, the emphasis was shifted from cleaning and lining water mains to the more permanent solution of water main replacement, which is more involved and more time consuming than cleaning and lining. During FY'04, even though rehabilitation and replacement efforts more than doubled, discolored water



complaints increased as a result of the volume of water main breaks associated with winter weather and service changes resulting from the Patuxent Water Filtration Plant Upgrade. In recent years, the number of discolored water complaints has again increased substantially. An investigation of this issue has revealed significant increases in sodium and manganese coming from the Potomac River. The sodium concentration, up to 7 times higher than usual, was in the river due to the use of salt on roads and driveways in the winter months. The salt leached manganese from the soil and the increased manganese in the ground water reached the river and the intake at the Potomac Plant. The presence of high levels of manganese caused discoloration. The presence of sodium aggravated the corrosion of WSSC's aging water mains and contributed to increased discolored water complaints as well. The Commission is now treating water for manganese reduction, which should reduce discolored water complaints in the future.

(Continued)

The focus on rehabilitation and replacement efforts has been increased in recent years. In order to maintain the high level of water quality our customers expect, it is important to continue acceleration of water main replacement. This will continue to reduce the amount of flushing that is required. WSSC replaced 69.2 miles of distribution mains, and 4.4 miles of transmission mains during FY'17.



The graph to the left shows the number of chronic problem areas requiring regular flushing on a weekly, bi-weekly, monthly, bi-monthly, and quarterly basis since FY'14. The number of areas with chronic discolored water problems has remained relatively constant over the years, with little variation in bi-weekly, monthly, bi-monthly, and quarterly flushings. Areas with weekly flushings have been reduced in number over the past few years.

## Sewer Line Blockages

The goal of the Line Blockage Analysis (LBA) program is to prevent a customer who experiences a sewer backup due to a problem in the WSSC's main sewer line from suffering a second backup. When a customer has a sewer backup, a maintenance crew responds to clear the stoppage and assist in cleaning the basement. Response is generally within 2 hours, 24 hours a day, 7 days a week. The customer is contacted the following business day to see if additional assistance is needed and is advised that an LBA investigation has been initiated. The sewer main is immediately recleaned to preclude another backup during the investigation process, and a television camera is pulled through the line within 30 days to determine structural condition. All pertinent data is then reviewed and analyzed to determine what action is necessary to prevent a recurrence of the backup. After a decision is made, the customer is notified by letter of any planned action, and the appropriate preventive maintenance or rehabilitation action is scheduled and subsequently implemented.

The overall program objective is to prevent a second backup in 95% of the cases processed. For FY'17, the Commission was successful in preventing a second backup in 99% of these cases. The Proactive Maintenance Program (PMP), along with technological advances such as the jet cam, has enabled the Commission to pursue its objective more diligently.

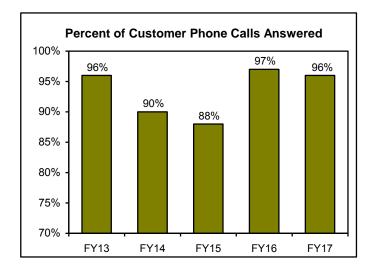
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## Sewer House Connection Renewal

The sewer house connection renewal program replaces sewer house connections when structural problems have caused customer backups. Damaged or deteriorated sewer house connections are replaced as necessary to ensure that customers do not suffer repeated sewer backups into their homes. The program objective is to prevent a second backup after the WSSC has confirmed there is a problem with the service. During FY'17, the Commission replaced 1,198 connections, versus 966 connections in FY'16.

## **Customer Calls for Maintenance Assistance**

During FY'17, the Commission answered 96% of customer calls for maintenance assistance, as shown in the graph to the right. Our goal continues to be a 95% response rate. We continue to work through several measures in furtherance of this goal. Cross-training agents from the Non-Emergency Call Center allows for greater flexibility in staffing and an improved knowledge base. A Geographic Information System (GIS) application enables customers to report emergencies using their smart phones. The system complements the Maintenance Management Information System (MMIS) by placing needed information about leaks and other emergencies at the dispatchers' fingertips, thereby allowing representatives to provide consistent and knowledgeable responses. Detailed help in determining the proper response to customers' problems and questions is included along with other frequently required reference materials, such as phone numbers and standard operating procedures.



In addition, a Workforce Management Center of Excellence (CoE) is being implemented to forecast, plan, schedule, and handle intra-day adjustments so staffing levels required to meet service levels are achieved. The benefit of this initiative is that the Workforce Management CoE will proactively monitor staffing levels and maintain best services, routing between in-house and out-sourced staff.

## **GOALS, OBJECTIVES, AND OUTCOME MEASURES**

## **STAFF OFFICES**

Goal: Provide cost-effective internal audit services.

Office(s): Internal Audit Strategic Priority: Achieve Business Process Excellence and Maintain Financial Stability

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
In fiscal years where Blue Plains audit reports are issued, achieve an internal audit payback ratio in excess of 1:1 (e.g. the Commission should receive more dollars from internal audits than it spends on internal audits).	Ratio of financial savings from internal audits to Internal Audit costs, excluding the costs associated with external audit services and the WSSC Commissioners.	1:1	1:1	1:1	1:1	1:1	1:1
Ensure accurate reimbursements via performed	<u>SDC</u> : Total audit-based adjustment in Developer-requested reimbursements for CIP construction.	\$500,000	\$29,522	\$500,000	\$1,042,314	\$500,000	\$500,000
audits.	<u>Blue Plains</u> : Total audit-based adjustment in Blue Plains O&M and Capital Indirect Billing.	\$1,000,000	N/A	\$1,000,000	\$2,323,705	\$1,000,000	\$1,000,000

Goal: Enhance customer service with an emphasis on customer communication.\*

Office(s): Claims Strategic Priority: Enhance

Enhance Customer Experience and Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Respond to all complaint phone calls and/or	Percentage of customer complaint	N/A	N/A	N/A	N/A	N/A	95%
emails within 24 hours.	calls/emails responded to within 24 hours.						9370
	Percentage of acknowledgement letters	N/A	N/A	N/A	N/A	N/A	95%
Acknowledge all claims promptly upon receipt	mailed within 24 hours of receipt of claim.						3370
of claim.	Percentage of customers with whom voice	N/A				N/A	
	contact has been made (or attempted)		N/A	N/A	N/A		95%
	within 48 hours of receipt of claim.						

\*New goal for FY 2019.

#### **STAFF OFFICES (continued)**

Goal: Improve the efficiency and promptness of the claims handling process.\*

Office(s): Claims Strategic Priority: Achieve Business Process Excellence and Maintain Financial Stability

Objective	Outcome Measure	FY 2	2016	FY 2017		FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Make liability decisions regarding new claims	Percentage of new claims having been						
within 30 days.	investigated and a liability determination	N/A	N/A	N/A	N/A	N/A	95%
	made within 30 days.						
Fully document all claims.	Percentage of processed claims fully	N/A	N/A	N/A	N/A	N/A	95%
	documented at closure.						5570
	Closure ratio for claims opened and closed	N/A	N/A	N/A	N/A	N/A	85%
Reduce the number of days required to close a	within one year.	IN/A	IN/A	IN/A	IN/A	IN/A	0370
claim.	Average number of days required to close	N/A	N/A	N/A	N/A	N/A	180
	a claim.	IN/A	IN/A	IN/A	IN/A	IN/A	100

\*New goal for FY 2019.

**Goal:** Support the achievement of the Commission's goals.

Office(s): WSSC Stat Office Strategic Priority: Enhance Custome Community Engage

Enhance Customer Experience and Community Engagement

Objective	Outcome Measure	FY 2	2016	FY 2	2017	FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Facilitate the use of management best	Percentage of annual enterprise initiatives						
practices in completion of enterprise initiatives	that utilized WSSC Stat Office consulting	25%	45%	25%	75%	25%	90%
and projects.	services for achievement of outcomes.						

#### **STAFF OFFICES (continued)**

**Goal:** Align organizational goals with the Commission's vision, mission, and strategic priorities.

Office(s):WSSC Stat OfficeStrategic Priority:Enhance Customer Experience and<br/>Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Facilitate alignment of annual workplan	Percentage of initiatives linked to Strategic						
initiatives with the Commission's Strategic	Priorities.	100%	100%	100%	100%	100%	100%
Priorities.							

#### **STRATEGIC PARTNERSHIPS**

Goal: Promptly and courteously answer all telephone calls.

**Division(s):** Customer Care **Strategic Priority:** Enhance Customer Experience and Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Attain a 95% success rate for answering non- emergency calls.	Percentage of non-emergency calls answered.	90.0%	92.0%	90.0%	93.0%	95.0%	95.0%
Maintain a 95% success rate for answering all emergency calls.	Percentage of emergency calls answered.	96.0%	97.0%	90.0%	91.0%	95.0%	95.0%

Accurately bill and collect for all metered water use. Goal:

Division(s):

Billing & Revenue Protection Strategic Priority: Enhance Customer Experience and Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Percentage of customer bills based on actual consumption (e.g., actual meter readings).	96.0%	91.0%	96.0%	96.5%	95.0%	95.0%
	Percentage of billed water and sewer accounts considered delinquent.	10.0%	6.0%	11.0%	5.9%	5.0%	5.0%

Goal: Provide a quick response time to customer problems or system emergencies.

Division(s): Customer Care Strategic Priority: Enhance Customer Experience and Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Respond within 14 (calendar) days to all written correspondence received.	Percentage of customer correspondence responded to within 14 (calendar) days.	80.0%	95.0%	95.0%	99.0%	95.0%	95.0%

#### STRATEGIC PARTNERSHIPS (continued)

**Goal:** Ensure active participation in, and full voice for, the WSSC's legislative priorities.

Office(s): Intergovernmental Relations Office Strategic Priority: Enhance Customer Experience and Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Officer and other WSSC officials in providing	Percentage of required bill hearings, worksessions, and delegation/committee meetings attended.	100%	100%	100%	100%	100%	100%

**Goal:** As the Commission's liaison, build and maintain strong partnerships with elected officials and their staff.

Office(s):Intergovernmental Relations OfficeStrategic Priority:Enhance Customer Experience and<br/>Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Develop and maintain relationships with elected officials and staff members to advance WSSC's interests.		100%	100%	100%	100%	100%	100%
Respond to elected officials' requests, including those originating from their constituents and staff.	Percentage of responses to inquiries provided within three business days.	100%	100%	100%	100%	100%	100%
Schedule educational site visits to WSSC facilities and briefings for elected officials and staff at the County, State, and Federal level.	Percentage of educational site visits and briefings conducted vs. scheduled.	100%	100%	100%	100%	100%	100%

#### STRATEGIC PARTNERSHIPS (continued)

**Goal:** Disseminate accurate and timely information regarding legislation impacting the WSSC to employees and stakeholders.

Office(s): Intergovernmental Relations Office Strategic Priority: Enhance Customer Experience and Community Engagement

Objective	Outcome Measure	FY 2	2016	FY 2	2017	FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
informed of County, State, and Federal	Percentage of monthly federal updates required to be sent to all management vs. actual updates sent.	100%	100%	100%	100%	100%	100%

# **Goal:** Disseminate accurate and timely information to WSSC customers and stakeholders.

Office(s):Communications & Community<br/>Relations OfficeStrategic Priority:Enhance Customer Experience and<br/>Community Engagement

Objective	Outcome Measure	FY 2	2016	FY 2	2017	FY 2018	FY 2019
Objective	Outcome Measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Satisfy EPA requirements by producing the Annual Water Quality Report by close of fiscal year.	Yes	Yes	Yes	Yes	Yes	Yes
	Number of Quarterly Pipeline bill inserts produced and distributed vs. planned.	4	4	4	4	4	4
Provide customers with up-to-date information on the WSSC and its activities/events.	Build social media following on Twitter and Facebook to expand our reach to customers. (# Followers/Social Media Program)	2,000 Facebook/ 3,000 Twitter	1,800 Facebook/ 3,000 Twitter	3,000 Facebook/ 5,000 Twitter	2,850 Facebook/ 3,700 Twitter	3,500 Facebook/ 5,500 Twitter	3,500 Facebook/ 5,500 Twitter
	Post all news releases on WSSC website home page.	Yes	Yes	Yes	Yes	Yes	Yes

#### STRATEGIC PARTNERSHIPS (continued)

**Goal:** Achieve fair and accurate media coverage for the WSSC.

Office(s):Communications & Community<br/>Relations OfficeStrategic Priority:Enhance Customer Experience and<br/>Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Percentage of responses to inquiries provided within one hour.	98%	98%	98%	98%	98%	98%
Remain continuously accessible (24/7) to local media.	Number of days per year accessible to local media.	365	365	365	365	365	365

## **Goal:** Disseminate accurate and timely information to WSSC customers and stakeholders.

Office(s):Communications & Community<br/>Relations OfficeStrategic Priority:Inspire Employee Engagement

FY 2016 FY 2017 FY 2018 FY 2019 Objective **Outcome Measure** Targeted Actual Targeted Targeted Actual Targeted Number of educational events prepared 35 78 75 100 100 120 and presented to local schools. Plan and execute presentations for community-level service groups and associations (e.g. Fats, Oils, and Grease 15 25 150 100 150 100 (FOG) Program, Infrastructure, WSSC educational-related issues, media Educate constituencies on the three appearances). components of the WSSC's services: water, Partner with outside agencies to wastewater, and source water protection. plan/execute events (e.g. stream/road 9 12 5 5 20 20 cleanups, water festival, and campfire). Number of community outreach events conducted (e.g. H2O Summit, Children's 25 30 30 20 35 20 Water Festival, tree plantings, and invasive weed removals).

#### STRATEGIC PARTNERSHIPS (continued)

Goal: Disseminate accurate and timely information to WSSC employees.

Office(s):Communications & Community<br/>Relations OfficeStrategic Priority:Inspire Employee Engagement

Objective	Outcome Measure	FY 2	2016	FY 2	2017	FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Inform employees about WSSC news.	Publish Fish Tales and distribute to Depots monthly (in addition to providing on-line). <u>Note:</u> As of FY'18, Fish Tales and #H20 People are combined for quarterly publications.	12	4	12	4	4	4
Communicate new initiatives/programs to employees.	Execute campaigns to communicate new or special initiatives, programs, etc. to employees.	5	5	5	5	5	5

**Goal:** Provide support for WSSC programs/projects as required.

Office(s):Communications & Community<br/>Relations OfficeStrategic Priority:Protect Our People, Infrastucture,<br/>Systems, and Resources

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Fulfill Consent Decree requirement to issue news releases for all SSOs over 10,000 gallons within 24 hours.	Yes	Yes	Yes	Yes	Yes	Yes
Increase public awareness of Consent Decree related issues, such as the Fats, Oils, and Grease (FOG) Program.	Promote "Can The Grease" to media at least 3 times per year.	3	3	3	3	3	3
	Provide FOG-related educational materials and promotional items to distribute to customers.	10,000	10,000	10,000	10,000	10,000	10,000

#### STRATEGIC PARTNERSHIPS (continued)

**Goal:** Continuous improvement of Human Resources operations.

Office(s): Human Resources Office Strategic Priority: Inspire Employee Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Percentage of policies and procedures identified as priority and critical for revision having been prioritized, revised, and communicated to all employees.	100%	60%	100%	70%	100%	100%

# **Goal:** Ensure the WSSC is fully compliant with all employment regulatory requirements.

Office(s):Human Resources OfficeStrategic Priority:Inspire Employee Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Ensure all employees are aware of WSSC policies and employment regulatory requirements, through communication and education.	Percentage of employees trained in the required employment areas.	100%	100%	100%	100%	100%	100%

**Goal:** Ensure that the WSSC is a safe place to work.

Office(s):Occupational Safety and HealthStrategic Priority:Inspire Employee Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Limit the occurrence of on-the-job injuries to	Number of injuries reported by WSSC:						
WSSC employees to $\leq$ 130 and lost-time	On-the-job injuries	125	109	125	109	125	125
injuries to <u>&lt;</u> 65.	Lost-time injuries	30	43	40	32	50	50

#### STRATEGIC PARTNERSHIPS (continued)

**Goal:** Provide regular, effective training to WSSC employees concerning Commission safety policies and practices.

Office(s):Occupational Safety and HealthStrategic Priority:Inspire Employee Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Average overall ratings by trainees for safety training classes.	4.8	4.8	4.8	4.8	4.8	4.8

#### **OPERATIONS**

**Goal:** Provide timely support for water and sewer extensions needed for planned development in the Sanitary District.

Division(s):Development ServicesStrategic Priority:Enhance Customer Experience and<br/>Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Complete Hydraulic Review as part of the System Extension Permit (SEP) process within 6 weeks of submission, excluding large/complex projects.		100%	94%	100%	88%	95%	95%
	Percentage of Phase II plan review packages processed in 8 weeks or less.	100%	100%	100%	100%	100%	100%

**Goal:** Promptly issue all plumbing and gasfitting permits required by the WSSC.

Division(s):Development ServicesStrategic Priority:Enhance Customer Experience and<br/>Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Percentage of permits issued within 2 days of receipt of contractors' application.	100%	100%	100%	100%	100%	100%

**Goal:** Provide effective short- and long-range planning for the WSSC's water and wastewater systems to ensure public safety and sufficient future water and wastewater capacity.

Division(s): Planning Strategic Priority: Improve Infrastructure

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Number of wastewater basins experiencing recurring wet weather overflows (Total: 21 basins).	1	1	1	1	1	1
storage deficiencies that require authorization	Number of water system zones with transmission / storage deficiencies that require authorization dependencies (Total: 19 zones).	0	0	0	2	0	2

#### **OPERATIONS** (continued)

Goal: Plan, design and construct major capital projects according to the CIP.

## Division(s):Facility Design & ConstructionStrategic Priority:Improve Infrastructure

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Number of planning and design phase projects completed vs. planned.	5	13	5	12	7	6
Complete facility construction as scheduled in the CIP.	Number of construction phase projects completed vs. planned.	6	8	8	8	4	13

**Goal:** Rehabilitate and/or replace deteriorating water and wastewater infrastructure.

Division(s): Pipeline Design

Pipeline Construction Improve Infrastructure

Strategic Priority: In

Objective	Outcome Measure	FY 2	2016	FY 2017		FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Design the number of miles for the Water Reconstruction Program as planned.	Miles of water mains designed vs. planned.	57	59	69	57.2	67	57
Design the number of large service meter vaults as planned.	Number of meter vaults designed vs. planned.	45	56	45	45	45	45
Design the number of miles for the Sewer Reconstruction Programs as planned.	Miles of sewer mains designed vs. planned.	10	49	20*	31.5	20	20
Design the number of sewer manholes as planned.	Number of sewer manholes designed vs. planned.	231	1,643	29	353	300	250
Manage construction of the water main	Miles of contract water distribution main replaced vs planned.	43.0	46.9	43.0	60.5	43.0	43.0
replacement program to achieve replacement goals.	Miles of contract water transmission main replaced vs planned.	4.0	7.7	6.0	4.4	6.0	6.0
Rehabilitate the number of miles of sewer mains and lateral lines for the Sewer Reconstruction and Trunk Sewer Reconstruction Programs as planned.	Miles of sewer mains and lateral lines rehabilitated vs. planned.	56	57	55	44	55	35

\* Effective FY'17 the design miles include both small and large diameter sewer mains.

#### **OPERATIONS** (continued)

Improve facility operations by updating industrial automation systems. Goal:

Division(s):	Process Control
Strategic Priority:	Improve Infrastructure

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Upgrade planned number of Programmable Logic Controllers (PLC).	Number of PLC upgraded vs. planned.	3	3	3	2	2	2
Upgrade or install new Uninterruptable Power Supply (UPS) systems to improve electrical reliability for the PLC Systems.	Number of UPS upgraded vs. planned.	3	3	3	0	2	2

Ensure Significant Industrial Users' compliance with EPA regulatory requirements. Goal:

**Division(s):** Regulatory Services Strategic Priority: Enhance Customer Experience and Community Engagement

Objective Outcome Measure		FY 2016		FY 2017		FY 2018	FY 2019
Objective			Actual	Targeted	Actual	Targeted	Targeted
Inspect all Significant Industrial Users annually	Number of required inspections of Significant ndustrial Users performed vs. number of Significant Industrial Users.	100%	100%	100%	100%	100%	100%
and conduct necessary follow up inspections.	Number of follow up inspections of Significant Industrial Users.	25	44	25	23	25	10
Collect samples from all Significant Industrial	Number of Significant Industrial User samples collected vs. number of samples required.	300	300	300	300	300	325
Users as required in their permit.	Number of additional samples taken of Significant Industrial Users.	850	1,016	850	1,104	850	850

#### **OPERATIONS** (continued)

**Goal:** Provide timely review of site utility plans and ensure compliance with plumbing and gasfitting regulations.

Division(s):Development Services<br/>Regulatory ServicesStrategic Priority:Improve Infrastructure

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Complete 1 <sup>st</sup> review of site utility plans within eight weeks of submission.	Percentage of 1 <sup>st</sup> reviews completed within eight weeks.	100%	100%	100%	100%	100%	100%
· · ·	Percentage of requested plumbing/gasfitting inspections conducted.	99.96%	100.00%	99.96%	100.00%	100.00%	100.00%

Goal: Comply with the FOG provisions of the Sanitary Sewer Overflow Consent Decree.

**Division(s):** Regulatory Services **Strategic Priority:** Enhance Customer B

Enhance Customer Experience and Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Conduct 100% of all mandatory Consent Decree FOG initial inspections.	Percentage of initial FOG inspections completed vs. planned.	100%	100%	100%	100%	100%	100%

**Goal:** Manage paving contracts to meet time restrictions for work directed on a non-emergency basis.

**Division(s):** Pipeline Construction **Strategic Priority:** Enhance Customer Ex

Enhance Customer Experience and Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Percentage of paving repairs that are completed within the contract time requirements.	80%	49%	70%	41%	70%	70%
	Percentage of paving repairs that are completed within the contract time requirements.	80%	72%	85%	70%	80%	80%

#### **OPERATIONS** (continued)

**Goal:** Manage construction contracts to minimize extra expense while still ensuring quality construction.

Division(s):Pipeline ConstructionStrategic Priority:Achieve Business Process Excellence<br/>and Maintain Financial Stability

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Manage change orders to ensure minimum amount of contract increases.	Dollar value of change orders as a percentage of bid amount for Pipeline Construction contracts completed.	0.0%	4.0%	1.0%	7.3%	1.0%	4.0%

**Goal:** Identify deteriorating infrastructure through inspection, testing and monitoring.

Division(s):Engineering & EnvironmentalStrategic Priority:Improve Infrastructure

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Inspect the number of dams as planned.	Number of dams inspected vs. planned.	3	3	3	3	3	3
Provide corrosion design and repair	Number of corrosion test stations read vs.						
recommendations based upon corrosion test	planned.	300	442	300	465	300	400
readings.							

**Goal:** Eliminate / Minimize adverse environmental impacts associated with accelerated soil erosion and sediment control of major pipeline projects.

Division(s): Er Strategic Priority: Er

Engineering & Environmental Enhance Customer Experience and Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
sediment control of major pipeline projects.	Percentage of bi-weekly inspections of each major pipeline project performed as required by law.	100%	100%	100%	100%	100%	100%

#### **OPERATIONS** (continued)

**Goal:** Comply with state and federal standards for safe drinking water.

Division(s):	Potomac, Patuxent
Strategic Priority:	Protect our People, Infrastructure,
	Systems and Resources

Objective	Outcome Measure	FY 2	2016	FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Maintain compliance with Safe Drinking Water Act requirements to ensure safe, pure drinking water.	Number of times the maximum contaminant levels established by the EPA were exceeded: Potomac Water Filtration Plant Patuxent Water Filtration Plant	0 0	0 0	0 0	0 0	0 0	0 0
Achieve optimized coagulation and filtration to maintain filtered water turbidity at or below 0.1 Nephelometric Turbidity Units (NTU).	Average filtered water turbidity (NTU): Potomac Water Filtration Plant Patuxent Water Filtration Plant	<0.08 <0.08	0.03 0.03	<0.08 <0.08	0.035 0.035	<0.08 <0.08	<0.08 <0.08
Keep the level of potential disinfection by- product (trihalomethanes) in the finished water below 80 micrograms per liter, the standard established by the EPA.	The highest quarter local value rolling annual average of trihalomethanes in the distribution system (mg/l).	<64.0	61.2	<64.0	59.5	<64.0	<64.0
Keep the level of potential disinfection by- product (haloacetic acids) in the finished water below 60 micrograms per liter, the standard established by the EPA.	The highest quarterly local value rolling annual average of haloacetic acids in the distribution system (mg/l).	<59.0	42.0	<59.0	39.8	<59.0	<59.0

**Goal:** Consistently return clean wastewater to the environment in a manner that meets or exceeds all state and federal standards.

**Division(s):** Piscataway, Western Branch, Parkway,

Seneca/Damascus/Hyattstown

Strategic Priority: Protect our People, Infrastructure, Systems and Resources

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome Measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Number of NPDES permit non-compliances for the WSSC's wastewater treatment plants.	4	0	2	0	2	0

#### **OPERATIONS** (continued)

**Goal:** Accurately bill and collect for all metered water use.

Division(s):Meter ServicesStrategic Priority:Achieve Business ProcessExcellence and MaintainFinancial Sustainability

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Accurately record and report all meter readings.	Percentage of meter readings reported and recorded accurately.	99.9%	99.9%	85.0%	98.6%	99.9%	90.0%

**Goal:** Accurately account for water produced in the distribution system.

Division(s):Utility Services North, West,<br/>Central, SouthStrategic Priority:Achieve Business Process<br/>Excellence and Maintain<br/>Financial Sustainability

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Reduce service interruptions due to water main breaks.	Number of breaks per 100 miles of water main.	33.0	26.2	50.0	57.0	35.0	35.0
Perform annual testing of all large water meters whose daily average registration exceeds 20,000 gallons.	Percentage of all large water meters tested annually.	100.0%	77.0%	100.0%	37.0%	80.0%	80.0%

**Goal:** Provide a quick response time to customer problems or system emergencies.

Division(s): Utility Services North, West, Central, South **Strategic Priority:** Enhance Customer Experience and Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
emergency telephone calls.	Percentage of emergencies responded to within 2 hours of receipt of customer calls.	85.0%	83.0%	85.0%	97.0%	95.0%	95.0%
	Average response time to emergency calls (in hours).	1.2	1.3	1.2	1.3	1.2	1.2

#### **OPERATIONS (continued)**

**Goal:** Minimize inconvenience caused by disruptions in service.

Division(s):	Utility Services North, West,
	Central, South
Strategic Priority:	Achieve Business Process
	Excellence and Maintain
	Financial Sustainability

Objective	Outcome Measure	FY 2	2016	FY 2017		FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Restore normal water service within 24 hours.	Percentage of customers whose water service was restored within 24 hours.	80.0%	72.5%	75.0%	79.0%	75.0%	75.0%
	Average time from notification of system problem to restoration of water service (in hours).	16.0	17.3	16.0	15.0	16.0	16.0
Limit time without water due to a service interruption to less than 6 hours.	Percentage of customers without water service for less than 6 hours.	90.0%	86.0%	90.0%	80.0%	90.0%	90.0%
	Average time without water (in hours).	4.0	4.1	4.0	4.0	4.0	4.0
Deduce the sumbar of discolars dougter	Number of discolored water complaints.	1,300	2,978	2,500	2,245	2,500	2,500
Reduce the number of discolored water complaints.	Areas with chronic discolored water problems which are on a routine flushing schedule.	50	59	60	62	60	60
Prevent a second sewer backup from occurring for at least 95% of customers experiencing an initial main line blockage.	Percentage of customers not experiencing a second backup after notifying the WSSC of a main line sewer blockage.	90.0%	100.0%	95.0%	99.4%	95.0%	95.0%

**Goal:** Complete planned water main replacement miles.

Division(s):Pipeline Infrastructure StrategicStrategic Priority:Improve Infrastructure

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Replace the number of miles of water main by in Miles of water main replaced by in-house		12.0	9.8	12.0	87	12.0	2.0
house staff as planned.	crews vs. planned.	12.0	9.0	12.0	0.7	12.0	2.0

#### **OPERATIONS** (continued)

Goal: Inspect sewer infrastructure to ensure a reliable sewer collection system.

Division(s):	Water/Wastewater Systems
	Assessment
Strategic Priority:	Improve Infrastructure

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Inspect, via closed circuit television, the number of miles of sewer main planned.	Miles of sewer main inspected via closed circuit television vs. planned.	300	242	300	286	300	300
	Miles of sewer main inspected via smoke test vs. planned.	5.0	0.7	5.0	2.0	5.0	5.0

**Goal:** Identify deteriorating water infrastructure through inspection, testing and monitoring.

Division(s):Water/Wastewater SystemsAssessmentStrategic Priority:Improve Infrastructure

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Inspect the number of Prestressed Concrete Cylinder Pipe (PCCP) miles as planned.	Miles of PCCP inspection performed vs. planned.	20.0	17.6	18.0	20.5	18.0	18.0
	Miles of acoustical fiber optic line installed vs. planned.	6.0	2.9	6.0	6.5	6.0	6.0

#### **ADMINISTRATION**

Minimize borrowing costs. Goal:

**Division(s):** Finance Department Strategic Priority: Achieve Business Process Excellence and Maintain Financial Stability

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Maintain FitchRatings, Moody's, and/or Standard and Poor's bond ratings of AAA/Aaa/AAA.	Bond ratings: (FitchRatings/Moody's/Standard and Poor's).	AAA/Aaa/ AAA	AAA/Aaa/ AAA	AAA/Aaa/ AAA	AAA/Aaa/ AAA	AAA/Aaa/ AAA	AAA/Aaa/ AAA

#### Maximize investment returns within the constraints of Maryland law and Goal: adopted investment policy.

**Division(s):** Retirement

Strategic Priority: Achieve Business Process Excellence and Maintain Financial Stability

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Manage WSSC investment portfolio relative to the 91-day T-bill (U.S. Treasury bill) rate. (In a rising market, targeted earnings are 25 basis points below. In a falling rate market, target is 25 basis points above.)	Difference in basis points on 91-day T-bill rate.	Even	5 basis points above	Even	15 basis points below	4 basis points above	25 basis points below
Meet or exceed the 7% actuarial assumption for Retirement Fund investment returns on an annualized 10-year basis.	Annualized 10-year return on Retirement Fund investments as of June 30.	6.4%	5.1%	5.5%	4.8%	5.5%	9.7%

#### ADMINISTRATION (continued)

Accurately assess front foot benefit charges against all properties abutting Goal: recent extensions to the WSSC's water and sewer systems.

**Division(s):** Revenue Strategic Priority: Enhance Customer Experience and Community Engagement

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
foot benefit charges.	Percentage of newly assessed property owners who successfully appeal the front foot benefit charge proposed by the WSSC.	0.01%	0.00%	0.01%	0.01%	0.01%	0.01%

Provide financial reports that are useful, timely, and accurate. Goal:

**Division(s):** Accounting

Strategic Priority: Achieve Business Process Excellence and Maintain Financial Stability

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Prepare monthly financial reports within 20 days of the end of the month and the annual report within 90 days of the end of the fiscal year.	Percentage of financial reports prepared on time.	100%	91%	100%	100%	100%	100%
Avoid the need for any prior period adjustments to financial reports unrelated to changes issued by the Governmental Accounting Standards Board (GASB).		0	0	0	0	0	0

#### ADMINISTRATION (continued)

Goal: Maintain proper accounting in accordance with Generally Accepted Accounting Principles (GAAP) and the Government Accounting Standards Board (GASB).

Division(s): Retirement, Accounting

Strategic Priority: Achieve Business Process Excellence and Maintain Financial Stability

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
		Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Number of finance-related external auditor recommendations of "significant deficiencies" received.	0	0	0	0	0	0
Receive no recommendations from the external auditor regarding "significant deficiencies" for the Retirement Plan.	Number of Retirement Plan-related external auditor recommendations of "significant deficiencies" received.	0	0	0	0	0	0

Process financial transactions quickly and accurately. Goal:

Division(s): Revenue, Disbursements Strategic Priority: Achieve Business Process Excellence and Maintain Financial Stability

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
Utilize at least 95.0% of available vendor discounts.	Percentage of available vendor discounts taken.	95.0%	86.0%	96.0%	86.0%	96.0%	90.0%
Post at least 95.5% of customer remittances on the day received.	Percentage of customer remittances posted on the same day.	99.5%	99.8%	99.5%	99.8%	99.5%	99.5%
Post at least 99.9% of customer remittances correctly.	Percentage of remittances posted correctly.	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

#### **ADMINISTRATION (continued)**

Ensure the long-term fiscal stability and soundness of the Commission. Goal:

Division(s): Budget

Strategic Priority: Achieve Business Process Excellence and Maintain Financial Stability

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Maintain an end-of-year fund balance	Combined end-of-year fund balance for the						
(accumulated net revenue) of at least 10	water and sewer operating funds	\$110.1 /	\$149.9 /	\$105.6 /	\$190.0 /	\$176.9 /	\$165.4 /
percent of water and sewer revenue as a	(\$ millions)/ Percent of water and sewer	18.9%	27.6%	15.5%	27.0%	25.1%	22.4%
reserve.	revenue.						

Produce a sound, affordable capital spending program. Goal:

Division(s): Budget

Strategic Priority: Achieve Business Process Excellence and Maintain Financial Stability

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Ratio of water and sewer debt service to total water and sewer operating expenditures.	34.0%	33.9%	34.0%	35.4%	35.4%	36.6%

#### **ADMINISTRATION (continued)**

#### Accurately budget Commission revenues and expenditures. Goal:

Division(s): Budget

Strategic Priority: Achieve Business Process Excellence and Maintain Financial Stability

Objective	Outcome Measure	FY 2	2016	FY 2	2017	FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Accurately budget annual water production.	Difference (in millions of gallons per day) between actual and budgeted water production.	0.0	-1.8	0.0	-0.9	0.0	0.0
	Percentage difference between actual and budgeted water production.	0.0%	-1.1%	0.0%	-0.5%	0.0%	0.0%
Accurately budget revenues from water and	Difference between actual and budgeted revenues from water and sewer use charges (\$ millions).	\$0.0	-\$40.3	\$0.0	\$20.2	\$0.0	\$0.0
sewer use charges.	Percentage difference between actual and budgeted water and sewer use charges.	0.0%	-6.9%	0.0%	3.5%	0.0%	0.0%
Accurately budget non-debt service water and sewer operating expenditures.	Difference (\$ millions) between actual and budgeted water and sewer operating expenditures (excluding debt service).	\$0.0	-\$42.3	\$0.0	-\$35.1	\$0.0	\$0.0
	Percentage difference between actual and budgeted water and sewer operating expenditures (excluding debt service).	0.0%	-9.4%	0.0%	-7.5%	0.0%	0.0%

Exhibit excellence in budgeting as judged by our peers. Goal:

Division(s): Budget Strategic Priority: Achieve Business Process Excellence and Maintain Financial Stability

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome Measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
<b>a a</b>	Receipt of GFOA's Distinguished Budget Presentation Award.	Yes	Yes	Yes	Yes	Yes	Yes

#### **ADMINISTRATION (continued)**

**Goal:** Evaluate, develop, and deliver quality, cost-effective application systems that support the core business operations of the Commission.

Division(s):Office of the CIO, IT Applications &<br/>Development, IT GovernanceStrategic Priority:Achieve Business Process Excellence<br/>and Maintain Financial Stability

Objective	Outcome Measure	FY 2	2016	FY 2	2017	FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Deliver Enterprise Technology Initiatives to support the Commission's business needs, on- time and within budget, 90% of the time.	Percentage of Enterprise Technology Initiatives implemented on-time.	90%	87%	90%	85%	90%	90%
(Enterprise Technology Initiatives are defined as multi-year, enterprise system implementation initiatives covered under the IT Strategic Plan).	Percentage of Enterprise Technology Initiatives implemented within budget.	90%	97%	90%	90%	90%	95%
Deliver IT projects to support the Commission's business needs, on-time and within budget, 90% of the time.	Percentage of IT projects implemented on- time.	75%	95%	75%	90%	75%	90%
(IT projects are defined as short-term business or IT infrastructure projects).	Percentage of IT projects implemented within budget.	75%	97%	75%	85%	75%	95%

## **Goal:** Provide a "One Stop Shop" for efficient IT problem resolution and service delivery.

Division(s):IT Infrastructure & OperationsStrategic Priority:Enhance Customer Experience and<br/>Community Engagement

Objective	Outcome Measure	FY 2	2016	FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
	Percentage of total calls to the Helpdesk achieving First Contact Resolution.	92%	98%	92%	90%	92%	95%
Respond to service tickets (for incidents and service requests) within the defined Service Level Agreement (SLA).	Percentage of incidents resolved within 3 business days.	92%	98%	92%	88%	92%	95%
	Percentage of service requests delivered within 5 days.	92%	97%	92%	85%	92%	95%

#### **ADMINISTRATION (continued)**

**Goal:** Provide reliable computing services to all users in order to deliver information and data in the timeframes required to support decisions.

Division(s):IT Applications & Development,<br/>IT Infrastructure & OperationsStrategic Priority:Improve Infrastructure

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Ensure the uptime and availability of critical business systems, 97% of the time.	Percentage of time that the critical systems are available.	100%	99%	97%	97%	100%	100%
	Percentage of time that the network is available across all Commission sites.	100%	99%	97%	97%	100%	100%

## **Goal:** Achieve and maintain high levels of productivity in the provision of vehicle and equipment maintenance services.

Division(s): Flo Strategic Priority: Pr

Fleet Services Protect our People, Infrastructure, Systems and Resources

Objective	Outcome Measure	FY 2016		FY 2017		FY 2018	FY 2019
Objective	Outcome Measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
Reduce vehicle and equipment down time to an average of 55 hours or less per shop visit.	Average down time per shop visit (hours).	60	80	75	76	75	75

## **Goal:** Achieve and maintain high levels of efficiency and accuracy in the management of warehouse operations.

Division(s): Flo Strategic Priority: Act

 Fleet Services, Materials Management
 Achieve Process Excellence and Financial Stability

Objective	Outcome Measure	FY 2	2016	FY 2017		FY 2018	FY 2019
Objective	Outcome measure	Targeted	Actual	Targeted	Actual	Targeted	Targeted
• •	Number of times the warehouse inventory turns over annually.	2.0	4.0	2.0	2.0	4.0	2.0
per year or higher.	Number of times the vehicle parts inventory turns over annually.	4.0	4.0	4.0	4.0	4.0	4.0
	Accuracy of warehouse inventory (from monthly cycle counts).	95.0%	98.7%	95.0%	98.9%	98.7%	95.0%
97% or higher.	Accuracy of vehicle parts inventory (from established cycle counts).	99.9%	99.9%	99.0%	99.0%	99.9%	99.0%

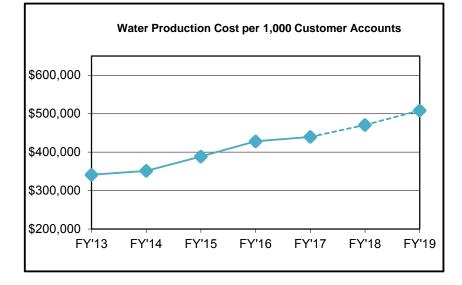
#### **ADMINISTRATION (continued)**

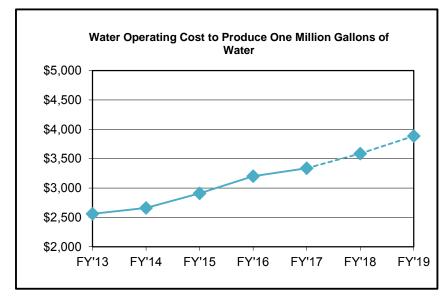
#### **Goal:** Provide timely procurement services.

Office(s):Procurement OfficeStrategic Priority:Achieve Business Process Excellence<br/>and Maintain Financial Stability

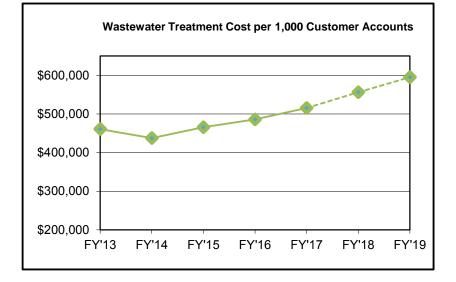
Objective	Outcome Measure	FY 2	2016	FY 2	2017	FY 2018	FY 2019
Objective		Targeted	Actual	Targeted	Actual	Targeted	Targeted
processing of purchase requests in the following categories:	Average number of days to process purchase requests in the identified categories from receipt of the request, with all required supporting documentation and approvals, through the time the Notice to Proceed is signed or the Purchase Order is approved:	(Number of Days)					
Miscellaneous (Small Purchases, Emergencies, etc.)	30 days	30	40	45	45	30	30
Sole Source	60 days	45	90	60	43	45	30
Requests for Qualifications (RFQ) and Requests for Information (RFI)	60 days	45	150	60	27	60	45
Invitations for Bids (IFB)	120 days	120	150	120	117	90	90
Requests for Proposals (RFP)	180 days	150	271	150	195	120	120

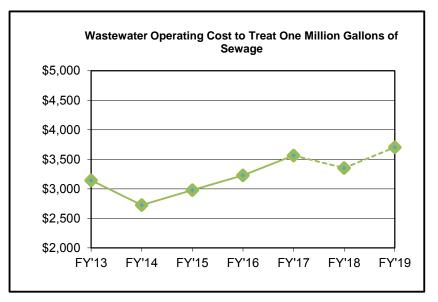
# WSSC OPERATING EFFICIENCY MEASURES



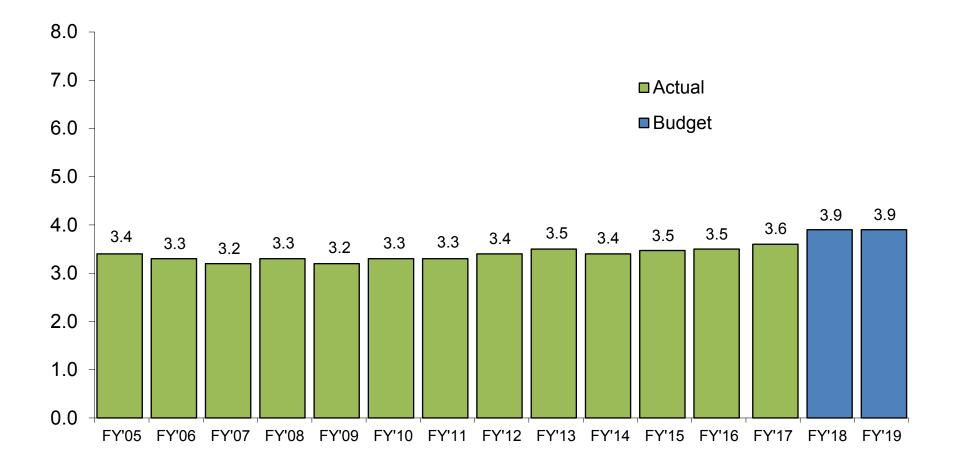


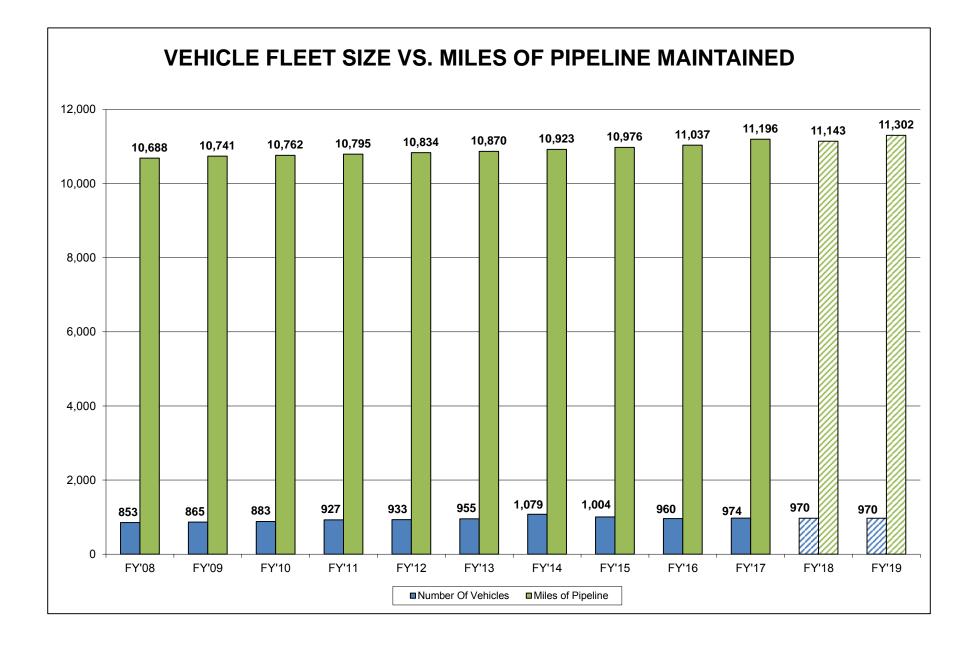
Note: FY'18 & FY'19 are budgeted, not actual.





## WORKYEARS PER 1,000 CUSTOMER ACCOUNTS





Note: FY'18 and FY'19 are budgeted, not actual.

#### WSSC COMPARATIVE STATISTICAL DATA

The following actual and budgeted data show the number of customer accounts increasing 3.1% and the population increasing 2.0% from FY'15 to FY'19, with the projected number of employee workyears increasing 14.9%. A portion of the increase in workyears is due to the transfer of work from contractors to employees in situations where employee costs would be equal to or less than those of a contractor. The overall size of the system, measured in miles of water and sewer pipe, will have expanded 2.1% from FY'15 through FY'19.

During the years 1997 through 2001, the WSSC significantly cut resources through a Competitive Action Plan. In 1997, actual workyears were 2,015, the number of accounts was 382,404, and the total number of miles maintained was 9,784. From this perspective, the number of accounts and size of the system will have increased 20.1% and 14.5%, respectively, from FY'97 to FY'19, while workyears will have decreased 11.9% for the same period. Workyears are used to fill gaps in staffing, and provide the WSSC with the means to improve customer service, meet increased regulatory requirements, and expand programs to address aging infrastructure issues.

						FY'15-FY'19	FY'97-FY'19
	FY'15	FY'16	FY'17	FY'18	FY'19	PERCENT	PERCENT
	<u>ACTUAL</u>	<u>ACTUAL</u>	ACTUAL	<u>APPROVED</u>	PROPOSED	<b>CHANGE</b>	<b>CHANGE</b>
Actual Workyears	1,546	1,587	1,623	1,776	1,776	14.9%	-11.9%
Population Served	1,765,000	1,774,000	1,759,000	1,792,000	1,801,000	2.0%	22.9%
Customer Accounts	445,385	448,061	451,904	456,061	459,404	3.1%	20.1%
Size of System							
Miles to be Maintained	-						
Water	5,552	5,586	5,647*	5,640	5,701	2.7%	14.9%
Sewer	<u>5,424</u>	<u>5,451</u>	<u>5,549*</u>	<u>5,503</u>	<u>5,601</u>	<u>3.3%</u>	<u>16.2%</u>
TOTAL	10,976	11,037	11,196	11,143	11,302	3.0%	15.5%
Water Production (average MGD)	162.9	164.2	163.1	164.0	164.0	0.7%	2.8%
Sewage Flows (average MGD)	190.8	184.8	179.0	207.2	201.4	5.6%	4.9%

\*Miles maintained reflects the latest Geographic Information System (GIS) data

SELECTED MULTI-YEAR HISTORICAL DATA

**SECTION 3** 

## SELECTED STATISTICAL DATA

	FY'13 <u>ACTUAL</u>	FY'14 <u>ACTUAL</u>	FY'15 <u>ACTUAL</u>	FY'16 <u>ACTUAL</u>	FY'17 <u>ACTUAL</u>	FY'18 <u>APPROVED</u>	FY'19 <u>PROPOSED</u>
Population Served	1,749,000	1,757,000	1,765,000	1,774,000	1,759,000	1,792,000	1,801,000
Customer Accounts	441,480	443,827	445,385	448,061	451,904	456,061	459,404
Water Produced (average MGD)	161.2	160.6	162.9	164.2	163.1	164.0	164.0
Water Produced (millions of gallons)	58,830	58,603	59,469	59,933	59,532	59,860	59,860
Water Mains Maintained (miles)	5,494	5,521	5,552	5,586	5,647*	5,640	5,701
Water Mains Constructed (miles added by WSSC)	7.3	0.5	9.0	7.0	12.1	2.0	2.0
Water Mains Constructed (miles added by developers)	15.3	26.3	22.4	27.1	25.2	25.0	25.0
Water House Connections Maintained	446,453	449,333	453,004	457,393	460,891	465,393	468,391
Water House Connections Installed	2,269	2,880	3,671	4,389	3,498	4,000	3,500
Water Meters Issued	18,554	14,675	17,540	17,936	16,873	18,065	18,065
Sewage Systems Total Flow (average MGD)	177.2	195.6	190.8	184.8	179.0	207.2	201.4
Sewage Systems Total Flow (millions of gallons)	64,666	71,232	69,650	67,545	65,335	75,628	73,511
Sewer Mains Maintained (miles)	5,376	5,402	5,424	5,451	5,549*	5,503	5,601
Sewer Mains Constructed (miles added by WSSC)	0.4	-	-	0.2	0.4	1.0	1.0
Sewer Mains Constructed (miles added by developers)	12.6	25.7	21.4	27.3	24.7	25.0	25.0
Sewer House Connections Maintained	423,110	425,445	428,279	431,589	434,586	437,789	440,786
Sewer House Connections Installed	2,018	2,335	2,834	3,310	2,997	3,100	3,100
Maintenance Work Orders (Emergency and Routine)	99,469	108,482	114,007	108,372	105,763	103,047	103,408
Vehicles in Fleet	955	1,079	1,004	960	974	970	970
Miles Traveled by Fleet	5,250,810	5,028,532	5,432,420	6,940,268	5,572,491	7,963,922	5,500,000
Water Meter Readings Completed	1,967,090	1,987,261	2,028,473	2,225,306	2,040,492	2,283,266	2,075,000
Authorized Positions	1,693	1,717	1,729	1,747	1,776	1,776	1,776
Authorized Workyears	1,693	1,717	1,729	1,747	1,776	1,776	1,776
Actual Employment Level - Beginning	1,549	1,549	1,550	1,561	1,633	1,620	
Actual Employment Level - Ending	1,549	1,550	1,561	1,633	1,620		
Actual Workyears	1,535	1,530	1,546	1,587	1,623		

\*Miles maintained reflects the latest Geographic Information System (GIS) data

## SELECTED FINANCIAL DATA

	FY'13 ACTUAL	FY'14 ACTUAL	FY'15 ACTUAL	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
1. Customer Water & Sewer Rate Percent Change							
Consumption Charges							
Water	2.9%	1.9%	7.7%	1.2%	5.9%	4.5%	2.3%
Sewer	11.5%	11.6%	3.9%	0.9%	0.8%	2.7%	6.2%
Combined	7.5%	7.25%	5.5%	1.0%	3.0%	3.5%	4.5%
2. Water & Sewer Bill Revenues (\$ in Thousands)							
Water Consumption Charges	\$225,212	\$227,923	\$242,867	\$235,805	\$270,134	\$267,080	\$273,316
Sewer Use Charges	275,559	309,403	319,488	307,264	329,332	333,822	354,626
Total Consumption Charges	500,771	537,326	562,355	543,069	599,466	600,902	627,942
Account Maintenance Fee	22,772	22,582	22,753	29,247	32,508	32,118	32,182
Infrastructure Investment Fee				16,700	37,561	38,816	38,894
Total	\$ 523,543	\$ 559,908	\$ 585,108	\$ 589,016	\$ 669,535	\$ 671,836	\$ 699,018
3. Water Production (average MGD)	161.2	160.6	162.9	164.2	163.1	164.0	164.0

# WATER & SEWER OPERATING FUNDS - COMBINED (\$ In Thousands)

	 FY'13 ACTUAL	FY'14 FY'15 ACTUAL ACTUAL		-	FY'16 ACTUAL		FY'17 ACTUAL		FY'18 APPROVED		FY'19 PROPOSED		
REVENUES													
Water Consumption Charges	\$ 225,212	\$	227,923	\$	242,867	\$	235,805	\$	270,134	\$	267,080	\$	273,316
Sewer Use Charges	275,559		309,403		319,488		307,264		329,332		333,822		354,627
Interest Income	722		630		532		696		1,540		700		1,500
Miscellaneous	26,926		25,104		29,484		31,989		32,908		33,532		34,730
Account Maintenance Fee	22,772		22,582		22,753		29,247		32,508		32,118		32,182
Infrastructure Fee	 -		-		-		16,700		37,561		38,816		38,894
Total Revenues	 551,191		585,642		615,124		621,701		703,983		706,068		735,249
SDC Debt Service Offset	2,192		1,428		1,167		728		2,609		-		3,364
Reconstruction Debt Service Offset	11,000		10,500		10,000		8,500		9,800		7,700		12,500
Use of Fund Balance	 18,528		27,481		30,193		20,721		24,450		11,580		11,580
Total Funds Available	\$ 582,911	\$	625,051	\$	656,484	\$	651,650	\$	740,842	\$	725,348	\$	762,693
EXPENDITURES													
Salaries & Wages	92,996		95,482		100,118		104,030		109,059		120,275		127,901
Heat, Light & Power	22,979		24,443		24,229		22,000		22,099		22,016		20,577
Regional Sewage Disposal	49,226		44,631		54,485		50,068		53,946		53,617		53,617
Debt Service													
Principal Payments	128,626		150,069		153,968		134,171		141,817		182,428		165,988
Interest Payments	55,604		60,772		68,013		76,190		94,918		74,643		111,073
Debt Reduction (PAYGO)	-		13,782		19,996		18,821		21,495		30,193		31,016
All Other	188,854		185,487		203,934		214,607		224,975		242,176		252,521
Working Capital Reserve Transfer	10,200		11,700		2,300		6,300		6,524		-		-
Total Expenditures	\$ 548,485	\$	586,366	\$	627,043	\$	626,187	\$	674,833	\$	725,348	\$	762,693
Water Production (average MGD)	161.2		160.6		162.9		164.2		163.1		164.0		164.0

## **CAPITAL BUDGET VS. ACTUAL EXPENSES**

# **FY'98 - FY'17** (\$ in Thousands)

	Water Supply Sewage Dis			Disposal	General Co	onstruction	tion Total Capital			
Fiscal Year	Approved Budget	Actual Expenses	Approved Budget	Actual Expenses	Approved Budget	Actual Expenses	Approved Budget	Actual Expenses		
1998	\$ 79,065	\$ 66,349	\$ 60,936	\$ 38,510	\$ 89,961	\$ 46,143	\$ 229,962	\$ 151,002		
1999	79,079	67,245	59,689	30,821	65,217	50,820	203,985	148,886		
2000	60,111	43,037	88,458	48,868	62,871	49,039	211,440	140,944		
2001	61,968	38,350	81,801	68,568	52,426	40,086	196,195	147,004		
2002	54,972	44,094	104,820	61,073	34,272	31,765	194,065	136,932		
2003	56,124	37,478	108,276	97,446	35,892	18,226	200,292	153,150		
2004	78,314	55,626	95,777	104,400	36,364	20,250	210,455	180,276		
2005	96,998	59,997	97,271	63,210	31,361	23,692	225,630	146,899		
2006	112,678	78,267	117,776	55,558	34,365	15,621	264,819	149,446		
2007	122,550	76,151	108,731	60,033	23,730	23,750	255,011	159,934		
2008	142,820	88,908	108,358	71,705	30,403	22,668	281,581	183,281		
2009	185,620	106,490	142,718	82,687	32,637	24,271	360,975	213,448		
2010	147,484	111,158	191,008	95,232	32,660	34,092	371,152	240,482		
2011	181,815	104,278	276,524	94,308	36,361	41,664	494,700	240,250		
2012	198,844	158,078	332,424	262,507	34,654	14,912	565,922	435,497		
2013	240,107	182,393	527,914	356,179	19,984	8,617	788,005	547,189		
2014	246,702	170,166	475,352	346,043	20,133	9,433	742,187	525,642		
2015	265,079	198,830	341,997	353,417	18,305	11,910	625,381	564,157		
2016	266,624	249,908	400,470	387,242	17,538	13,049	684,632	650,199		
2017	317,309	263,569	355,522	280,632	17,467	12,784	690,298	556,985		

**OPERATING BUDGET** 

**SECTION 4** 

#### **PURPOSES OF FUNDS - SOURCES OF REVENUE**

The WSSC Operating Budget consists of the Water Operating, Sewer Operating, and General Bond Debt Service Funds. Each fund is a separate entity authorized to expend funds for prescribed purposes and derive revenues from specific rates, charges, and/or taxes. The purposes of each fund and the revenue sources are prescribed by law in the Washington Suburban Sanitary District Code.

#### Water Operating Fund

The purpose of the **Water Operating Fund** is to defray expenses for maintenance and operation of pipes, pumping stations, filtration plants, and reservoirs needed to supply water to the Sanitary District, and to pay the principal and interest on Water Supply Bonds. Existing laws require that the water consumption rates be sufficient to meet these provisions. This fund is also used to defray expenses associated with the plumbing activities of the Commission.

#### Sources of revenue include:

*Water Consumption Charges* - revenue derived from the sale of water by applying an increasing rate schedule per 1,000 gallons of use. The rate charged for each account is based upon the average daily consumption during each billing period. The range of currently approved rates is \$3.53 to \$8.16 per 1,000 gallons of water consumed.

Account Maintenance Fee - a charge to all customers, based on meter size, to defray costs of providing and reading a meter and rendering a water and/or sewer bill.

*Infrastructure Investment Fee* - a fixed fee that funds the debt service associated with the Commission's water and sewer pipe reconstruction programs for the approved Capital Improvements Program.

*Plumbing and Inspection Fees* - a fee for Commission inspection of all plumbing and gas fixtures installed in residential and commercial structures to ensure that such installations are in compliance with the WSSC Plumbing and Gasfitting Code.

*Interest on Investments* - revenues derived from investment of cash available to the Water Operating Fund and the Water Supply Bond Fund.

(Continued)

*System Development Charge (SDC)* - a charge for new development to pay for that part of the Commission's capital program which is needed to accommodate growth. Debt service on bonds issued to fund growth-related CIP projects in prior years (e.g., because of inadequate SDC revenue) is paid from SDC revenues if sufficient revenues exist, or from operating revenues if SDC funds are not available. The balance of these revenues will be used in the capital funds to pay for growth projects.

*Miscellaneous* - revenue derived from charges for late payment of bills; charges for repair of Commission property (e.g., fire hydrants and water mains) damaged by individuals; charges for relocation of WSSC water systems and/or facilities for the benefit of other parties (e.g., Maryland Department of Transportation and county Departments of Transportation); antenna lease fees collected; and fees charged for the use of recreational facilities in the WSSC's watershed areas.

#### Water Operating Fund Revenue Sources

	FY'16 <u>Actual</u>	FY'17 <u>Actual</u>	FY'18 <u>Approved</u>	FY'19 <u>Proposed</u>
Water Consumption Charges	\$235,805	\$270,134	\$267,080	\$273,316
Account Maintenance Fee	14,916	16,579	16,380	16,413
Infrastructure Investment Fee	8,517	19,156	19,797	19,836
Plumbing & Inspection Fees	6,037	6,518	6,560	7,190
Interest	30	130	100	100
SDC Debt Service Offset	213	446	-	2,422
Miscellaneous	10,527	10,199	11,100	10,900

(Continued)

#### **Sewer Operating Fund**

The purpose of the **Sewer Operating Fund** is to maintain and operate the pipes, pumping stations, and treatment plants needed to properly dispose of all sewage originating in the Sanitary District; to pay the District of Columbia Water and Sewer Authority for our share of the Regional Sewage Disposal charges; and to pay principal and interest on Sewage Disposal Bonds.

Sources of revenue include:

*Sewer Use Charges* - revenue derived from applying an increasing rate schedule per 1,000 gallons of water sold. The rate charged for each account is based upon the average daily water consumption by customer unit during each billing period. The range of currently approved rates is \$4.42 to \$11.20 per 1,000 gallons of metered water. Customers who receive sewage disposal services only are currently charged at a flat rate of \$108.00 per quarter.

*Plumbing and Inspection Fees* - a fee for Commission inspection of all plumbing and gas fixtures installed in residential and commercial structures to ensure that such installations are in compliance with the WSSC Plumbing and Gasfitting Code.

Account Maintenance Fee - a charge to all customers, based on meter size, to defray costs of providing and reading a meter and rendering a water and/or sewer bill.

*Infrastructure Investment Fee* - a fixed fee that funds the debt service associated with the Commission's water and sewer pipe reconstruction programs for the approved Capital Improvements Program.

*Interest on Investments* - revenue derived from investment of cash available to the Sewer Operating Fund and Sewage Disposal Bond Fund.

*Rockville Sewer Use* - revenue derived from payment by the City of Rockville for the city's share of the Regional Sewage Disposal charges.

*System Development Charge (SDC)* - a charge for new development to pay for that part of the Commission's capital program which is needed to accommodate growth. Debt service on bonds issued to fund growth-related CIP projects in prior years (e.g., because of inadequate SDC revenue) is paid from SDC revenues if sufficient revenues exist, or from operating revenues if SDC funds are not available. The balance of these revenues will be used in the capital funds to pay for growth projects.

(Continued)

Miscellaneous - revenue derived from charges for late payment of bills; charges for repair of Commission property (e.g., sewer mains) damaged by individuals; charges for relocation of WSSC sewer lines and/or facilities for the benefit of other parties (e.g., Maryland Department of Transportation and county Departments of Transportation); and sewage handlers' fees which are charged for discharging septic tank clean-out wastes into the WSSC's sewerage system.

<u> </u>	Sewer Operating Fund Revenue Sources (\$ In Thousands)			
	FY'16 <u>Actual</u>	FY'17 <u>Actual</u>	FY'18 <u>Approved</u>	FY'19 <u>Proposed</u>
Sewer Use Charges	\$307,264	\$329,332	\$333,822	\$354,626
Account Maintenance Fee	14,331	15,929	15,738	15,769
Infrastructure Investment Fee	8,183	18,405	19,019	19,058
Plumbing & Inspection Fees	4,393	4,660	4,740	5,041
Interest	666	1,410	600	1,400
Rockville Sewer Use	3,142	2,907	2,632	2,700
SDC Debt Service Offset	515	2,163	-	942
Miscellaneous	7,890	8,624	8,500	8,900

(Continued)

#### **General Bond Debt Service Fund**

The purpose of the General Bond Debt Service Fund is to pay the principal and interest on General Construction Bonds.

#### Sources of revenue include:

*Front Foot Benefit Charges* - revenues derived from charges assessed owners of property abutting water and/or sewer mains who derive a benefit from the construction of these water mains and sewers. This revenue pays the principal and interest on General Construction Bonds.

Current Approved Front Foot Benefit Assessment Rates		
	(\$ Per Foot)	
	Water	<u>Sewer</u>
<b>Subdivision</b>		
First 150 Feet	\$4.80	\$7.18
Next 150 Feet	3.60	5.39
Over 300 Feet	2.40	3.59
<b>Business</b>		
All Footage	6.39	9.55

Note: The rates established each year apply mainly to the assessable properties that benefit from that year's construction. They cannot be increased, and remain in effect during the life of the bonds issued to pay for the construction.

*Deferred House Connections* - revenues derived from deferred or amortized house connection payments to cover the cost of building lines from lateral lines to the property line. These connection charges may be paid over a multi-year period, and revenues shown are those being collected from this method of payment until fully amortized.

#### OPERATING FUNDS (Continued)

*Interest on Investments* - revenue derived from investments of cash available to the General Bond Debt Service and General Construction Bond Funds.

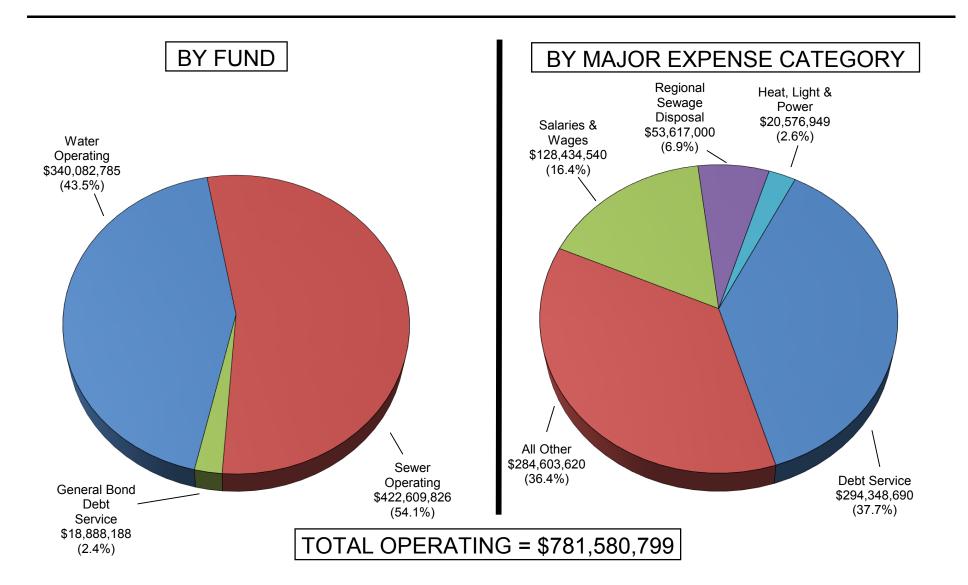
*Miscellaneous* - revenue primarily derived from late payments of Front Foot Benefit Charges.

General Bond Debt Service Fund Revenue Sources (\$ In Thousands)				
	FY'16 Actual	FY'17 Actual	FY'18 Approved	FY'19 Proposed
Front Foot Benefit Charges and				
Deferred House Connection Charges	\$24,925	\$22,039	\$18,852	\$15,473
Interest	87	383	20	75
Miscellaneous	312	294	240	240

### CONSOLIDATED STATEMENT OF OPERATING FUNDS, REVENUES, AND EXPENDITURES

	FY'17 Actual	FY'18 Approved Budget	FY'19 Proposed Budget
REVENUESWater Consumption ChargesSewer Use ChargesAccount Maintenance FeeInfrastructure FeeFront Foot Benefit & House Connection Charges (Deferred)Plumbing & Inspection FeesInterest IncomeRockville Sewer UseProducts and TechnologyUse of Fund BalanceMiscellaneousReserve RequirementTOTAL REVENUES	\$ 270,134 329,332 32,508 37,561 18,852 11,178 1,560 2,907 - 24,450 19,063 - - 747,545	\$ 267,080 333,822 32,118 38,816 18,852 11,300 720 2,632 - 11,580 19,840 - 736,760	\$ 273,316 354,626 32,182 38,894 15,473 12,231 1,575 2,700 - 11,580 20,040 - 762,617
EXPENSES Salaries & Wages Heat, Light & Power Regional Sewage Disposal Products and Technology All Other Debt Reduction (PAYGO) Debt Service Prinicpal Payments Interest Payments <b>GROSS EXPENSES</b>	109,748 22,099 53,946 - 225,833 21,495 151,076 <u>99,669</u> 683,866	120,919 22,016 53,617 - 243,275 30,193 193,177 <u>78,039</u> 741,236	128,434 20,577 53,617 - 253,588 31,016 177,413 <u>116,936</u> 781,581
Less: Reconstruction Debt Service Offset SDC Debt Service Offset Working Capital Reserve Transfer NET EXPENSES	(9,800) (2,609) <u>6,524</u> 677,981	(7,700) - - 733,536	(12,500) (3,364) - 765,717
NET REVENUE (LOSS) FOR YEAR	\$ 69,564	\$ 3,224	<u>\$ (3,100</u> )

# **FY 2019 PROPOSED BUDGET** OPERATING EXPENDITURES



#### WATER OPERATING

	FY'17 Actual	FY'18 Approved Budget	FY'19 Proposed Budget
REVENUES			
Water Consumption Charges	\$ 270,134	\$ 267,080	\$ 273,316
Account Maintenance Fee	16,579	16,380	16,413
Infrastructure Investment Fee	19,156	19,797	19,836
Plumbing & Inspection Fees	6,518	6,560	7,190
Interest Income	130	100	100
Products and Technology	-	-	
Use of Fund Balance	9,362	-	5,906
Miscellaneous	10,199	11,100	10,900
Reserve Requirement	-	-	-
TOTAL REVENUES	332,078	321,017	333,661
EXPENSES			
Salaries & Wages	60,383	64,169	68,672
Heat, Light & Power	12,733	11,761	10,642
Products and Technology	-	-	-
All Other	116,446	125,604	129,381
Debt Reduction (PAYGO)	9,107	13,163	13,660
Debt Service	- , -	-,	- ,
Principal Payments	59,593	78,013	70,988
Interest Payments	39,237	28,307	46,740
GROSS EXPENSES	297,499	321,017	340,083
Less: Reconstruction Debt Service Offset	(2,800)	-	(4,000)
SDC Debt Service Offset	(446)	-	(2,422)
Working Capital Reserve Transfer	3,100		
NET EXPENSES	297,353	321,017	333,661
NET REVENUE (LOSS) FOR YEAR	<u>\$ 34,725</u>	<u>\$ -</u>	<u>\$ -</u>

#### **SEWER OPERATING**

	FY'17 Actual	FY'18 Approved Budget	FY'19 Proposed Budget
REVENUES			
Sewer Use Charges	\$ 329,332	\$ 333,822	\$ 354,626
Account Maintenance Fee	15,929	15,738	15,769
Infrastructure Investment Fee	18,405	19,019	19,058
Plumbing & Inspection Fees	4,660	4,740	5,041
Interest Income	1,410	600	1,400
Rockville Sewer Use	2,907	2,632	2,700
Products and Technology	-		
Use of Fund Balance	15,088	11,580	5,674
Miscellaneous	8,624	8,500	8,900
Reserve Requirement	-	-	-
TOTAL REVENUES	396,355	396,631	413,168
<u>EXPENSES</u>			
Salaries & Wages	48,676	56,106	59,229
Heat, Light & Power	9,366	10,255	9,935
Regional Sewage Disposal	53,946	53,617	53,617
Products and Technology	-	-	
All Other	108,529	116,572	123,140
Debt Reduction (PAYGO)	12,388	17,030	17,356
Debt Service			
Principal Payments	82,224	104,415	95,000
Interest Payments	55,681	46,336	64,333
GROSS EXPENSES	370,810	404,331	422,610
Less: Reconstruction Debt Service Offset	(7,000)	(7,700)	(8,500)
SDC Debt Service Offset	(2,163)	-	(942)
Working Capital Reserve Transfer	3,424		
NET EXPENSES	365,071	396,631	413,168
NET REVENUE (LOSS) FOR YEAR	\$ 31,284	\$-	\$-
	· · · · ·	<u> </u>	<u>·</u>

### GENERAL BOND DEBT SERVICE (\$ In Thousands)

	FY'17 Actual	FY'18 Approved Budget	FY'19 Proposed Budget
<b>REVENUES</b> Front Foot Benefit & House Connection Charges (Deferred) Interest Income Miscellaneous Use of Fund Balance Reconstruction Debt Service Offset TOTAL REVENUES	\$ 22,039 383 294 9,800 (9,800) 22,716	\$ 18,852 20 240 7,700 <u>(7,700)</u> 19,112	\$ 15,473 75 240 12,500 (12,500) 15,788
EXPENSES Salaries & Wages All Other Debt Service Principal Payments Interest Payments TOTAL EXPENSES	689 858 9,259 4,751 15,557	644 <u>1,099</u> 10,749 <u>3,396</u> <u>15,888</u>	533 <u>1,067</u> 11,425 <u>5,863</u> <u>18,888</u>
NET REVENUE (LOSS) FOR YEAR	<u>\$7,159</u>	<u>\$ 3,224</u>	<u>\$ (3,100)</u>

#### **DEBT SERVICE**

This section provides budget data for the repayment of Water Supply, Sewage Disposal, and General Construction Bonds issued as long-term financing of the Commission's facilities and infrastructure.

#### **Overview**

The total FY'19 Proposed Budget for debt service is \$294,348,690, an increase of \$23,132,690 or 8.5% more than the FY'18 Approved Budget of \$271,216,000. The proposed debt service is based upon paying the FY'19 principal and interest payments on current outstanding debt, and issuing \$486,847,776 in new Water Supply Bonds and Sewage Disposal Bonds. The new debt issues are necessary to implement the first year of the Commission's Proposed FYs 2019-2024 Capital Improvements, Engineering Support, and Systems Reconstruction programs as well as to construct some local water and sewer mains, and other miscellaneous capital projects.

The WSSC issues Water Supply and Sewage Disposal Bonds to fund a major portion of the construction of long-lived additions or improvements to major water and sewerage facilities including water and wastewater treatment plants, pumping stations and force mains, storage structures, all water mains 16 inches in diameter and larger, and all sewer mains 15 inches and larger. The Commission's fiscal plan for these facilities is known as the Capital Improvements Program and is published separately from the operating and capital budget.

Water Supply and Sewage Disposal Bonds also help finance projects in the WSSC's Engineering Support, Systems Reconstruction, and Water Storage Facility Rehabilitation programs. The Engineering Support Program (ESP) is a diverse group of multi-year projects and studies that support the extensive water and sewerage infrastructure and numerous support facilities owned, operated, and maintained by the WSSC. Typical ESP projects correct design deficiencies, eliminate hazardous situations, modify existing processes, satisfy regulatory requirements, or rehabilitate aging facilities.

The Systems Reconstruction Program provides for the rehabilitation or replacement of the aging portions of the water distribution and wastewater collection systems. Portions of these systems are more than 80 years old and need to be replaced or renovated in order to achieve adequate water flow for domestic and commercial use and fighting fires, to eliminate discolored water problems, or to correct structural damage to the sewage collection system.

The Water Storage Facility Rehabilitation Program provides for the comprehensive rehabilitation of the Commission's aging water storage facilities located throughout the WSSC service area. Rehabilitation efforts can include structural metal and concrete foundation repairs, lead paint removal, security upgrades, advanced mixing systems to improve water quality, and supply pipe replacement.

#### DEBT SERVICE (Continued)

(Continued)

In addition to borrowing funds in the private financial markets, the WSSC periodically borrows funds from the Maryland Water Quality Loan Fund to fund major wastewater capital improvements that are needed to help maintain or improve water quality in the Chesapeake Bay. The Fund, established by the State of Maryland and administered by the Maryland Water Quality Financing Administration, provides low interest loans to local governments to help with a variety of water quality improvement projects such as upgrades of wastewater treatment plants, construction of sewers in areas with failing septic tanks, implementation of estuary conservation management plans, and the reduction of non-point-source pollution.

General Construction Bonds are issued to finance a major portion of the cost of constructing some minor water and sewer lines (up to 15 inches in diameter for water and 14 inches in diameter for sewer); constructing new administrative and support facilities; modifying, enlarging, or replacing existing support facilities; relocating facilities; and purchasing water meters. As a result of a legislative change, applications for service requested after July 1, 1999, require the Applicant to finance and construct the local water and sewer mains needed for new development. The WSSC will still construct those projects serving one residence or providing relief from a residential health hazard.

The Commission's outstanding debt as of June 30, 2017, is as follows:

General Construction Bonds	\$155,889,641
Maryland Water Quality Bonds	250,069,313
Water Supply Bonds	948,314,724
Sewage Disposal Bonds	1,256,495,635
Water, Sewer and General Notes	202,600,000
TOTAL	<u>\$2,813,369,313</u>

#### FISCAL YEARS 2017-2019 ACTUAL AND ESTIMATED OUTSTANDING DEBT

Debt as of June 30, 2017 (Includes Maryland Water Quality Loans)	\$2,813,369,313
FY'18 BUDGETED NEW ISSUES Water Bonds Sewer Bonds	220,000,000 239,250,000
<b><u>FY'18 PRINCIPAL PAYMENTS</u></b> Principal from Debt Outstanding as of June 30, 2017	(157,057,578)
Estimated Debt Outstanding as of June 30, 2018	\$3,115,561,735
<u>NEW FY'19 PROPOSED ISSUES</u> Water Bonds Sewer Bonds	224,266,568 262,581,208
<b>FY'19 PRINCIPAL PAYMENTS</b> Principal from Debt Outstanding as of June 30, 2017 Principal from FY'18 Water & Sewer Bonds	(167,049,872) (5,600,000)
Estimated Debt Outstanding as of June 30, 2019	<u>\$3,429,759,639</u>

#### DEBT SERVICE (Continued)

Commission bonds are repaid to bondholders over a period of years with a series of principal and interest payments known as debt service. In this manner, the initial high cost of capital improvements is spread over time and paid for by customers benefiting from facilities in the future, as well as by current customers. Due to various federal, state, and local policies, interest costs on the debt are kept low because the interest on Commission debt is exempt from federal and state taxation.

The Commission's debt is repaid from water consumption and sewer use charges and front foot benefit charges. However, should revenue from these sources be inadequate, State Law provides for the levy of ad valorem taxes, annually, against all the assessable property within the District by the County Council of Montgomery County and the County Council of Prince George's County, sufficient to pay principal and interest when due and payable. The Commission has never needed to invoke this underlying pledge and does not expect to do so. Thus, these financial instruments provide strong advantages in both safety of repayment and investment return for certain categories of investors.

#### Rating Agency Reviews

WSSC bonds carry AAA/Aaa/AAA credit ratings from the three major bond rating agencies: FitchRatings, Moody's, and Standard and Poor's. These high ratings are critical in ensuring a low cost of debt to WSSC customers. High ratings translate into low interest rates and considerable savings over the 19 to 30 year bond repayment period. The WSSC has been able to secure these ratings primarily because of the quality of its operations, its policy of maintaining a 10% or greater operating reserve, the willingness of the Commission and local governments to raise the rate revenues necessary to meet debt service requirements, and the underlying credit worthiness of Montgomery and Prince George's Counties. All of these factors are considered evidence of both the ability and willingness of the Commission and the Prince George's and Montgomery County governments to support public debt.

#### Legal Debt Margin

Bonds and notes issued by the Commission are limited to an amount outstanding at any time that may not exceed the sum of 3.8% of the total assessable base of all real property and 7.0% of the total assessable personal and operating real property for county taxation purposes within the Sanitary District. However, any amount held in a sinking fund for the payment of sinking fund bonds may be deducted from the total indebtedness subject to such debt limitations. The following tables show the Commission's legal debt margin, the latest certified assessed valuations of those portions of the counties that lie within the Sanitary District, and the ratio of Commission debt to permitted debt.

#### TOTAL LEGAL DEBT MARGIN

Total Assessed Valuation *		\$281,597,593,832
Debt Limit: 7.0% of total assessable per 3.8% of total assessable tax		164,275,803 10,611,530,272
Debt applicable to limitation: Total applicable debt	2,813,369,313	
Less amount available from Repayment of debt - FY'18 Repayment of debt - FY'19 Plus amount available from New issues - FY'18	(157,057,578) (167,049,872) 459,250,000	
Planned issues - FY'19 Less Total debt applicable to limitation	486,847,776	3,435,359,639
Legal Debt Margin		<u>\$7,340,446,437</u>

#### **ASSESSED VALUATION**

As of June 30	Total Assessed Valuation (000)	Total Debt <u>Outstanding (000)</u>	Maximum Debt <u>Permitted (000)</u>
2017	\$281,597,594	\$2,813,369	\$10,775,806
2016	273,112,412	2,470,352	10,451,218
2015	242,885,625	2,171,364	9,289,681
2014	240,410,073	1,952,543	9,197,332
2013	240,018,093	1,878,296	9,180,923
2012	227,730,398	1,556,797	8,715,697

\* Sources for the assessed valuation of personal and real property are the Certificate of Supervisor of Assessments of Montgomery County Maryland, as to the Last Assessment for Taxation of Property in the District in Montgomery County and the Certificate of Director of Finance of Prince George's County, Maryland as to the Last Assessment for Taxation of Property in the District in Prince George's County. **CAPITAL BUDGET** 

**SECTION 5** 

#### **CAPITAL BUDGET**

The Washington Suburban Sanitary Commission's (WSSC's) budget is a comprehensive financial plan by which the WSSC is funded for a single fiscal year. The WSSC's budget, or funding plan, is composed of six separate funds, three in the operating budget (the **Water Operating, Sewer Operating**, and **General Bond Debt Service Funds**), and three in the capital budget.

WSSC's Capital Budget consists of the **Water Supply Bond**, **Sewage Disposal Bond**, and **General Construction Bond Funds**. Each fund is a separate entity authorized to expend funds for prescribed purposes and to derive revenues from specific sources, primarily proceeds from the issuance of bonds.

The Capital Budget is also composed of a number of programs for which funds are expended, and their associated administrative and support costs. Specifically, these are the water and sewer Capital Improvements Program, the Systems Reconstruction Program, the Engineering Support Program, Other Capital Projects, and General Construction of Local Lines.

The purposes and revenue sources of each fund are prescribed by law in the Washington Suburban Sanitary District Code. The capital funds and their respective purposes and funding sources are as follows:

The purpose of the **Water Supply Bond Fund** is to plan, design, and construct dams and reservoirs, water filtration plants, water pumping stations, water storage facilities, water supply lines of 16 inches in diameter and larger, and improvements or modifications to these facilities.

#### Sources of revenue include:

*Bonds Issued and Cash on Hand* - proceeds from the sale of Water Supply Bonds, and cash on hand at the beginning of the fiscal year;

Anticipated Contributions - contributions made by private parties for the excess cost of extending major water lines to certain areas, or to offset the cost of unusual conditions of providing service, and payments to the WSSC from local governments or agencies for the co-use of facilities or for the relocation of pipelines;

*System Development Charge (SDC)* - a charge to pay for that part of the Commission's Capital Improvements Program needed to accommodate growth.

#### CAPITAL BUDGET (Continued)

The purpose of the **Sewage Disposal Bond Fund** is to plan, design, and construct trunk and intercepting sewers 15 inches in diameter and larger; sewage pumping stations and force mains; sewage treatment facilities; along with improvements or modifications to these facilities; and reimbursement to the District of Columbia Water and Sewer Authority for construction at the Blue Plains Advanced Wastewater Treatment Plant.

Sources of revenue include:

Bonds Issued and Cash on Hand - proceeds from the sale of Sewage Disposal Bonds, and cash on hand at the beginning of the fiscal year;

Anticipated Contributions (Federal) - federal grant funds;

Anticipated Contributions (State) - state grant funds;

Anticipated Contributions (Other) - contributions made by private parties for the excess cost of extending major sewerage lines to certain areas, or to offset the cost of unusual conditions of providing service, and payments to the WSSC from local governments or agencies for the co-use of facilities or for the relocation of pipelines;

*System Development Charge (SDC)* - a charge to pay for that part of the Commission's Capital Improvements Program needed to accommodate growth.

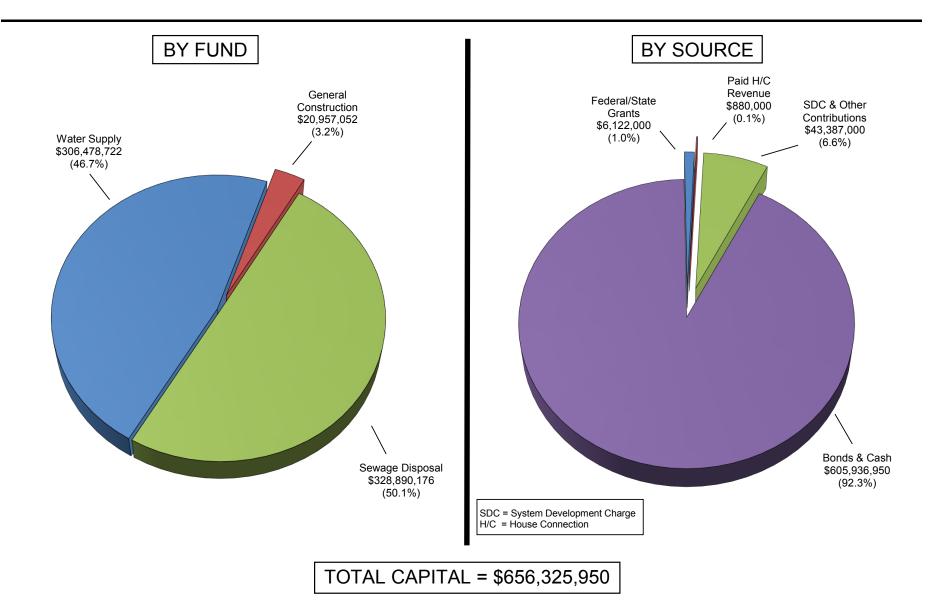
The purpose of the **General Construction Bond Fund** is to finance a major portion of the cost of constructing minor water and sewer lines (up to 15 inches in diameter for water and 14 inches in diameter for sewer); constructing new administrative and support facilities; modifying, enlarging, or replacing existing support facilities; relocating facilities; and purchasing water meters.

Sources of revenue include:

Bonds Issued and Cash On Hand - proceeds from the sale of General Construction Bonds and cash on hand at the beginning of the fiscal year;

Anticipated Contributions - house connection charges which are paid as a lump sum, and contributions made by private parties for the excess cost of extending lateral water and sewer lines to certain areas.

# FY 2019 PROPOSED BUDGET CAPITAL

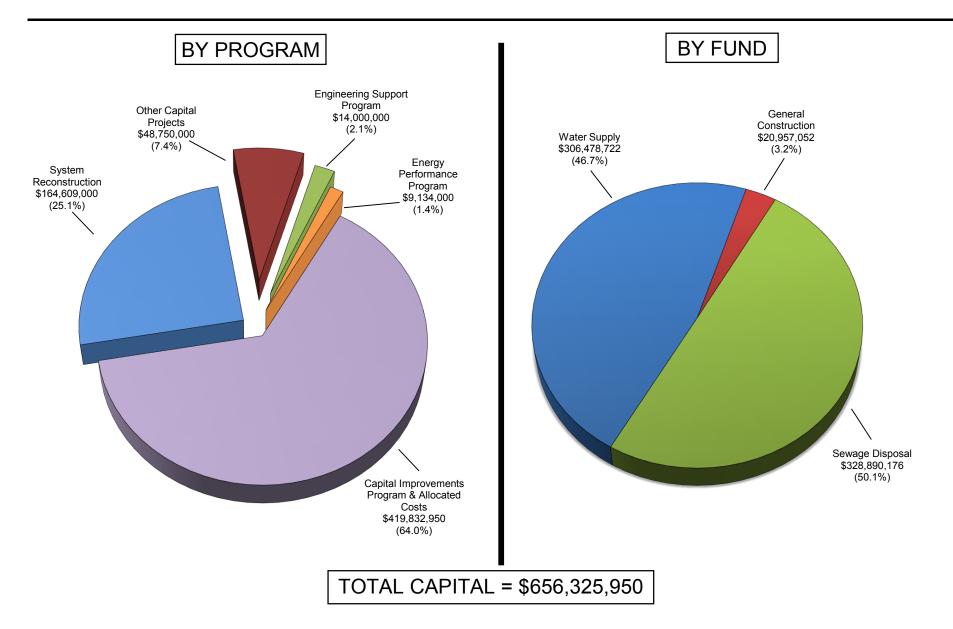


#### STATEMENT OF CAPITAL FUNDS, INCOME, AND EXPENDITURES

#### **CAPITAL FUNDS TOTAL**

	FY'17 Actual	FY'18 Approved Budget	FY'19 Proposed Budget
GROSS FUNDS AVAILABLE Bonds Issued and Cash on Hand Anticipated Contributions:	\$ 534,035	\$ 614,459	\$ 605,937
Federal and State Grants	12,976	10,780	6,122
System Development Charge (SDC)	36,766	32,189	23,647
Other	35,158	28,081	20,620
Available for Current Construction	618,935	685,509	656,326
CAPITAL COSTS			
Salaries & Wages	30,229	30,009	30,678
Contract Work	328,614	453,397	376,223
Consulting Engineers	53,763	57,814	68,912
All Other	144,379	144,289	180,513
TOTAL COSTS	556,985	685,509	656,326
Funds Available After Current Construction	\$ 61,950	<u>\$ -</u>	\$-

## FY 2019 PROPOSED BUDGET CAPITAL EXPENDITURES



#### FY'19 PROPOSED CAPITAL BUDGET FUND AND PROGRAM RELATIONSHIP

(\$ In Thousands)

Displayed below is the relationship between the three Major Capital Funds and the Program Categories.

Distribution by Program Category	Grand Total	Water	Sewer	-	eneral struction
Capital Improvements Program (CIP) & Allocated Costs	\$ 419,833	\$ 165,705	\$ 236,685	\$	17,443
Systems Reconstruction Program	164,609	99,925	64,684		-
Engineering Support Program	14,000	9,560	4,440		-
Energy Performance Program	9,134	2,500	6,634		-
Other Capital Projects	48,750	28,789	16,447		3,514
TOTAL	\$ 656,326	\$ 306,479	\$ 328,890	\$	20,957

#### SIX-YEAR CAPITAL IMPROVEMENTS PROGRAM

The WSSC is responsible for protecting the health and safety of the residents of the two counties we serve by protecting our source water, providing an adequate supply of safe drinking water, meeting fire-fighting requirements, and collecting and adequately treating wastewater before it is returned to the waters of the State of Maryland. The projects contained in the Capital Improvements Program (CIP) represent a multi-year plan to design and construct capital facilities required to successfully meet this responsibility. The Commission strives to maintain a balance between the use of valuable resources and the public's demand for clean water and the treatment of sanitary waste in an ethically, financially, and environmentally responsible manner.

Under state law, the WSSC is responsible for annually preparing a Six-Year Capital Improvements Program for major water and sanitary sewerage facilities for those portions of Prince George's and Montgomery Counties included in the Washington Suburban Sanitary District (WSSD). Only expenditures for the first year of the six-year program are included in this document. These expenditures identify the funding required for acquiring sites and rights-of-way, and planning, designing, and constructing projects in order to provide potable water and environmentally responsible sanitary sewer services to residential and commercial customers, as well as federal, state, and local facilities within the WSSD. The CIP projects include water mains at least 16 inches in diameter, sewer lines at least 15 inches in diameter, water and sewage pumping stations, force mains, storage facilities, joint-use facilities, and water filtration plant and wastewater treatment plant improvements. The CIP is developed in coordination with and in direct support of the two counties' approved land use plans and policies for orderly growth and development as detailed in their approved ten-year water and sewage programs.

CIP projects are financed primarily with long-term, rate-supported debt through the sale of bonds. Obtaining funding from other sources and through the use of PAYGO funding (when budgeted) lowers our borrowing requirements, which in turn lowers debt service requirements and ultimately our customers' bills. Other funding sources may include: payments from applicants for new service, including System Development Charges for certain projects which are intended to support new development; payments from other jurisdictions for projects which specifically benefit them; and state and federal grants. The amounts of these collections may vary from year to year. Water Supply bonds are issued to finance major water treatment, storage, and transmission facilities. Sewage Disposal bonds are issued to finance major sewage collection and treatment facilities. These bonds are repaid to bond holders over a 20 to 30-year period by annual principal and interest payments (debt service). The annual debt service on outstanding bonds is paid from the Commission's operating funds. The primary funding source for the repayment of debt is the revenue generated by water consumption and sewer use charges. These charges are set on an annual basis to cover operations, maintenance, and debt service costs of the Commission. In this manner, the initial high cost of capital improvements is spread over time and paid for by future customers who will benefit from the facilities, as well as by current customers. It is through this capital project financing process that the size of the Capital Improvements Program impacts the size of water and sewer bond issues, which in turn impacts customers' water and sewer bills.

#### SIX-YEAR CAPITAL IMPROVEMENTS PROGRAM

(Continued)

For FYs 2019-2024, CIP expenditures total approximately \$2.0 billion over the six-year program period, representing a \$112 million increase compared to last year's CIP. The increase can be primarily attributed to updating the cost estimate for the Potomac Water Filtration Plant Consent Decree project to reflect the audit and long-term upgrade report findings and the updated cost estimate for the Piscataway Bio-Energy project. These increases were partially offset by a decrease in the Trunk Sewer Reconstruction Program.

Of the \$2.0 billion in the six-year program period, approximately \$153 million is for growth, \$194 million is to meet environmental mandates, and \$1.7 billion is for system improvements. Approximately \$35.9 million of the growth cost in the six-year program period is attributable to water and sewer developer projects, with approximately \$16.0 million programmed in FY'19. A summary of six-year program expenditures is displayed on the next page.

The estimated total expenditures for the first year of the FYs 2019-2024 CIP - the budget year - are included in this FY'19 Proposed Budget for approval. Expenditures for FY'19 are estimated to be \$401 million, which is approximately \$76 million less than last year. The decrease can be primarily attributed to the decrease in the Trunk Sewer Reconstruction Program, the projected construction progress for the Patuxent WFP Phase II Expansion, and Blue Plains Enhanced Nutrient Removal projects, and a \$50 million reduction in bond funded capital projects in order to meet Spending Affordability Guidelines. A table of FY'19 proposed spending for planning and design fees, land and rights-of-way acquisitions, construction, and other costs for the water and sewerage projects contained in the CIP is included later in this section of the budget document. More detailed information is provided in the WSSC's Proposed FYs 2019-2024 Capital Improvements Program document available on our website and through our Communications & Community Relations Office.

Allocated Costs encompass all costs that are not specifically identifiable to a fund account. Instead, the costs are accumulated in expense pools, and subsequently distributed to the fund accounts based upon various allocation methods. The methods are designed to allocate these costs based on the utilization of the cost item being distributed. Allocated costs include machinery, equipment, and transportation charges; materials and procurement costs; and administrative and general costs.

The machinery, equipment, and transportation charges include garage and shop maintenance, and repair and service of vehicles, machinery, and equipment. These costs are assigned to specific WSSC offices based upon utilization, and are then allocated to the capital fund accounts. Materials and procurement costs and costs related to purchasing, storing, issuing, and testing materials are distributed based upon the materials charged to fund accounts. Administrative and general costs include general supervision and all administrative and support areas such as payroll, data processing, management, and fringe benefits.

#### CAPITAL IMPROVEMENTS PROGRAM SIX-YEAR FINANCIAL SUMMARY

(\$ in Thousands)

	Budget Year FY'19	Year 2 FY'20	Year 3 FY'21	Year 4 FY'22	Year 5 FY'23	Year 6 FY'24	Total Six Years FY'19-'24
<u>Water Projects</u> Montgomery County Prince George's County Bi-County Total Water Projects	\$ 13,869 49,408 72,690 135,967	\$ 1,674 45,971 90,219 137,864	\$661 41,452 134,141 176,254	\$- 27,196 138,661 165,857	\$ - 26,914 122,061 148,975	\$- 23,698 106,351 130,049	\$ 16,204 214,639 664,123 894,966
Sewer Projects Montgomery County Prince George's County Bi-County Total Sewer Projects	12,537 60,397 <u>192,554</u> 265,488	10,317 52,596 214,120 277,033	2,960 26,871 209,121 238,952	26,216 131,962 158,178	13,549 94,329 107,878	927 75,428 76,355	25,814 180,556 917,514 1,123,884
GRAND TOTAL	\$401,455	\$414,897	\$415,206	\$324,035	\$256,853	\$206,404	\$2,018,850

#### FY'19 ESTIMATES FOR SIX-YEAR CAPITAL IMPROVEMENTS PROGRAM - WATER

PROJECT <u>NUMBER</u>	PROJECT NAME	 D AND S OF WAY	ANNING/ I <u>GN FEES</u>		STRUCTION COSTS	<u>0TH</u>	ER COSTS	<u>FY'19 TOTAL</u>
MONTGOMERY C	COUNTY							
W-3.02 Olney S	Standpipe Replacement	\$ -	\$ 357	\$	441	\$	120	\$ 918
W-46.15 Clarksb	urg Elevated Water Storage Facility	-	221		1,400		243	1,864
W-46.24 Clarksb	urg Area Stage 3 Water Main, Part 4	-	69		436		76	581
W-46.25 Clarksb	urg Area Stage 3 Water Main, Part 5	-	18		120		21	159
W-90.04 Brink Z	one Reliability Improvements	-	400		5,500		590	6,490
W-138.02 Shady	Grove Standpipe Replacement	 -	 281	_	3,225		351	 3,857
MONT	GOMERY COUNTY SUBTOTALS	\$ -	\$ 1,346	\$	11,122	\$	1,401	\$ 13,869
<u>BI-COUNTY</u>								
W-73.19 Potoma	c WFP Outdoor Substation No. 2 Replacement	\$ -	\$ 1	\$	20	\$	1	\$ 22
W-73.21 Potoma	c WFP Corrosion Mitigation	-	10		50		5	65
W-73.22 Potoma	c WFP Pre-Filter Chlorination & Air Scour Improvements	-	591		6,575		717	7,883
W-73.30 Potoma	c WFP Submerged Channel Intake	-	67		-		3	70
W-73.32 Potoma	c WFP Main Zone Pipeline	-	1,000		-		100	1,100
W-73.33 Potoma	c WFP Consent Decree Program	400	4,000		5,000		450	9,850
W-139.02 Ducket	& Brighton Dam Upgrades	-	1,023		6,069		709	7,801
W-161.01 Large D	iameter Water Pipe & Large Valve Rehabilitation Program	-	6,441		32,284		1,936	40,661
W-172.05 Patuxe	nt WFP Phase II Expansion	-	225		800		51	1,076
W-172.07 Patuxe	nt Raw Water Pipeline	-	20		320		38	378
W-172.08 Rocky	Gorge Pump Station Upgrade	-	436		1,748		300	2,484
W-202.00 Land &	Rights-of-Way Acquisition - Bi-County Water	 1,300	 -		-		-	 1,300
BI-COL	INTY SUBTOTALS	\$ 1,700	\$ 13,814	\$	52,866	\$	4,310	\$ 72,690

#### FY'19 ESTIMATES FOR SIX-YEAR CAPITAL IMPROVEMENTS PROGRAM - WATER

PROJECT <u>NUMBER</u>	PROJECT NAME		D AND S OF WAY		ANNING/ I <u>GN FEES</u>	STRUCTION	<u>0Th</u>	IER COSTS		<u>FY'19 TOTAL</u>
PRINCE GEOF	RGE'S COUNTY									
W-12.02 Prin	nce George's County HG415 Zone Water Main	\$	-	\$	3	\$ 1,800	\$	274	\$	2,077
W-34.02 Old	Branch Avenue Water Main		-		200	6,000		620		6,820
W-34.03 Wat	ter Transmission Improvements 385B Pressure Zone		-		20	6,000		600		6,620
W-34.04 Bra	anch Avenue Water Transmission Improvements		-		155	5,403		9,193		14,751
W-34.05 Mar	rlboro Zone Reinforcement Main		-		240	2,400		396		3,036
W-62.05 Clin	nton Zone Water Storage Facility Implementation		-		148	5,300		545		5,993
W-65.10 St. I	Barnabas Elevated Tank Replacement		-		80	304		38		422
W-84.02 Ritc	chie Marlboro Road Transmission Main & PRV		-		100	1,430		230		1,760
W-84.03 Smi	ith Home Farms Water Main		-		63	297		54		414
W-84.04 Wes	stphalia Town Center Water Main		-		63	209		41		313
W-84.05 Prin	nce George's County 450A Zone Water Main		-		595	-		89		684
W-93.01 Kon	nterra Town Center East Water Main		-		7	46		8		61
W-105.01 Mar	rlton Section 18 Water Main, Lake Marlton Avenue		-		44	309		53		406
W-111.05 Hillr	meade Road Water Main		-		30	2,297		349		2,676
W-119.01 Joh	n Hanson Highway Water Main, Part 1		-		80	475		55		610
W-120.14 Villa	ages of Timothy Water Main, Part 1		-		22	391		62		475
W-120.15 Villa	ages of Timothy Water Main, Part 2		-		6	124		19		149
W-123.14 Old	I Marlboro Pike Water Main		-		16	160		26		202
W-123.20 Oak	k Grove/Leeland Roads Water Main, Part 2		-		10	200		20		230
W-137.03 Sou	uth Potomac Supply Improvement, Phase 2		-		1,500	-		75		1,575
W-147.00 Coll	lington Elevated Water Storage Facility		-		21	100		13		134
PRI	INCE GEORGE'S COUNTY SUBTOTALS	\$	-	\$	3,403	\$ 33,245	\$	12,760	\$	49,408
<u>GR.</u>	AND TOTAL WATER PROJECTS	<u>\$</u>	1,700	<u>\$</u>	18,563	\$ 97,233	<u>\$</u>	18,471	<u>\$</u>	135,967

#### FY'19 ESTIMATES FOR <u>SIX-YEAR CAPITAL IMPROVEMENTS PROGRAM - SEWER</u>

PROJEC <u>NUMBER</u>		 O AND OF WAY	 ANNING/ I <u>GN FEES</u>	 STRUCTION COSTS	<u>0TH</u>	ER COSTS	<u>FY'19 TOTAL</u>
MONTGO	MERY COUNTY						
S-84.47	Clarksburg Triangle Outfall Sewer, Part 2	\$ -	\$ 15	\$ 523	\$	81	\$ 619
S-84.60	Cabin Branch Wastewater Pumping Station	-	51	1,160		182	1,393
S-84.61	Cabin Branch WWPS Force Main	-	51	102		26	179
S-84.67	Milestone Center Sewer Main	-	122	306		64	492
S-84.68	Clarksburg Wastewater Pumping Station	-	40	1,100		171	1,311
S84.69	Clarksburg WWPS Force Main	-	35	728		114	877
S-85.21	Shady Grove Station Sewer Augmentation	-	15	1,036		158	1,209
S-103.16	Cabin John Trunk Sewer Relief	-	192	5,423		842	6,457
	MONTGOMERY COUNTY SUBTOTALS	\$ -	\$ 521	\$ 10,378	\$	1,638	\$ 12,537
BI-COUN	<u>TY</u>						
S-22.06	Blue Plains WWTP: Liquid Train Projects, Part 2	\$ -	\$ 3,398	\$ 13,900	\$	173	\$ 17,471
S-22.07	Blue Plains WWTP: Biosolids Management, Part 2	-	814	6,998		78	7,890
S-22.09	Blue Plains WWTP: Plant-wide Projects	-	2,327	5,798		81	8,206
S-22.10	Blue Plains WWTP: Enhanced Nutrient Removal	-	5,224	3,038		83	8,345
S-22.11	Blue Plains: Pipelines & Appurtenances	-	3,833	19,328		232	23,393
S-103.02	Piscataway WWTP Bio-Energy Project	-	12,700	25,700		1,910	40,310
S-170.08	Septage Discharge Facility Planning & Implementation	-	53	4,832		344	5,229
S-170.09	Trunk Sewer Reconstruction Program	-	16,771	57,908		6,936	81,615
S-203.00	Land & Rights-of-Way Acquisition - Bi-County Sewer	 95	 -	 -			 95
	BI-COUNTY SUBTOTALS	\$ 95	\$ 45,120	\$ 137,502	\$	9,837	\$ 192,554

#### FY'19 ESTIMATES FOR <u>SIX-YEAR CAPITAL IMPROVEMENTS PROGRAM - SEWER</u>

PROJECT <u>NUMBER</u>		) AND OF WAY	ANNING/ I <u>GN FEES</u>	STRUCTION COSTS	<u>0TH</u>	IER COSTS	<u>I</u>	FY'19 TOTAL
PRINCE (	GEORGE'S COUNTY							
S-27.08	Westphalia Town Center Sewer Main	\$ -	\$ 19	\$ 89	\$	16	\$	124
S-28.18	Konterra Town Center East Sewer	-	58	388		67		513
S-43.02	Broad Creek WWPS Augmentation	-	1,500	13,000		725		15,225
S-57.92	Western Branch Facility Upgrade	-	200	2,800		150		3,150
S-68.01	Landover Mall Redevelopment	-	76	461		81		618
S-75.19	Brandywine Woods Wastewater Pumping Station	-	14	44		9		67
S-75.20	Brandywine Woods WWPS Force Main	-	8	50		9		67
S-75.21	Mattawoman WWTP Upgrades	-	-	4,049		-		4,049
S-77.20	Parkway North Substation Replacemen	-	300	2,000		350		2,650
S-86.19	Karington Subdivision Sewer	-	4	153		24		181
S-96.14	Piscataway WWTP Facility Upgrades	-	2,898	26,735		1,482		31,115
S-131.05	Pleasant Valley Sewer Main, Part 2	-	52	290		51		393
S-131.07	Pleasant Valley Sewer Main, Part 1	-	107	736		127		970
S-131.10	Fort Washington Forest No. 1 WWPS Augmentation	-	108	1,000		167		1,275
	PRINCE GEORGE'S COUNTY SUBTOTALS	\$ -	\$ 5,344	\$ 51,795	\$	3,258	\$	60,397
	GRAND TOTAL SEWER PROJECTS	\$ 95	\$ 50,985	\$ 199,675	\$	14,733	\$	265,488

#### PROJECTED IN-SERVICE DATES FOR MAJOR FACILITIES

#### WASTEWATER NAME OF FACILITY **PROJECTED IN-SERVICE DATE** S-43.02 Broad Creek WWPS Augmentation FY 2020 Brandywine Woods WWPS Developer Dependent S-75.19 Cabin Branch WWPS **Developer Dependent** S-84.60 Clarksburg WWPS S-84.68 FY 2021 S-96.14 Piscataway WWTP Facility Upgrades FY 2023 S-103.02 Piscataway WWTP Bio-Energy Project July 2022 Septage Discharge Facility Planning & Implementation S-170.08 FY2021 WATER Olney Standpipe Replacement July 2019 W-3.02 W-46.15 Clarksburg Elevated Water Storage Facility FY 2019 Clinton Zone Water Storage Facility Implementation W-62.05 FY 2020 W-65.10 St. Barnabas Elevated Tank Replacement August 2018 Potomac WFP Submerged Channel Intake W-73.30 FY 2024 Shady Grove Standpipe Replacement January 2019 W-138.02 **Duckett & Brighton Dam Upgrades** W-139.02 April 2019 Collington Elevated Water Storage Facility W-147.00 March 2018 Patuxent WFP Phase II Expansion W-172.05 August 2018 Rocky Gorge Pump Station Upgrade August 2019 W-172.08

#### SYSTEMS RECONSTRUCTION PROGRAM

	FY'17	FY'18	FY'19
	<u>Actual</u>	<b>Approved</b>	<b>Proposed</b>
Systems Reconstruction Program	\$194,671,000	\$175,070,000	\$164,609,000

This program provides for the systematic replacement or rehabilitation of the Commission's aging infrastructure of small diameter water mains (less than 16-inches in diameter) and sewer lines (less than 15-inches in diameter), as well as associated house connections (from the main to the property line). In order to extend their useful life, portions of these systems are rehabilitated each year. Through FY'17, WSSC maintained approximately 5,600 miles of water main and 5,500 miles of sewer main, along with 460,900 water house connections and 434,600 sewer house connections. In addition to the small diameter pipe rehabilitation programs, two rehabilitation programs for large diameter pipe projects (the Large Diameter Water Pipe & Large Valve Rehabilitation Program (W-161.01) and the Trunk Sewer Reconstruction Program (S-170.09)) are included in the Commission's Capital Improvements Program (CIP budget).

The Water Reconstruction Program consolidates several water main improvement activities designed to enhance water quality and reliability under one initiative. A majority of the funding is dedicated to replacing older water mains that are located in roadways and previously prone to breaks with new sections of cement lined zinc coated ductile iron pipe. The Program also includes installing cathodic protection and pipeline appurtenances, including large meter and fire meter vaults. The FY'19 proposed budget of \$99.9 million provides for the planned design and rehabilitation of 45 miles of water main and associated house connection renewals (\$84.2 million), large water service rehabilitation (\$8.0 million), cathodic protection (\$1.0 million), and funding for emergency/urgent pipe replacements (\$6.7 million). In FY'17, 69.2 miles of water main and associated house connection renewals were rehabilitated, along with 30 large water service meters, at a total cost of \$135.3 million dollars.

The Sewer Reconstruction Program provides for correcting structural deficiencies in sewer mains that may result from soil settlement, root penetration, or corrosion, and often contribute to sewage overflows and backups into homes. The FY'19 proposed budget of \$64.7 million provides for the rehabilitation of 20 miles of sewer main (\$32.1 million) and 6 miles of lateral lines located in roadways, as well as associated house connection renewals (\$29.7 million), and funding for emergency/urgent pipe repairs (\$2.9 million). In FY'17, 34.0 miles of roadway sewer mains, 9.9 miles of sewer laterals, and the associated house connections, were rehabilitated at a cost of \$59.4 million dollars.

#### **ENGINEERING SUPPORT PROGRAM**

	FY'17	FY'18	FY'19
	<u>Actual</u>	<b>Approved</b>	<b>Proposed</b>
Engineering Support Program	\$6,502,000	\$18,000,000	\$14,000,000

The Engineering Support Program (ESP) represents the consolidation of a diverse group of multi-year projects and asset management processes to analyze, evaluate and support the extensive water and sewer infrastructure and numerous support facilities that are owned, operated, and maintained by the WSSC. ESP project requests for engineering support for planning, design, and construction management are initiated through the Asset Management Program processe. ESP projects are diverse in scope, and typically include work needed to upgrade operating efficiency, modify existing processes, satisfy regulatory requirements, or rehabilitate aging facilities. The ESP does not include proposed "major projects" which, by law, must be programmed in the WSSC's Six-Year Capital Improvements Program, or "growth" projects to serve new development.

The total FY'19 proposed program is \$14,000,000 in the capital budget. ESP projects are recommended based upon our Asset Management Program planning processes including developing confidence level ratings, evaluating level of service impacts, determining business risk exposure and performing business case analysis for future capital projects in an enterprise-wide asset management process environment. The ESP provides a stable funding level for projects that require engineering support. All requested ESP projects are evaluated, prioritized and then initiated subject to the available funding for the fiscal year.

Projects in the program include: underground fuel storage tank replacements; NPDES Industrial Stormwater Permit compliance; continuous discharge turbidity measurement systems at the Potomac WFP; elevator modernization, electrical and data center upgrades at the RGH building; and, safety upgrades to the Consolidated Lab gas storage facilities. Further details of the program are included in the Information Only section of the FYs 2019-2024 Proposed Capital Improvements Program document.

#### **ENERGY PERFORMANCE PROGRAM**

	FY'17	FY'18	FY'19
	<u>Actual</u>	<b>Approved</b>	<b>Proposed</b>
Energy Performance Program	\$0	\$18,249,000	\$9,134,000

The Energy Performance Program (EPP) includes expenditures for the engineering audit, design, construction, and maintenance necessary to replace and upgrade energy consuming equipment and systems at all major Commission facilities. The program will provide a reduction, guaranteed by the contractor, in energy usage (electricity, fuel oil, natural gas, or other fuel) and costs greater than, or equal to, the annual costs to be incurred. The program will maintain or enhance existing operating conditions and reliability while continuing to meet all permit requirements and ensuring a continued commitment to environmental stewardship at WSSC sites.

The FY'19 proposed program is \$9,134,000 in the capital budget. Phase IIA of the program addressing energy consuming equipment at the Richard G. Hocevar Building and wastewater facilities was completed in FY'06. Phase IIB of the program, additional facility upgrades and new energy management control systems, was completed in FY'11. Phase IIC of the program, to provide electricity generation from renewable wind power, was placed in service in FY'08. Phase IID of the program, to replace and upgrade existing pumps at the Potomac Water Filtration Plant to improve operating efficiency, qualified for \$250,000 in Pepco energy efficient rebates and was completed in FY'13. Phase IIE of the program, to implement new Solar Photovoltaic Power Systems at our Western Branch and Seneca WWTPs through a Purchase Power Agreement (PPA), was placed in service in October 2013. Phase IIF of the program was added in FY'13 to evaluate energy efficient HVAC and lighting upgrades at field offices, upgrades to water distribution and wastewater pumps, and additional upgrades at wastewater treatment plants.

Energy conservation measures may include, but are not limited to, the following: the replacement or upgrade of water and wastewater process equipment; aeration equipment; piping, valves, and motors; sludge dewatering/thickening equipment; grit removal; effluent disinfection systems; water pumps/ valves/ motor replacement and rebuild; mixers; wastewater pumps; pump instrumentation; flow metering; power measurement; incinerator upgrades; peak power shaving and back-up electric generation systems; variable speed drives; HVAC equipment/systems; lighting; water distribution system controls/optimization; electrical load aggregation; electric supply; and electric supply management services. Sub-metering will be required for all major equipment in order to provide a baseline and to verify energy savings. Further details of the program are included in the Information Only section of the FYs 2019-2024 Proposed Capital Improvements Program document.

### OTHER CAPITAL PROJECTS (\$ in Thousands)

Displayed below is the allocation of the Other Capital Projects category to the three major Capital Funds.

Other Capital Projects	Grand Total	Water	Sewer	General Construction
Water Storage Facility Rehabilitation Program	\$8,000	\$8,000	\$	\$
Specialty Valve Vault Rehabilitation Program	1,442	1,442		
Advanced Metering Infrastructure	27,694	13,847	13,847	
New House Connections	3,100	2,000	1,100	
Relocations	5,000	3,500	1,500	
General Construction – Local Lines	690			690
Water Meters	2,824			2,824
TOTAL	\$48,750	\$28,789	\$16,447	\$3,514

#### **OTHER CAPITAL PROJECTS**

(Continued)

		<b>FY'17</b>	FY'18	FY'19
		Actual	<b>Approved</b>	<b>Proposed</b>
•	Water Storage Facility Rehabilitation Program	\$2,645,519	\$8,000,000	\$8,000,000

The Water Storage Facility Rehabilitation Program provides for the comprehensive rehabilitation of the Commission's 60 water storage facilities located throughout the WSSC service area safeguarding nearly 200 million gallons of finished drinking water. The Program provides for structural metal and concrete foundation repairs, equipment upgrades to meet current OSHA standards, lead paint removal, security upgrades, advanced mixing systems to improve water quality, and altitude valve vault and supply pipe replacement. The Program does not include proposed "major projects" which, by law, must be programmed in the WSSC's Six-Year Capital Improvements Program.

By January 2019, there will be 21 steel tanks whose last painting contract was finished 10 or more years ago including 8 newer tanks with coatings more than 15 years old. The Program provides a stable funding level for the painting and rehabilitation of water storage facilities. All water storage facilities are prioritized based on the condition of the existing coating and structural integrity issues and then initiated subject to the available funding for the fiscal year.

The Program plan for FY'19 will address the following water storage facilities: Andrews, Bradley Hills, Brink, Greenbelt, North Woodside, Pointer Ridge, and Wall Lane Reservoirs. Further details of the Program are included in the Information Only section of the FYs 2019-2024 Proposed Capital Improvements Program document.

#### **OTHER CAPITAL PROJECTS**

(Continued)

		FY'17	FY'18	FY'19
		<u>Actual</u>	<b>Approved</b>	<b>Proposed</b>
•	Specialty Valve Vault Rehabilitation Program	\$6,279,433	\$1,898,000	\$1,442,000

The Specialty Valve Vault Rehabilitation Program provides for the planning, design and construction of improvements and replacement of pressure reducing valves, altitude valves, metering valves, and other valves and their associated vaults throughout the water distribution system. The program includes valves ranging in size from 8-inches to 60-inches in diameter. The program systematically evaluates the condition of individual installations, some of which were constructed as early as the 1930's, and upgrades, rehabilitates, or relocates the structures and equipment as necessary. The Specialty Valve Vault Rehabilitation Program improves reliability and increases efficiency of system operation.

		<b>FY'17</b>	FY'18	FY'19
		<u>Actual</u>	Approved	Proposed
•	Advanced Metering Infrastructure	\$0	\$6,950,000	\$27,694,000

The Advanced Metering Infrastructure Project (AMI) provides for the implementation of a system-wide automated meter reading infrastructure system including new comprehensive customer billing and data analysis integration software programs. New Meter Interface Units with internal antenna capable of obtaining and/or transmitting the meter register reading will be installed on all water meters. The system may be either a mobile system where meters are read by a meter reader driving down the street with a portable radio based meter reading device or a fixed network communications system with data collectors installed on poles and rooftops. AMI will improve both customer service and operational efficiency. Expected benefits include: monthly billing based on actual meter readings providing reduced bill size to help customers stay current with payments, help customers develop a greater awareness of their water consumption, and ensure that problems such as excessive consumption due to leaks are addressed more quickly; active notification of customers with abnormal consumption that might signify leaks before the customers receive high consumption bills; reduced customer calls; reduced field investigation visits; opportunities to employ more sophisticated rate structures; analysis of individual consumption patterns to detect meters suspected of wearing out, or perform meter sizing analysis to ensure that large meters are optimally sized; monitoring of individual consumption to perform precise, targeted conservation enforcement during droughts; and, opportunities to improve the monitoring and operation of the distribution system, in order to detect and reduce non-revenue water. The increase in the FY'19 Proposed Budget reflects the ramping up of the project hardware and software implementation.

#### **OTHER CAPITAL PROJECTS**

(Continued)

		<b>FY'17</b>	FY'18	FY'19
		<u>Actual</u>	<b>Approved</b>	<b>Proposed</b>
•	New House Connections	\$4,215,143	\$3,350,000	\$3,100,000

Water and/or sewer house connections are separate, small diameter pipes installed between the individual water and sewer service mains in the street and the owner's property line. These lines feed potable water, under pressure, into a customer's dwelling, place of business, or other structure and convey domestic sewage away, usually by gravity, into the mainline sewer in the street. These connections are maintained by the Commission.

Most of the house connections are installed in conjunction with the installation of mainline extensions to serve new development, and may include abutting properties external to the new development. The remaining connections are constructed to serve existing or new structures in areas already developed and where mainlines already exist. Costs for the house connection construction programs are recovered through house connection fees, which are set annually by the Commission.

Historically, the number of water and sewer house connections constructed in a given year is approximately equal. The actual number of completed house connections was 6,495 in FY'17. The estimated number of connections to be completed in FY'19 is 6,600 each year. The majority of these house connections will be constructed by developers at their expense.

		<b>FY'17</b>	FY'18	FY'19
		<u>Actual</u>	<b>Approved</b>	<b>Proposed</b>
•	<b><u>Relocations</u></b>	\$4,125,107	\$3,500,000	\$5,000,000

The relocation of existing WSSC water mains and sewer lines is usually necessitated by construction that is proposed by other public agencies, developers, and occasionally the general public. The relocation program consists primarily of construction contract work associated with road improvement projects planned by the Maryland State Highway Administration, the Montgomery County Department of Public Works and Transportation, and the Prince George's County Department of Public Works and Transportation. The majority of the program is dependent upon construction scheduling by these agencies.

#### **OTHER CAPITAL PROJECTS**

(Continued)

		FY'17	FY'18	FY'19
		Actual	<b>Approved</b>	<b>Proposed</b>
•	<u>General Construction – Local Lines</u>	\$0	\$690,000	\$690,000

General Construction Bond funds are used for the design and installation of local water mains and sewers. As a class, these pipelines are smaller in diameter than those constructed with the proceeds from the sale of Water Supply and Sewage Disposal Bonds. The class includes all water mains up to 15 inches in diameter and sewer lines up to 14 inches in diameter. However, in some cases, larger water pipelines that provide a measure of service to individual customers are partially supported by General Construction funds in proportion to their localized function.

Applications for service requested after July 1, 1999, require the Applicant to finance and construct the local water and sewer mains needed for new development. The WSSC will construct those remaining projects serving one new residence, providing relief from a residential health hazard, or serving existing homes previously connected to private systems.

		FY'17 <u>Actual</u>	FY'18 Approved	FY'19 <u>Proposed</u>
•	Water Meters	\$2,584,854	\$2,823,900	\$2,823,900

The Utility Services Team is responsible for installing meters and ensuring all WSSC's water meters accurately register customers' water use. Funds for the purchase of new and replacement meters, both small (1" and smaller) and large (1-1/2") and greater) are included in the General Construction Bond Fund of the Capital Budget.

The Small and Large Meter Maintenance Programs monitor nearly 500,000 meters on an ongoing basis to ensure that the meters register accurately. These programs provide preventive/emergency maintenance, testing, repair and replacement. In FY'19, the small meter program is estimated to install approximately 3,500 new small meters and replace about 14,400 small meters. The large meter program plans to test, and repair as needed, an estimated 1,200 large meters.

#### FUNDING OF WATER AND SEWER CAPITAL PROGRAMS

For FY'19, expenditures of \$635.4 million are budgeted in the Water and Sewer Bond Funds to implement the Commission's water and sewer Capital Improvements Program, Systems Reconstruction Program, Engineering Support Program, and other Information Only Projects. The capital budget presents the spending level required to *fully implement* during FY'19 all planning, design, and construction activities scheduled for projects in these programs. However, historical experience indicates that some activities will not be completed during the budget year because of difficulties in acquiring land or rights-of-way, delays in obtaining permits from other governmental organizations, changes in developer schedules, and other considerations beyond the WSSC's control. Any delay in one or more of the projects will cause capital expenditures to be less than budgeted. Forecasts of FY'19 spending for capital programs are made by reducing the budgeted program dollars using completion and scaling factors. The completion and scaling factors are determined by analyzing projects in the programs and reviewing the historical relationship between budgeted and actual spending for capital projects.

Estimating actual spending is an important step in forecasting the issuance of new debt at a level which does not exceed the amount necessary to cover actual expenditures. Conservative issuance of long-term debt is essential to keep outstanding debt, debt service, and water and sewer rates at moderate levels. The amount of new debt is calculated by adjusting for other funding sources, such as grants, PAYGO and System Development Charges, from the total funding requirement. FY'19 spending for the Water and Sewer Bond Funds, adjusted for completion, is estimated to be \$567.4 million. The requirement for new long-term Water and Sewer Debt is estimated to be \$486.8 million.

	(\$ in Thousands)		
USES:	<u>Water</u>	<u>Sewer</u>	<u>Combined</u>
Budgeted Capital Expenditures	\$306,479	\$328,890	\$635,369
Capital Expenditures adjusted for completion factor	265,356	302,017	567,373
SOURCES:			
Long-term Bonds (new)	224,267	262,581	486,848
Federal & State Grants	-	6,122	6,122
System Development Charge (SDC)	17,026	6,621	23,647
PAYGO	13,660	17,356	31,016
Other	10,403	9,337	19,740
TOTAL SOURCES	<u>\$265,356</u>	<u>\$302,017</u>	<u>\$567,373</u>

## FY'19 SOURCES AND USES OF WATER & SEWER FUNDS

5-23

#### FUNDING OF WATER AND SEWER CAPITAL PROGRAMS

(Continued)

Both non-rate-supported and rate-supported sources fund Water and Sewer Bond Fund expenditures. Non-rate-supported sources (System Development Charges, federal and state grants, and developer contributions) account for approximately 9% of the funding. Rate-supported sources (long-term debt, construction notes and PAYGO) account for the remaining 91%. The new debt required to fund the capital program is reflected in the operating budget as debt service expense. In FY'14, the Commission began issuing debt for 30 years as opposed to the prior practice of 20 years. The savings will be used to fund PAYGO capital projects. The table below presents the debt service associated with both existing debt and new debt proposed for FY'19.

### WATER & SEWER BOND FUNDS RATE-SUPPORTED DEBT SERVICE EXPENSES

(\$ in Thousands)

	<u>Water</u>	Sewer	<u>Combined</u>
Debt Service for Existing Debt Debt Service for Planned New Debt	\$111,157 6,571	\$151,988 <u>7,345</u>	\$263,145 <u>13,916</u>
Total Debt Service	<u>\$117,728</u>	<u>\$159,333</u>	<u>\$277,061</u>

### WATER AND SEWER OPERATING BUDGET IMPACTS OF CAPITAL PROJECTS

The construction of capital projects affects the water and sewer operating budget in several ways. The first and largest impact is the payment of debt service associated with major projects programmed in the capital budget.

Impact on the Operating Budget

	FY'18	FY'19
	Approved	<b>Proposed</b>
Debt Service	\$257,071,000	\$277,060,690

The second impact from capital improvements is less direct, and involves changes to operations, processes, or revenue streams when a capital project is completed. These changes can have positive effects on the operating budget, although the effects are difficult to quantify. For instance, the Commission's four programs for Water and Sewer Reconstruction of system-wide infrastructure improvements are funded through the capital budget and are focused on the most highly prioritized, aging portions of the Commission's extensive network of water transmission mains and sewage collection lines. These efforts include water main and large valve rehabilitation, sewer and force main reconstruction, cathodic protection and other non-Capital Improvements Program (CIP) sized pipeline replacements. These efforts are aimed at reducing service interruptions and providing all Commission customers with the same high levels of service. The infrastructure work will eliminate some line flushing, reduce the number of complaints to be addressed, reduce the number of leaks and breaks, and result in some deferral of costs related to preventive maintenance, costs which are paid out of operating funds.

The third impact of capital projects relates to the cost of operating and maintaining facilities that will be completed in FY'18 and FY'19 and will require operation and maintenance funding in the FY'19 budget. The most significant effect occurs when additional staff must be hired to operate and maintain a new or expanded facility, or in cases where new or increased regulations require new equipment and processes that may increase operating costs for energy, chemicals, monitoring or maintenance.

In some cases, where capital projects provide for renovation or replacement of major existing facilities in the CIP, or encompass smaller infrastructure improvements such as those contained in the Commission's Engineering Support Program, the impacts on the operating budget are minimal and may even result in cost savings. Energy Performance Program projects serve to reduce operating expenses when state-of-the-art-computerized controls and modern pumping and treatment technology are installed at an existing facility. These improvements increase process efficiencies and lower our overall energy requirements.

### Major Capital Projects Which Impact the FY'19 Operating Budget

<u>Enhanced Nutrient Removal Projects</u>: These projects will provide for the improvements required at the Piscataway, Parkway, Western Branch, Seneca and Damascus WWTPs to meet the requirements of the Maryland Department of the Environment Enhanced

### WATER AND SEWER OPERATING BUDGET IMPACTS OF CAPITAL PROJECTS

(Continued)

Nutrient Removal Program and new NPDES plant permit requirements. The FY'19 budget includes additional costs for ENR related process equipment maintenance and operation to meet ENR permit level requirements for the removal of nitrogen and phosphorus.

Patuxent WFP Phase II Expansion: The expansion project provides for the addition of a sixth treatment train to increase the plant's nominal treatment capacity from 56 MGD to 72 MGD, new UV disinfection facilities to comply with EPA requirements and a new residuals handling facility to improve overall system operation. Operating and maintenance costs will increase due to: addition of a sixth treatment train consisting of a three stage flocculation chamber, sedimentation basin with chain and flight solids removal and plate settlers, disinfectant contact chamber, and two deep bed granular carbon filters; operation and maintenance of the new plant-wide UV disinfection system; operation of the new residuals handling facility to reduce solids from impacting the downstream sewer system and Parkway WWTP; and, increased chemical costs at Parkway WWTP. Portions of the project came online beginning in FY'16 and will continue on into FY'19.

<u>Potomac WFP Consent Decree Program</u>: This program provides for the planning, design, and construction required for the implementation of Operational Improvements and, Short-Term and Long-Term Capital Improvements at the Potomac Water Filtration Plant to meet the new discharge limitations identified in the Consent Decree. Beginning in FY'17 the plant experienced higher chemical and hauling costs due to higher level of treatment and larger volume of solids removed in response to the Consent Decree.

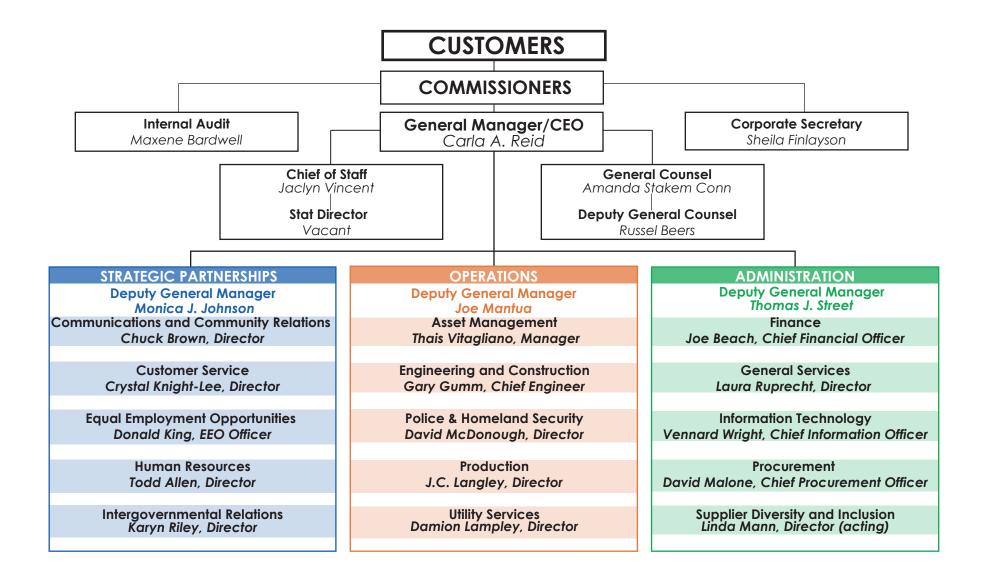
The following table summarizes the total estimated water and sewer operating budget impacts for the projects included in the FY'19 Capital Budget.

### Water and Sewer Impact of the FY'19 Capital Budget

	FY'18 <u>Approved</u>	FY'19 <u>Proposed</u>	FY'19 <u>Net Impact</u>
Operating Expenses			
Debt Service	\$257,071,000	\$277,060,690	\$19,989,690
Major Capital Projects	<u> </u>	454,000	454,000
TOTAL	<u>\$257,071,000</u>	<u>\$277,514,690</u>	<u>\$20,443,690</u>

**ORGANIZATIONAL BUDGETS & RESPONSIBILITIES** 

**SECTION 6** 



## Comparative Expenditures by Organizational Unit

	FY'18 Approved		FY'19 Proposed		
	Workyears	Amount	Workyears	Amount	
Commissioners/Corporate Secretary's Office	2	\$ 380,735	2	\$ 390,768	
Internal Audit	10	1,308,751	10	1,348,142	
General Manager's Office	10	1,621,640	9	1,598,034	
WSSC Stat Office	4	685,726	4	684,350	
General Counsel's Office (includes Claims Unit)	26	10,527,054	25	10,392,624	
Strategic Partnerships					
Customer Service Department	101	8,104,616	102	11,883,866	
Intergovernmental Relations Office	4	714,808	4	723,476	
Communications & Community Relations Office	19	2,756,222	19	3,111,669	
Human Resources Office	36	5,880,431	36	6,054,817	
Equal Employment Opportunities Office	1	127,423	1	228,994	
Operations					
Asset Management Office	8	3,310,489	8	3,468,777	
Ingineering & Construction Department	377	618,045,772	378	578,731,541	
Police & Homeland Security	41	5,403,062	41	5,557,088	
Production Department	332	171,942,315	332	160,340,070	
Jtility Services Department	499	114,009,997	499	123,630,467	
Administration					
inance Department	64	7,198,969	64	7,691,928	
nformation Technology Department	104	45,053,733	104	70,230,482	
General Services Office	94	18,057,793	94	18,441,208	
Procurement Office	35	3,388,073	35	3,677,370	
Office of Supplier Diversity & Inclusion	9	1,378,288	9	1,414,076	
Non-Departmental (Finance)	-	52,090,496	-	53,825,526	
Non-Departmental (Human Resources)	-	36,724,900	-	34,524,900	
Debt Service	-	271,216,000	-	294,348,690	
PAYGO	-	30,193,000	-	31,015,512	
Depreciation Expense		16,625,200		14,592,374	
SUMMARY-TOTAL	1,776	\$ 1,426,745,493	1,776	\$ 1,437,906,749	

### Comparative Personnel Complement by Organizational Unit

	FY'17	' Actual	FY'18	Approved	FY'19 F	Proposed
	Authorized Positions	Workyears	Authorized Positions	Workyears	Authorized Positions	Workyears
Commissioners/Corporate Secretary's Office	*8	1.0	*8	2.0	*8	2.0
Internal Audit	10	8.7	10	10.0	10	10.0
General Manager's Office	15	15.0	10	10.0	9	9.0
WSSC Stat Office	4	3.7	4	4.0	4	4.0
General Counsel's Office (includes Claims Unit in FY'18 and FY'19)	16	14.7	26	26.0	25	25.0
Strategic Partnerships						
Customer Service Department	107	77.7	101	101.0	102	102.0
Intergovernmental Relations Office	4	3.3	4	4.0	4	4.0
Communications & Community Relations Office	19	18.8	19	19.0	19	19.0
Human Resources Office	36	38.6	36	36.0	36	36.0
Equal Employment Opportunities Office	1	0.1	1	1.0	1	1.0
Operations						
Asset Management Office (included in General Manager's Office in FY'17)	-	-	8	8.0	8	8.0
Engineering & Construction Department	378	352.4	377	377.0	378	378.0
Police & Homeland Security	41	36.2	41	41.0	41	41.0
Production Department	303	319.7	332	332.0	332	332.0
Utility Services Department	504	471.1	499	499.0	499	499.0
Administration						
Finance Department	62	59.0	64	64.0	64	64.0
Information Technology Department	109	81.8	104	104.0	104	104.0
General Services Office	121	88.0	94	94.0	94	94.0
Procurement Office	35	23.4	35	35.0	35	35.0
Office of Supplier Diversity & Inclusion	9	9.3	9	9.0	9	9.0
	1,776	1,622.5	1,776	1,776.0	1,776	1,776.0

\* Commissioners (6) not included in total positions or workyears.

## Salaries and Wages Summary

	FY'19	Proposed
	Workyears	Amount
Base Positions Funded Full Year Overtime Subtotal	1,776	\$ 154,930,072 <u>8,099,381</u> 163,029,453
Lapse on Base Positions * Subtotal		<u>9,440,601</u> 153,588,852
Salary Enhancements Salary - 6 Commissioners		5,445,188 78,500
TOTAL	1,776	<u>\$ 159,112,540</u>

\*Lapse is the reduction of gross salary costs due to vacancies and normal delays in filling positions.

## COMMISSIONERS/CORPORATE SECRETARY, GENERAL MANAGER & STAFF OFFICES

Commissioners/Corporate Secretary, General Manager & Staff Offices is comprised of the following: Commissioners/Corporate Secretary, Internal Audit, General Manager, WSSC Stat, and General Counsel Offices.

Offices	FISCAL YE		FISCAL YE APPRO		FISCAL YE PROPO		2018 - 2019 VARIANCE		
	Amount	Workyears	Amount	Workyears	Amount	Workyears	Dollars	Percent	
Commissioners/Corporate Secretary's	\$ 328,405	1.0	\$ 380,735	2.0	\$ 390,768	2.0	\$ 10,033	2.6%	
Internal Audit	1,236,253	8.7	1,308,751	10.0	1,348,142	10.0	39,391	3.0%	
General Manager's	4,429,837	15.0	1,621,640	10.0	1,598,034	9.0	(23,606)	-1.5%	
WSSC Stat	1,088,768	3.7	685,726	4.0	684,350	4.0	(1,376)	-0.2%	
General Counsel's	4,807,725	14.7	10,527,054	26.0	10,392,624	25.0	(134,430)	-1.3%	
Totals	\$ 11,890,988	43.1	\$ 14,523,906	52.0	\$ 14,413,918	50.0	\$ (109,988)	-0.8%	

## **Budget Summary**

## **Explanation of Major Variances**

None

## **COMMISSIONERS/CORPORATE SECRETARY'S OFFICE**

#### **Mission Statement**

To function as the Board of Directors and set general policy for the operation of the Commission, while providing leadership, guidance, and oversight.

### **Budget Summary**

	FISCAL YEAR 2017			FISCAL YEAR 2018			FISCAL YE	AR 2019	2018 - 2019			
		ACTUAL		APPROVED			PROPOSED			VARIANCE		
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$	235,142	1.0	\$	295,535	2.0	\$	305,568	2.0	\$	10,033	3.4%
All Other		93,263			85,200			85,200			-	0.0%
Totals	\$	328,405	1.0	\$	380,735	2.0	\$	390,768	2.0	\$	10,033	2.6%

### **Explanation of Major Variances**

None

## **Office Description and Core Activities**

The WSSC is overseen by a six-member board of appointed Commissioners. Three Commissioners are appointed by the Prince George's County Executive and three by the Montgomery County Executive. Appointments are subject to approval by their respective County Councils.

The Commissioners establish policies for the operation of the Commission within the legal framework of Division II of the Public Utilities Article of the Annotated Code of Maryland.

The Commission's Corporate Secretary manages the corporate functions including meeting agendas, maintaining the Commission's official records, providing staff support, handling official correspondence and telephone inquiries, and serving as liaison for the Commissioners with customers.

## INTERNAL AUDIT

#### **Mission Statement**

To evaluate the adequacy and effectiveness of the WSSC's system of internal controls. The Ethics Officer administers the Code of Ethics; provides support to the Board of Ethics; provides ethics training; and administers the Fraud, Waste, and Abuse Hotline.

#### **Budget Summary**

	FISCAL YEAR 2017		]	FISCAL YE	AR 2018	]	FISCAL YE	AR 2019	2018 - 2019			
		ACTUAL		APPROVED			PROPOSED			VARIANCE		
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$	1,018,602	8.7	\$	1,059,251	10.0	\$	1,098,642	10.0	\$	39,391	3.7%
All Other		217,651			249,500			249,500			-	0.0%
Totals	\$	1,236,253	8.7	\$	1,308,751	10.0	\$	1,348,142	10.0	\$	39,391	3.0%

### **Explanation of Major Variances**

None

## **Office Description and Core Activities**

Internal Audit is responsible for providing independent and objective opinions that add value to and improve WSSC's operations. The Office helps the Commission accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

<u>Blue Plains Audits</u> – This activity evaluates the accuracy of the billings for Regional Sewage Disposal submitted by the District of Columbia Water and Sewer Authority.

<u>SDC Credit or Reimbursement Audits</u> – This activity provides resources for developer requested audits of SDC reimbursements for CIP construction projects, in accordance with Division II, Section 25-405(d) of the Public Utilities Article of the Annotated Code of Maryland.

## **INTERNAL AUDIT** (Continued)

<u>Other Audits</u> – This activity includes risk-based, special request, and external audits. Risk-based audits address operational, financial, and compliance issues and consider the effectiveness and efficiency of operations; the reliability of financial reporting; and compliance with applicable laws, regulations, and Commission policies, respectively. Special request audits arise throughout the fiscal year and are performed on an as-needed basis. The specific risk-based audits to be performed in FY'19 will be determined upon approval of the Audit Plan by the Commissioners. The Audit Plan is based on a comprehensive review of prior Internal Audit reports and analysis of current operations. External audits include the funding and coordination of WSSC's annual financial statements as well as the Employees' Retirement Plan.

<u>Advisory Services</u> – This activity adds value and improves an organization's governance, risk management, and control processes without the internal auditor assuming management or oversight responsibility. Examples of advisory services provided include the counsel, advice, facilitation, and training often demonstrated by auditor participation in standing committees (i.e., Consultant Selection Committee, Purchase Order Review Committee, etc.), limited-life-projects, ad hoc meetings, system conversions, routine information exchange, and formal consulting engagements.

<u>Ethics Office Administration</u> – This activity administers the Code of Ethics and provides support to the Board of Ethics. Responsibilities include maintaining the Financial Disclosure Forms; managing the Lobbyist Registration Awareness Program, along with maintaining associated registration forms; preparing quarterly and annual reports for the Montgomery and Prince George's County Councils; and implementing the Code of Conduct. The Ethics Officer conducts interviews for board positions, handles ethics inquiries, provides ethics training, and is also responsible for monitoring the WSSC's standards, policies, and procedures to ensure compliance.

<u>Fraud, Waste and Abuse Hotline</u> – This activity provides a centralized reporting vehicle for WSSC employees, customers, and stakeholders of the Commission, to report suspected occurrences of fraud, waste, and abuse anonymously, without fear of retaliation. In addition, the Internal Audit staff also serves as primary investigator of occurrences reported through the hotline.

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Audits and related work as outlined in the annual Audit Plan.	4,637	4,506	7,000	7,000
Advisory services provided for the Ad hoc committee meetings and special projects.	1,068	976	800	800
Blue Plains System Development Charge and Special Request audits.	3,893	5,980	4,000	4,000

## **Activity Indicators**

## **GENERAL MANAGER'S OFFICE**

### **Mission Statement**

To provide strategic direction to ensure the Commission provides safe and reliable water to customers, and returns clean water to the environment, all in an ethically and financially responsible manner.

### **Budget Summary**

	FISCAL YEAR 2017			FISCAL YEAR 2018			FISCAL YE	AR 2019	2018 - 2019			
		ACTUAL		APPROVED			PROPOSED			VARIANCE		
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$	2,161,976	15.0	\$	1,426,730	10.0	\$	1,404,234	9.0	\$	(22,496)	-1.6%
All Other		2,267,861			194,910			193,800			(1,110)	-0.6%
Totals	\$	4,429,837	15.0	\$	1,621,640	10.0	\$	1,598,034	9.0	\$	(23,606)	-1.5%

\* In FY'18 the Asset Management Office was transferred from the General Manger's Office to the Operations Department.

## **Explanation of Major Variances**

None

## **Office Description and Core Activities**

As the Commission's chief executive, the General Manager/CEO provides managerial direction to all Commission operations and support functions, and serves as the Commission's primary representative in relations with the County and State governments and other outside parties.

<u>General Management</u> – This activity includes coordinating and supervising the Commission-wide activities of the WSSC, and recommending courses of action to the Commissioners. As the principal executive, the General Manager/CEO is responsible for all Commission operations and functions.

## WSSC STAT OFFICE

## **Mission Statement**

To implement a performance oversight and monitoring program using both real-time and other data to assist various organizations within the Commission in measuring their performance, ensuring more effective and efficient service to WSSC customers.

### **Budget Summary**

	]	FISCAL YEAR 2017 ACTUAL			FISCAL YEAR 2018 APPROVED			FISCAL YE PROPO		2018 - 2019 VARIANCE		
Category									Workyears			Percent
Salaries & Wages	\$	485,629	3.7	\$	534,326	4.0	\$	532,950	4.0	\$	(1,376)	-0.3%
All Other		603,139			151,400			151,400			-	0.0%
Totals	\$	1,088,768	3.7	\$	685,726	4.0	\$	684,350	4.0	\$	(1,376)	-0.2%

### **Explanation of Major Variances**

None

## **Office Description and Core Activities**

<u>Management and Administration</u> – This activity is responsible for coordinating and providing general management and administrative support to the Stat program. This activity also manages strategic meetings such as Senior Leadership, All Management Meetings, and other leadership-sponsored events.

## **GENERAL COUNSEL'S OFFICE**

#### **Mission Statement**

To provide legal representation to the Commission in a tradition of excellence in the quality of services provided to its clients, while maintaining the highest standards of professional ethics and integrity.

	FISCAL YE	AR 2017	FISCAL YE	AR 2018	FISCAL YE	AR 2019	2018 - 2019		
	ACTUAL		APPRO	VED	PROPO	SED	VARIANCE		
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent	
Salaries & Wages	\$ 1,612,527	14.7	\$ 2,615,687	26.0	\$ 2,481,324	25.0	\$ (134,363)	-5.1%	
Professional Services	443,953		1,145,000		1,153,400		8,400	0.7%	
All Other	2,751,245		6,766,367		6,757,900		(8,467)	-0.1%	
Totals	\$ 4,807,725	14.7	\$ 10,527,054	26.0	\$ 10,392,624	25.0	\$ (134,430)	-1.3%	

### **Budget Summary**

### **Explanation of Major Variances**

None

### **Office Description and Core Activities**

The General Counsel's Office (GCO) represents the Commission as legal counsel in judicial and administrative proceedings, while advocating and defending its interests in those proceedings. This Office educates Commission personnel about legal requirements and preventable risk and also investigates and resolves claims made against the Commission.

<u>Legal Services</u> – This activity provides legal advice, guidance, and preventive legal measures on regulatory and administrative matters to Commission staff and officials regarding statutory, regulatory, and administrative matters. The Office also assists in the lawful formulation, adoption, implementation, and enforcement of the WSSC's policies, procedures, rules, regulations, and programs.

<u>Claims</u> – This activity involves investigating claims made against WSSC to determine liability exposure; assessing damages to determine appropriate settlement value; negotiating liability claims settlement; and pursuing claims against responsible third parties for damages incurred by the Commission, within delegated levels of authority.

Billed Work – This activity involves investigation of damage to WSSC's property caused by others, or damage WSSC causes to others.

# GENERAL COUNSEL'S OFFICE (Continued)

# **Activity Indicators**

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Administrative/Refund hearings	124	96	106	110
Petitions for bankruptcies received	343	355	367	349
Cases filed against the WSSC	47	44	46	46
Cases filed by the WSSC	65	57	73	61
Contested civil citations filed by the WSSC	39	28	45	34
Contracts/Agreements negotiated, drafted, or reviewed	192	134	179	163
Deeds, easements, and leases negotiated, drafted, or reviewed	93	101	118	97
Document/Public information requests received	138	118	142	128
Policies/Procedures/Resolutions reviewed	39	41	44	40

## STRATEGIC PARTNERSHIPS

Strategic Partnerships oversee the people and partnerships of the Commission. The Deputy General Manager for Strategic Partnerships provides leadership and guidance on building strategic collaboration with customers, legislators, businesses and other key stakeholders. These partnerships are essential to ensuring the General Manager's vision for customer excellence. The Deputy General Manager also oversees internal functions critical to employees, including human resources and fair practices. Strategic Partnerships is comprised of the following: Customer Service, Intergovernmental Relations, Communications & Community Relations, Human Resources, and Equal Employment Opportunities.

### **Budget Summary**

	FISCAL YE	AR 2017	FISCAL YE	AR 2018	FISCAL YE	AR 2019	2018 - 2	2019
Organizations	ACTU	AL	APPRO	VED	PROPO	SED	VARIA	NCE
	Amount	Workyears	Amount	Workyears	Amount	Workyears	Dollars	Percent
Customer Service Department	\$ 11,104,271	77.7	\$ 8,104,616	101.0	\$ 11,883,866	102.0	\$ 3,779,250	46.6%
Intergovernmental Relations Office	712,089	3.3	714,808	4.0	723,476	4.0	8,668	1.2%
Communications & Community Relations	2,795,265	18.8	2,756,222	19.0	3,111,669	19.0	355,447	12.9%
Human Resources Office	5,632,093	38.6	5,880,431	36.0	6,054,817	36.0	174,386	3.0%
Equal Employment Opportunities Office	20,244	0.1	127,423	1.0	228,994	1.0	101,571	79.7%
Totals	\$ 20,263,962	138.5	\$ 17,583,500	161.0	\$ 22,002,822	162.0	\$ 4,419,322	25.1%

## **CUSTOMER SERVICE DEPARTMENT**

The Customer Service Department is responsible for providing residential and commercial customers with timely, accurate, and responsive customer services. The Department supports the vision for customer service excellence through four divisions: Customer Care, the Center of Excellence, Customer Engagement & Advocacy, and Billing & Revenue Protection.

#### **Mission Statement**

To serve and provide a quality customer experience for each customer, every time by treating all customers with respect and dignity, giving accurate information, safeguarding sensitive information, and providing service in a friendly, helpful and professional manner.

### **Budget Summary**

	FISCAL YE	AR 2017	FISCAL Y	EAR 2018	FISCAL YE	AR 2019	2018 - 2	2019	
Organizations	ACTUAL		APPRO	OVED	PROPO	SED	VARIANCE		
	Amount	Workyears	Amount	Workyears	Amount	Workyears	Dollars	Percent	
Office of the Director, Customer Service	\$ 373,152	2.0	\$ 346,806	3.0	\$ 387,018	3.0	\$ 40,212	11.6%	
Customer Care Division	10,731,119	75.7	4,832,404	66.0	7,209,900	66.0	2,377,496	49.2%	
Center of Excellence	-	-	633,278	6.0	1,108,516	6.0	475,238	75.0%	
Customer Engagement & Advocacy Division	-	-	803,836	7.0	830,503	7.0	26,667	3.3%	
Billing & Revenue Protection Division	-	-	1,488,292	19.0	2,347,929	20.0	859,637	57.8%	
Totals	\$ 11,104,271	77.7	\$ 8,104,616	101.0	\$ 11,883,866	102.0	\$ 3,779,250	46.6%	

### **Explanation of Major Variances**

The FY'19 Proposed Budget reflects an increase of approximately 47% over the Approved FY'18 Budget. This increase is primarily due to the implementation of a new billing system known as Customer to Meter (C2M). In addition, the increase is attributable to expansion of customer service improvements to reduce overtime, staff attrition, billing adjustments, refund requests, call volume, and transitioning outsourced call center operations in-house.

## CUSTOMER SERVICE DEPARTMENT (Continued)

## Highlights

- The Customer Service Department was reorganized into four divisions with the focus on improving customer experience.
- Oracle Utilities C2M is set to replace Customer Service Information System (CSIS), providing WSSC with a robust and flexible billing and customer service platform, that will integrate with the broader suite of Oracle tools in place at WSSC.
- Customer advocates were transferred from Utility Services to better serve customers through the Customer Engagement & Advocacy Division.

## **OFFICE OF THE DIRECTOR**

The Customer Service Department, led by the Director, is responsible for improving overall customer care and streamlining operations to improve customer satisfaction.

## **Budget Summary**

	FISCAL YEAR 2017			FISCAL YE			FISCAL YE		2018 - 2019				
		ACTU	ACTUAL		APPROVED			PROPOSED			VARIANCE		
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$	364,885	2.0	\$	311,802	3.0	\$	322,218	3.0	\$	10,416	3.3%	
All Other		8,267			35,004			64,800			29,796	85.1%	
Totals	\$	373,152	2.0	\$	346,806	3.0	\$	387,018	3.0	\$	40,212	11.6%	

## **Explanation of Major Variances**

None

## **Core Activities**

<u>Management and Administration</u> – This activity involves the management and supervision of all four Customer Service Divisions including Customer Care, Center of Excellence, Customer Engagement & Advocacy, and Billing & Revenue Protection Divisions.

## **CUSTOMER CARE DIVISION**

The Customer Care Division serves as the voice of the utility for customer oriented services and is comprised of the Customer Service Center (CSC), Correspondence & Investigations Section, and Emergency Service Center (ESC). The Division responds to general and complex customer requests such as customer assistance with billing matters, research and analysis, and water and sewer emergencies.

### **Budget Summary**

	FISCAL YEAR 2017			FISCAL YE	AR 2018	FISCAL YEAR 2019				2018 - 2019		
	ACTUAL			APPROVED			PROPOSED			VARIANCE		
Category	Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$ 5,445,757	75.7	\$	4,277,964	66.0	\$	5,656,818	66.0	\$	1,378,854	32.2%	
Services	1,383,447			548,004			1,400,500			852,496	155.6%	
All Other	3,901,915			6,436			152,582			146,146	2,270.8%	
Totals	\$ 10,731,119	75.7	\$	4,832,404	66.0	\$	7,209,900	66.0	\$	2,377,496	49.2%	

## **Explanation of Major Variances**

The FY'19 Proposed Budget reflects an increase of approximately 49% over the Approved FY'18 Budget. The variance is primarily due to the implementation of C2M. The current legacy system, CSIS, is a 30+ year old mainframe billing system that lacks the functionality required for the new rate structure implementation. C2M is set to replace CSIS, providing WSSC with a robust and flexible billing and customer service platform, that will integrate with the broader suite of Oracle tools in place at WSSC. In addition, the budget increase includes customer service enhancements to reduce the number of billing adjustments and refund requests, overtime, call volume, and costs related to outsourced call center services.

## CUSTOMER CARE DIVISION (Continued)

## **Core Activities**

<u>Customer Account Maintenance</u> – This activity is associated with processing bill adjustments granted to customers who meet the adjustment policy criteria; updating adjustments to customer accounts in the Customer Service Information System (CSIS) database; and investigating refund requests, which may result in customer account modifications.

<u>Monthly Bill Customer Account Inquiry</u> – This activity determines appropriate actions to ensure that customers, particularly large users who produce 40% of the WSSC's revenue, are billed accurately; and that malfunctioning meters, which inaccurately measure consumption, are properly identified, investigated, and either repaired or replaced.

<u>Customer Correspondence</u> – This activity is associated with addressing written correspondence received from WSSC customers. Inquiries and communications received via letter, fax, or electronic mail are entered into the CSIS database to accurately reflect the customer's account history.

<u>Dispute Resolution/Refund Hearing</u> – This activity is associated with all aspects of the dispute resolution and/or refund hearing process and the administrative functions necessary to track, evaluate, and prepare information associated with the hearings.

<u>Customer Account Inquiry (Non-Emergency)</u> – This activity is associated with addressing customers' billing issues stemming from telephone conversations and walk-in inquiries. Specifically, this activity includes analyzing account records regarding household customer water use habits; generating work orders, scheduling and evaluating field service activities in the CSIS database such as inspections, field investigations, and restoration of service; and educating customers on such topics as sources of water loss and water conservation.

<u>Customer Account Inquiry (Emergency)</u> – This activity is associated with answering emergency telephone calls to the WSSC's Emergency Call Center. Agents assist customers with emergency inquiries and system/maintenance field concerns. The staff generates a variety of work orders for field personnel, ensuring they respond within the designated two hour window for emergency response, and notifies County and State agencies of infrastructure events that significantly impact the community.

<u>Radio Dispatching</u> – This activity communicates with field staff to investigate reports of emergencies and receive updates on field maintenance activities; updates maintenance records and arranges for resolution of problems; and operates base radio station equipment dispatching emergency work orders to maintenance crews, cleaning companies, plumbers, and other WSSC personnel as required.

# CUSTOMER CARE DIVISION (Continued)

## **Activity Indicators**

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Bill adjustments/corrections	17,063	15,198	20,000	20,000
Non-emergency calls received	666,988	705,677	670,000	670,000
Emergency calls from customers answered	80,129	82,629	95,000	95,000
Large meter work orders processed	3,253	2,491	4,500	4,500

## **CENTER OF EXCELLENCE DIVISION**

The Center of Excellence Division provides centralized strategies and resources for the Customer Service Department including workforce scheduling, forecasting and resource allocation; quality assurance, training, and coaching; employee engagement and performance-based management; and innovative business process and customer service technology strategies for the enterprise.

#### **Budget Summary**

	]	FISCAL YE	AR 2017	FISCAL YEAR 2018			FISCAL YE	AR 2019	2018 - 2019		
	ACTUAL		APPROVED			PROPOSED			VARIANCE		
Category		Actual	Workyears	Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$	-	0.0	\$ 632,328	6.0	\$	1,107,516	6.0	\$	475,188	75.1%
All Other		-		950			1,000			50	5.3%
Totals	\$	-	0.0	\$ 633,278	6.0	\$	1,108,516	6.0	\$	475,238	75.0%

### **Explanation of Major Variances**

The FY'19 Proposed Budget reflects an increase of 75% over the Approved FY'18 Budget. The variance is primarily due to the implementation of new technologies to maintain, enhance, monitor, and execute continuous improvements to achieve service excellence.

## **Core Activities**

<u>Workforce Management, Quality Assurance & Training</u> – This activity includes developing and managing strategies related to Division workforce optimization, quality assurance, employee engagement, departmental performance, and training.

## **CUSTOMER ENGAGEMENT & ADVOCACY DIVISION**

The Customer Engagement & Advocacy Division serves as an advocate for all customers for resolving complex customer service issues and promoting effective customer relationships. This Division informs communities and stakeholders about WSSC priorities and projects, and promotes customer assistance programs and initiatives.

### **Budget Summary**

	I	FISCAL YE	AR 2017		FISCAL YE	AR 2018	FISCAL YEAR 2019				2018 - 2019		
	ACTUAL		APPROVED			PROPOSED			VARIANCE				
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$	-	0.0	\$	781,626	7.0	\$	823,303	7.0	\$	41,677	5.3%	
All Other		-			22,210			7,200			(15,010)	-67.6%	
Totals	\$	-	0.0	\$	803,836	7.0	\$	830,503	7.0	\$	26,667	3.3%	

### **Explanation of Major Variances**

None

## **Core Activities**

<u>Customer Engagement</u> – This activity focuses on educating WSSC external customers on water conservation, and publishing and distributing material on WSSC's contribution to the surrounding communities. The activity also involves informing customers of any projects or events that will impact their water/sewer service.

## **BILLING & REVENUE PROTECTION DIVISION**

The Billing & Revenue Protection Division manages billing and collections operations, billing adjustments and corrections, and revenue analysis and management. The Division partners with the Utility Services Department to handle account collections and turn-offs, and support timely and effective meter reading.

## **Budget Summary**

	FISCAL YE	AR 2017	]	FISCAL YEAR 2018			FISCAL YE	AR 2019	2018 - 2019			
	ACTUAL			APPROVED			PROPOSED			VARIANCE		
Category	Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$ -	0.0	\$	1,486,262	19.0	\$	2,295,429	20.0	\$	809,167	54.4%	
All Other	-			2,030			52,500			50,470	2,486.2%	
Totals	\$ -	0.0	\$	1,488,292	19.0	\$	2,347,929	20.0	\$	859,637	57.8%	

## **Explanation of Major Variances**

The FY'19 Proposed Budget reflects an increase of approximately 58% over the Approved FY'18 Budget. The variance is primarily due to the implementation of C2M and costs related to eliminate process gaps in customer service delivery especially in relation to billing and payments.

## **Core Activities**

<u>Billing & Revenue Projection</u> – This activity ensures effective and efficient billing, accounts receivable collection functions, and fraud management. Additionally, the Division assesses and authorizes requests for billing adjustments, manages delinquent accounts, and billing reconciliation.

## INTERGOVERNMENTAL RELATIONS OFFICE

## **Mission Statement**

To analyze the impact of state and federal legislation on the Commission and act as the WSSC's representative before legislative bodies.

### **Budget Summary**

	FISCAL YEAR 2017				FISCAL YE	AR 2018	FISCAL YEAR 2019				2018 - 2019		
	ACTUAL		APPROVED			PROPOSED			VARIANCE				
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$	354,749	3.3	\$	413,408	4.0	\$	422,076	4.0	\$	8,668	2.1%	
All Other		357,340			301,400			301,400			-	0.0%	
Totals	\$	712,089	3.3	\$	714,808	4.0	\$	723,476	4.0	\$	8,668	1.2%	

### **Explanation of Major Variances**

None

## **Office Description and Core Activities**

The Intergovernmental Relations Office oversees the Commission's legislative agenda and represents WSSC before elected bodies. The office is responsible for researching, developing, analyzing, and lobbying for or against legislation impacting the Commission. In addition, the office also serves as a liaison between the Commission and elected officials.

<u>Intergovernmental Relations</u> – This activity focuses on the passage of the Commission's legislative agenda, increasing communication with state and local governments, and increasing the Commission's role in federal legislative issues.

## **COMMUNICATIONS & COMMUNITY RELATIONS OFFICE**

## **Mission Statement**

To provide timely and accurate information that is designed to educate and inform the Communication Office's internal and external customers and enhance the WSSC's image.

### **Budget Summary**

	FISCAL YEAR 2017 ACTUAL		FISCAL YEAR 2018 APPROVED			FISCAL YEAR 2019 PROPOSED			2018 - 2019 VARIANCE			
Category	Act	ual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$ 1,83	33,039	18.8	\$	1,821,622	19.0	\$	1,861,194	19.0	\$	39,572	2.2%
All Other	96	52,226			934,600			1,250,475			315,875	33.8%
Totals	\$ 2,79	95,265	18.8	\$	2,756,222	19.0	\$	3,111,669	19.0	\$	355,447	12.9%

### **Explanation of Major Variances**

None

### **Office Description and Core Activities**

The Communications & Community Relations Office proactively communicates internally and externally while building relationships and strategic alliances throughout communities and industries. The Office also provides the news media with timely and accurate information and manages crisis communications; oversees the content on the WSSC website; and provides graphic and photographic services.

<u>Media and Public Relations</u> – This activity includes numerous functions which inform our customers, improve relationships with the media and constituencies, and enhance the WSSC's image. These functions include preparing news releases, conducting interviews with the press, briefing the media, performing public service announcements, conducting customer surveys, and managing various platforms of social media.

## COMMUNICATIONS & COMMUNITY RELATIONS OFFICE (Continued)

<u>Publications</u> – This activity includes efforts related to the preparation and/or distribution of annual reports, brochures, booklets, newsletters, customer bill inserts, and the transition of printed information to the Commission's web site.

<u>Community Outreach</u> – This activity includes informing, updating, and educating customers and stakeholders of engineering and other projects impacting their communities. This is accomplished via project and community meetings and events, exhibits, dedications, ground-breakings, and conducting educational presentations at schools and various WSSC facilities. Additional outreach efforts include managing the Sewer Science Program; disseminating information and materials on the Fats, Oils, and Grease (FOG) and "Can the Grease" Programs; and conducting events such as the H2O Fest, Children's Water Festival, Fishing Derby, the Watershed Festival, and the Annual Family Campfire. This activity also provides support to the Customer Advisory Board, and supports the community outreach activities of other Commission offices.

<u>Other Public Communications Projects</u> – This activity involves preparing communications materials for requested meetings and events, coordinating tours for dignitaries, ordering promotional materials, producing informational videos, and providing advisory services to other offices and teams on their communications needs or issues.

Internal Communications and Events – This activity informs WSSC employees about company news, events, policies, and benefits, and coordinates special events, service awards ceremonies, and the United Way Campaign. This activity also communicates the WSSC's Core Strategies and Values to company staff.

<u>Graphics</u>, <u>Photography and Videography Support</u> – This activity provides support to all WSSC business units with needed graphics design, photographic, and video graphic services.

<u>Web Content Administration</u> – This activity includes overall management of content on the WSSC Corporate website and overseeing the web content publication process for each organization of the Commission, including creating, updating, and publishing of Public Notices, Feature Tabs, News Releases, photo galleries, and the events calendar. This activity also involves recommending, drafting and editing website content to provide user-friendly information to WSSC customers and stakeholders.

## HUMAN RESOURCES OFFICE

## **Mission Statement**

To support employee, department, and organizational success; and provide quality employee systems in talent management, employee development, work force development, and total rewards.

### **Budget Summary**

	FISCAL YEAR 2017		FISCAL YEAR 2018			FISCAL YEAR 2019				2018 - 2019		
	ACTUAL			APPROVED			PROPOSED			VARIANCE		
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$	4,000,319	38.6	\$	3,755,627	36.0	\$	3,930,017	36.0	\$	174,390	4.6%
All Other		1,631,774			2,124,804			2,124,800			(4)	0.0%
Totals	\$	5,632,093	38.6	\$	5,880,431	36.0	\$	6,054,817	36.0	\$	174,386	3.0%

## **Explanation of Major Variances**

None

## **Office Description and Core Activities**

The Human Resources Office is responsible for planning, administering, and evaluating the Commission's personnel related programs. The Office develops and maintains the employee benefit structures, and the classification and compensation programs, conducts training courses, and manages the employee recruitment functions. The Office also provides counseling services on a variety of employee issues, and adheres to all applicable federal and state laws. It is also responsible for providing a safe and healthy work environment for Commission employees, administering safety and health programs to ensure compliance with all federal, state and local regulations.

<u>Employee Development and Succession Management</u> – This activity involves the development, planning, and administration of corporate employee development efforts, including succession management and educational assistance programs; career development and counseling; leadership, management, and supervisory development; knowledge capture and transfer methodologies; computer skills training; and assisting operating units with externally provided technical training.

## HUMAN RESOURCES OFFICE (Continued)

<u>Benefits Administration</u> – This activity involves developing, communicating, and administering employee and retiree benefit programs, as well as interfacing with payroll and other financial systems. This includes benefits plan review, design, redesign, and administration; disability plan administration (including Workers' Compensation and accident and sickness programs); administration of the Deferred Compensation and Employee Assistance Programs; benefits communication and enrollment design and administration; benefits cost management; and regulatory compliance. This activity also provides for the MyLife Wellbeing program which incorporates ways for employees to become more engaged and make healthier lifestyle choices.

<u>Employee Relations & Talent Management</u> – This activity provides advice and guidance on Human Resources (HR) services to Departments and Staff Offices on resolution of employee relations issues and labor relations. This activity also provides support for collective bargaining; compliance with employment regulations; and Commission-wide policy development, implementation, and interpretation.

<u>Compensation & Human Resources Management</u> – This activity manages the Commission's compensation program in alignment with the WSSC's compensation philosophy, and the employee information management system (HRMS). Employee information consists of both human resource information systems and records management. This includes base pay programs; variable compensation and rewards; employee recognition and rewards programs; position classification and job evaluation; the severance program; employment verifications; and information collection and data analysis services. This activity also addresses employee relations issues regarding salary and wages, and participates in compensation studies and implementation of study recommendations.

<u>Talent Acquisition</u> – This activity includes talent acquisition (recruitment, applicant screening, promotions, transfers, selection, hiring, and onboarding processes). This function is responsible for internship, apprenticeship, and student cooperative program development, implementation, and management. This function is also responsible for assisting in workforce planning, data gathering, and statistical analysis of recruitment and staffing activities.

<u>Occupational Health & Safety</u> – This activity provides for the development and supervision of Commission-wide programs to minimize the risk of injuries, accidents, and damage to Commission property. This activity develops and implements training and medical surveillance, performs safety audits and inspections, evaluates work practices, recommends safety improvements, ensures safe use of hazardous materials, and reviews design of Commission facilities.

# HUMAN RESOURCES OFFICE (Continued)

## **Activity Indicators**

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Average training hours per employee	16.6	16.8	17.0	17.2
Average training dollars spent per employee	466	493	525	530
Average days to fill a position	60	55	60	60
Employee turnover rate	7.1	9.3	8.1	8.7
Facility safety inspections	106	76	110	110
Job site inspections	162	163	160	160
Total occupational injuries reviewed	131	109	150	150
Number of employees attending driver improvement classes	247	243	250	250

# EQUAL EMPLOYMENT OPPORTUNITIES OFFICE

## **Mission Statement**

To ensure Commission compliance with Equal Employment Opportunity laws and practices, and address employee discrimination issues and complaints in accordance with the Commission's policies and procedures.

### **Budget Summary**

	FISCAL YEAR 2017		FISCAL YEAR 2018			FISCAL YEAR 2019			2018 - 2019		
		ACTU	AL	APPRO	VED		PROPO	SED		VARIAN	NCE
Category		Actual	Workyears	Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$	4,966	0.1	\$ 116,419	1.0	\$	167,994	1.0	\$	51,575	44.3%
All Other		15,278		11,004			61,000			49,996	454.3%
Totals	\$	20,244	0.1	\$ 127,423	1.0	\$	228,994	1.0	\$	101,571	79.7%

## **Explanation of Major Variances**

None

## **Office Description and Core Activities**

The Equal Employment Opportunities (EEO) Office is responsible for identifying, investigating and resolving employee EEO matters with integrity, neutrality and transparency. The EEO Office works to resolve all allegations of harassment, employment discrimination and retaliation expeditiously and efficiently, with a view towards fair and equitable treatment for all persons involved.

<u>Equal Employment Opportunities</u> – This activity directs the application of the Commission's equal employment principles and goals, and outlines the responsibilities of management, supervisory, and non-supervisory personnel for fostering a spirit of equal employment opportunity. Also included in the activity are investigations of discrimination claims in accordance with the Commission's policy and procedures.

# **OPERATIONS**

Operations refers to the Departments critical to the planning, design, construction, operation, and maintenance of WSSC's water and sewer services. The Deputy Manager for Operations provides leadership, oversight, and guidance regarding facility planning and construction, plant maintenance and operations, as well as maintenance and repair of WSSC's vast water and sewer distribution/collection system, ensuring continuous delivery of life's most precious resource. The Departments that fall under Operations include Asset Management, Engineering & Construction, Police & Homeland Security, Production, and Utility Services.

#### **Budget Summary**

	FISCAL YE	-	FISCAL YE		FISCAL YE				
Organizations	ACTU	AL	APPRO	VED	PROPO	SED	VARIANCE		
	Amount	Workyears	Amount	Workyears	Amount	Workyears	Dollars	Percent	
Asset Management Office	\$-	0.0	\$ 3,310,489	8.0	\$ 3,468,777	8.0	\$ 158,288	4.8%	
Engineering & Construction Department	543,293,919	352.4	618,045,772	377.0	578,731,541	378.0	(39,314,231)	-6.4%	
Police & Homeland Security Office	4,215,953	36.2	5,403,062	41.0	5,557,088	41.0	154,026	2.9%	
Production Department	151,021,670	319.7	171,942,315	332.0	160,340,070	332.0	(11,602,245)	-6.7%	
Utility Services Department	97,748,586	471.1	114,009,997	499.0	123,630,467	499.0	9,620,470	8.4%	
Totals	\$796,280,128	1,179.4	\$912,711,635	1,257.0	\$871,727,943	1,258.0	\$ (40,983,692)	-4.5%	

# ASSET MANAGEMENT OFFICE

### **Mission Statement**

To implement asset management strategy to strengthen current asset management practices and develop an Enterprise Asset Management Plan which identifies the infrastructure needs for a 30-year planning period and is utilized to develop a 10-year fiscal plan.

### **Budget Summary**

	FISCAL YEAR 2017		FISCAL YEAR 2018		FISCAL YEAR 2019			2018 - 2019		
	ACTUAL		APPROVED		PROPOSED			VARIANCE		
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$ -	0.0	\$ 799,399	8.0	\$ 957,577	8.0	\$	158,178	19.8%	
Consultant Engineers	-		2,500,000		2,500,000			-	100.0%	
All Other	-		11,090		11,200			110	200.0%	
Totals	\$ -	0.0	\$ 3,310,489	8.0	\$ 3,468,777	8.0	\$	158,288	4.8%	

\* In FY'18 the Asset Management Office transferred to the Operations Department.

\*\* In FY'17 Asset Management was part of the General Manager's Office. The FY'17 Actual expenses appear under the General Manager's Office (p.6-9).

# **Explanation of Major Variances**

None

# **Office Description and Core Activities**

The Asset Management Office is responsible for the development and implementation of world class asset management strategies and practices in order to balance the competing goals of maximizing the level of service we deliver to our customers, while at the same time minimizing the lifecycle cost of the assets and the business risk exposure of the commission; sustaining the infrastructure to continue delivering the highest level of reliable water and wastewater service; optimizing decision-making processes; and maximizing the utilization of existing resources.

<u>Asset Management Program</u> – This activity involves the development and implementation of the WSSC Asset Management Program. The program includes the development of asset management plans and asset management processes and procedures for all WSSC facility assets, water transmission and distribution assets, wastewater collection assets, and support service facility assets. This effort is being delivered in multiple phases over a number of years. In addition, the Office oversees the WSSC Needs Validation process, identifying the most effective solution based upon lifecycle costs, risk and level of service.

# **ENGINEERING & CONSTRUCTION DEPARTMENT**

The Engineering & Construction Department (E&C) manages the planning, design and construction of the water and sewer systems throughout the Washington Suburban Sanitary District (WSSD), and serves as the water and sewer regulatory body that protects the system and the public. The Department, led by the Chief Engineer, is comprised of the Development Services, Planning, Facility Design & Construction, Pipeline Design, Process Control Engineering, Regulatory Services, Pipeline Construction, and Engineering & Environmental Services Divisions.

## **Mission Statement**

To provide engineering and regulatory expertise to plan, design, and build necessary infrastructure as well as operational support for delivering safe water and wastewater services in a timely, cost-effective, and environmentally sound manner.

	FISCAL YE	AR 2017	FISCAL YE	AR 2018	FISCAL YE	AR 2019	2018 - 2	019
Organizations	ACTU	AL	APPRO	VED	PROPO	SED	VARIANCE	
	Amount	Workyears	Amount	Workyears	Amount	Workyears	Dollars	Percent
Office of the Chief Engineer	\$ 285,752	2.0	\$ 15,014,533	2.0	\$ 3,775,782	2.0	\$ (11,238,751)	-74.9%
Development Services Division	5,497,015	54.0	5,712,712	53.0	5,854,226	53.0	141,514	2.5%
Planning Division	78,580,166	9.3	70,275,734	13.0	75,035,308	14.0	4,759,574	6.8%
Facility Design & Construction Division	102,094,214	32.9	148,096,758	34.0	167,944,272	34.0	19,847,514	13.4%
Pipeline Design Division	29,534,325	34.1	28,402,011	42.0	34,791,076	42.0	6,389,065	22.5%
Process Control Engineering Division	2,271,320	12.9	2,587,670	14.0	2,658,736	14.0	71,066	2.7%
Regulatory Services Division	6,125,245	70.3	6,515,607	74.0	6,873,022	74.0	357,415	5.5%
Pipeline Construction Division	306,977,335	78.1	326,045,604	83.0	267,338,446	83.0	(58,707,158)	-18.0%
Engineering & Environmental Services Division	11,928,547	58.8	15,395,143	62.0	14,460,673	62.0	(934,470)	-6.1%
Totals	\$ 543,293,919	352.4	\$618,045,772	377.0	\$578,731,541	378.0	\$ (39,314,231)	-6.4%

### **Budget Summary**

# ENGINEERING & CONSTRUCTION DEPARTMENT (Continued)

# **Explanation of Major Variances**

The FY'19 Proposed Budget reflects a decrease of approximately 6% from the Approved FY'18 Budget. Variances in E&C are driven by the annual update to the CIP. This includes a projected decrease in the Trunk Sewer Reconstruction Program as the work moves past the peak of construction, and as the construction progress projected for the Blue Plains Enhanced Nutrient Removal (ENR) and the Patuxent Expansion projects begins winding down by FY'19. These decreases are partially offset by programmed increases in the Large Diameter Water Pipe Rehabilitation Program and Piscataway Bio-Energy project.

## Highlights

- The Commission continues to comply with all aspects of the Sanitary Sewer Consent Decree.
- The Systems Reconstruction program completed 69 miles of water main rehabilitation in FY'17.
- The final phase of the Broad Creek WWPS Augmentation project has moved into construction.
- The Patuxent WFP Expansion project will be completed in the summer of 2018.
- New water storage tanks in Olney, St. Barnabas and Collington (Bowie area) will be completed by the fall of 2018.

# **OFFICE OF THE CHIEF ENGINEER**

The Chief Engineer is responsible for leading and managing the Development Services, Planning, Facility Design & Construction, Pipeline Design, Process Control Engineering, Regulatory Services, Pipeline Construction, and Engineering & Environmental Services Divisions.

### **Budget Summary**

	FISCAL YEAR 2017			FISCAL YEAR 2018			FISCAL YEAR 2019			2018 - 2019		
	ACTUAL		APPROVED			PROPOSED			VARIANCE			
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$	284,975	2.0	\$	269,213	2.0	\$	274,482	2.0	\$	5,269	2.0%
Unsigned SEP Developer Projects		-			14,739,020			3,495,000		(	(11,244,020)	-76.3%
All Other		777			6,300			6,300			-	0.0%
Totals	\$	285,752	2.0	\$	15,014,533	2.0	\$	3,775,782	2.0	\$(	(11,238,751)	-74.9%

# **Explanation of Major Variances**

The FY'19 Proposed Budget reflects a decrease of approximately 75% from the Approved FY'18 Budget. The line item, All Other, includes budgeted reductions for System Extension Permit projects (SEP), which are anticipated to be built by Developers.

## **Core Activities**

<u>Management and Administration</u> – This activity involves the management and supervision of the Engineering and Construction Department. The Chief Engineer is responsible for leading capital project delivery, regulatory compliance processes, process controls for water and wastewater treatment facilities, and environmental initiatives.

<u>Unsigned System Extension Permit (SEP)</u> – This activity reserves funds for developer projects that do not yet have a signed SEP, in the event that WSSC has to proceed with development.

## **DEVELOPMENT SERVICES DIVISION**

The Development Services Division is responsible for the integrity of WSSC's water and sewer system through oversight of the planning, design, and construction of water and sewer extensions. The Division also reviews all plumbing, gas-fitting and house connection applications, issues permits, collects related fees and charges, and reviews and processes on-site plans, service connection submittals and applicant built construction packages.

#### **Budget Summary**

	FISCAL YEAR 2017			FISCAL YEAR 2018			FISCAL YEAR 2019			2018 - 2019		
	ACTUAL		APPROVED		PROPOSED			VARIANCE				
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$	5,045,767	54.0	\$	5,035,815	53.0	\$	5,177,826	53.0	\$	142,011	2.8%
All Other		451,248			676,897			676,400			(497)	-0.1%
Totals	\$	5,497,015	54.0	\$	5,712,712	53.0	\$	5,854,226	53.0	\$	141,514	2.5%

#### **Explanation of Major Variances**

None

#### **Core Activities**

<u>Development Design</u> – This activity includes three stages of design: planning, design review, and construction coordination for developer built and WSSC built development projects. Planning includes hydraulic analysis, determining adequacy and service requirements of the size and alignment of water/sewer lines, easement issues, and coordination with other jurisdictions. Design review encompasses the review and approval of construction plans of new and/or relocated water/sewer mains for both WSSC and large connection private systems associated with new development, and issuance of all house connection, plumbing and site utility installation permits. Construction coordination involves review and approval of plan revisions during construction, as well as processing partial and final releases, and working with other WSSC offices to close-out and store data for completed projects.

<u>Permits</u> – This activity includes reviewing plumbing, gas-fitting, and house connection applications, and issuing permits within the WSSD. It also ensures regulatory requirements are met, and assesses and collects levies, related fees and charges.

# **DEVELOPMENT SERVICES DIVISION** (Continued)

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Proposed water and sewer service category changes reviewed	40	28	45	40
Preliminary subdivision plans reviewed	90	85	100	90
Water and sewer pipeline plans reviewed	205	263	230	250
Ensure 90% of plumbing/gas-fitting permits are issued within 2 days	100%	100%	100%	100%
Ensure 90% of applicant-built house connection packages are issued within 2 days	100%	100%	100%	100%

# PLANNING DIVISION

The Planning Division develops future water and sewer system capacity demands, participates in regional water and wastewater management and planning, oversees Blue Plains capital billing to WSSC, supports negotiations of Blue Plains agreements, and represents the WSSC on Blue Plains committees.

#### **Budget Summary**

	FISCAL YEAR 2017		FISCAL YE		FISCAL YE		2018 - 2019		
	ACTU	AL	APPRO	VED	PROPO	SED	VARIANCE		
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent	
Salaries & Wages	\$ 972,958	9.3	\$ 1,075,242	13.0	\$ 1,489,608	14.0	\$ 414,366	38.5%	
Blue Plains/Mattawoman	75,990,361		67,162,992		69,354,000		2,191,008	3.3%	
Consultant Engineers	734,495		1,100,000		3,200,000		2,100,000	190.9%	
All Other	882,352		937,500		991,700		54,200	5.8%	
Totals	\$ 78,580,166	9.3	\$ 70,275,734	13.0	\$ 75,035,308	14.0	\$ 4,759,574	6.8%	

#### **Explanation of Major Variances**

The FY'19 Proposed Budget reflects an increase of approximately 7% from the Approved FY'18 Budget. The budget includes consultant support for the new Replacement Planning Section which will manage outside engineering for replacement of PCCP mains, water transmission mains, force mains, and large meter vault replacement programs. In addition, the Blue Plains ENR, and pipeline and appurtenances project planning continue to progress.

#### **Core Activities**

<u>Need Analysis & Facility Planning</u> – This activity identifies and develops water and sewer system capacities and models, and evaluates development proposals. It also develops long range flow projections, and provides technical support for county ten-year water and sewer plan revisions, reports quarterly on available capacity, and provides operational analysis for PCCP and transmission system inspections and rehabilitation.

<u>Flow Monitoring & Reporting</u> – This activity monitors flows, reviews data, and develops sewer meter flow reporting used for billing and system operations.

# PLANNING DIVISION (Continued)

<u>Regulatory Permitting & Compliance</u> – This activity negotiates NPDES permits for WSSC wastewater treatment plants and the Potomac Filtration Plant, responds to proposed regulatory initiatives, coordinates WSSC responses to enforcement actions, coordinates comments on proposed legislation, and evaluates environmental legislation that may impact WSSC.

<u>Regional Water & Wastewater Management</u> – This activity oversees payments to DCWater for WSSC's share of construction at the Blue Plains Wastewater Treatment Plant (WWTP) located in Washington, DC. It also oversees capital billing and reviews the preparation of Blue Plains WWTP and Mattawoman WWTP (located in Charles County) Capital Improvements Programs.

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Reports entered into Consolidated Engineering System	117	77	200	200
Plumbing permits assigned to mini-basin numbers	3,217	2,806	2,900	4,000
New connections entered into Consolidated Engineering System and Permits Processing Information System	250	106	350	350

# FACILITY DESIGN & CONSTRUCTION DIVISION

The Facility Design & Construction Division administers and manages the design, construction and inspection of major water, wastewater and biosolids facility projects. The Division also oversees special projects and planning studies.

	FISCAL YEAR 2017		FISCAL YE	AR 2018	FISCAL YE	AR 2019	2018 - 2	019	
	ACTU	AL	APPROVED		PROPO	SED	VARIANCE		
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent	
Salaries & Wages	\$ 3,277,103	32.9	\$ 3,464,479	34.0	\$ 3,441,072	34.0	\$ (23,407)	-0.7%	
Construction	79,225,414		120,167,996		137,961,000		17,793,004	14.8%	
Consultant Engineers	19,181,920		23,980,970		26,059,000		2,078,030	8.7%	
All Other	409,777		483,313		483,200		(113)	0.0%	
Totals	\$102,094,214	32.9	\$148,096,758	34.0	\$167,944,272	34.0	\$ 19,847,514	13.4%	

#### **Budget Summary**

### **Explanation of Major Variances**

The FY'19 Proposed Budget reflects an increase of approximately 13% over the Approved FY'18 Budget. Capital cost estimates for FY'19 increased for the Piscataway Bio-Energy project and the Potomac Consent Decree program as those projects ramp up for construction. In addition, the Water Tank Rehabilitation Program was transferred from Systems Control in Production to the Division.

#### **Core Activities**

<u>Facility Planning and Design</u> – This activity manages selected architecture/engineering contracts and in-house resources investigating specific WSSD areas needing additional facilities serving existing and future customers.

<u>Facility Construction</u> – This activity funds and manages facility construction projects, including ensuring contract items, conditions and specification are fulfilled, processing contractor requests for information, reviewing and processing monthly and final payment requests, administering and negotiating change orders, and evaluating claims.

# PIPELINE DESIGN DIVISION

The Pipeline Design Division is responsible for managing pipeline design in the CIP and the water and sewer main reconstruction programs, and reviewing water and sewer relocations to ensure compliance with WSSC guidelines.

#### **Budget Summary**

	FISCAL YEAR 2017		FISCAL YE	AR 2018	FISCAL YEAR 2019			2018 - 2019		
	ACTUAL		APPROVED		PROPOSED			VARIANCE		
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$ 3,042,207	34.1	\$ 3,953,415	42.0	\$ 3,878,040	42.0	\$	(75,375)	-1.9%	
Consultant Engineers	26,498,159		24,315,996		30,800,536			6,484,540	26.7%	
All Other	(6,041)		132,600		112,500			(20,100)	-15.2%	
Totals	\$ 29,534,325	34.1	\$ 28,402,011	42.0	\$ 34,791,076	42.0	\$	6,389,065	22.5%	

### **Explanation of Major Variances**

The FY'19 Proposed Budget reflects an increase of approximately 23% over the Approved FY'18 Budget. The increase primarily reflects the ramping up of design work for Clinton area water projects in the CIP program.

## **Core Activities**

<u>Pipeline Design</u> – This activity prepares and manages contract design documents for CIP water and sewer main projects, and water and sewer reconstruction programs, including project scope preparation and design, overseeing consultants, performing technical reviews, coordinating community outreach, and acquiring rights-of-way permits.

<u>Water and Sewer Relocations</u> – This activity reviews construction plans for new roads; and other WSSC, government agency and private sector construction. It also administers and monitors architectural/engineering contracts required for governmental road construction projects. In addition, the Division prepares designs for relocating existing water and sanitary sewer systems.

# PIPELINE DESIGN DIVISION (Continued)

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Miles of small diameter water mains (<16") designed for rehabilitation	56	57	55	45
Miles of large diameter water mains (>16") designed for rehabilitation	7	7	6	6
Number of large meter and/or pressure reducing valves designed for rehabilitation	56	45	50	50
Miles of sewer main lines designed for lining, bursting and/or grouting	56	32	20	20
Number of manholes designed for rehabilitation	1,643	353	300	300

# PROCESS CONTROL ENGINEERING DIVISION

The Process Control Engineering Division designs process control systems for new facilities, improves automation for existing facilities, and maintains and repairs all instrumentation systems.

#### **Budget Summary**

	FISCAL YEAR 2017				FISCAL YEAR 2018			FISCAL YE	AR 2019	2018 - 2019		
		ACTU	AL	APPROVED PRO			PROPOSED			VARIANCE		
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$	1,468,256	12.9	\$	1,557,670	14.0	\$	1,628,736	14.0	\$	71,066	4.6%
All Other		803,064			1,030,000			1,030,000			-	0.0%
Totals	\$	2,271,320	12.9	\$	2,587,670	14.0	\$	2,658,736	14.0	\$	71,066	2.7%

#### **Explanation of Major Variances**

None

#### **Core Activities**

<u>Corrective Maintenance</u> – This activity provides corrective maintenance of all process control systems in the Commission's facilities.

<u>Enhancement and Upgrade Maintenance</u> – This activity includes software programming and configuration enhancements, hardware upgrades, and process control system improvements.

Inventory Management – This activity orders, receives and performs database management of materials and inventory.

<u>New Facility Support</u> – This activity participates in design reviews to integrate, install and program new process control equipment for newly constructed facilities, including managing contractual agreements with vendors.

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Programmable logic controllers upgraded	3	2	2	2
Uninterruptable power supply systems upgraded	4	2	0	2

# **REGULATORY SERVICES DIVISION**

The Regulatory Services Division is responsible for the federally mandated pre-treatment Fats, Oils, and Grease (FOG) Program, and enforcement of the Plumbing and Gas-fitting Regulations. The Division regulates discharges into the sewer system, samples discharges from industrial users, inspects food service facilities, conducts investigations, responds to spills of hazardous materials entering the sewer system, and monitors/inspects cross connections to prevent backflow contamination.

### **Budget Summary**

	FISCAL YEAR 2017			FISCAL YEAR 2018			FISCAL YEAR 2019				2018 - 2019		
		ACTU	AL		APPROVED		PROPOSED			VARIAN		NCE	
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$	5,853,938	70.3	\$	6,125,910	74.0	\$	6,483,222	74.0	\$	357,312	5.8%	
All Other		271,307			389,697			389,800			103	0.0%	
Totals	\$	6,125,245	70.3	\$	6,515,607	74.0	\$	6,873,022	74.0	\$	357,415	5.5%	

### **Explanation of Major Variances**

None

#### **Core Activities**

<u>Code Planning and Cross Connection</u> – This activity plans, develops and maintains the technical aspects of WSSC's plumbing and gasfitting plans, inspects backflow prevention devices, maintains inspection records, and issues plumber, gas-fitter, and drain and sewer cleaner licenses.

<u>Plumbing Inspections</u> – This activity inspects for proper permitting and installations, in compliance with WSSC's Plumbing Code, of installed commercial and residential plumbing and gas-fitting systems, backflow prevention devices, and grease abatement systems for new construction projects.

<u>Industrial Discharge Control Program</u> – This activity monitors and controls industrial waste discharged into the Commission's sanitary sewer systems in compliance with all government regulations; and investigates, samples, permits and reviews industry reports to confirm industry regulation compliance.

# **REGULATORY SERVICES DIVISION** (Continued)

<u>Fats, Oils, and Grease (FOG) Program</u> – This activity monitors and controls the food service industry discharge of fats, oils and grease into the sewer systems, and investigates sanitary sewer blockages and overflows resulting from FOG discharges, and initiates enforcement actions.

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Plumbing and gas-fitting plans reviewed	781	840	1,200	900
Plumbing and gas-fitting inspections performed	67,214	71,802	70,000	72,000
Industrial discharge investigations performed	148	100	60	60
Industrial discharge samples analyzed	1,316	1,104	1,100	1,100
Fats, Oils, and Grease (FOG) Program inspections performed	5,198	5,823	5,500	5,500
FOG Program permits issued	352	321	350	350
Cross Connection site inspections performed	4,422	3,554	3,840	3,840

# PIPELINE CONSTRUCTION DIVISION

The Pipeline Construction Division is responsible for the management and inspection of water supply and wastewater collection pipeline construction contracts, as well as associated contracts for house connections, paving and landscaping.

	FISCAL YE	AR 2017	FISCAL YE	AR 2018	FISCAL YE	AR 2019	2018 - 2019		
	ACTU	AL	APPRO	VED	PROPO	SED	VARIAN	ICE	
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent	
Salaries & Wages	\$ 6,108,784	78.1	\$ 6,372,100	83.0	\$ 6,581,346	83.0	\$ 209,246	3.3%	
Materials	19,950,720		12,099,992		18,890,000		6,790,008	56.1%	
Construction	237,050,202		268,075,000		195,431,800		(72,643,200)	-27.1%	
Consultant Engineers	9,608,849		9,370,000		10,509,000		1,139,000	12.2%	
Contract Restoration	34,019,680		30,000,004		35,800,000		5,799,996	19.3%	
All Other	239,100		128,508		126,300		(2,208)	-1.7%	
Totals	\$306,977,335	78.1	\$326,045,604	83.0	\$267,338,446	83.0	\$(58,707,158)	-18.0%	

## **Explanation of Major Variances**

The FY'19 Proposed Budget reflects a decrease of approximately 18% from the Approved FY'18 Budget, primarily due to a planned reduction in the CIP Trunk Sewer Reconstruction Program, partially offset by increases for street restoration.

## **Core Activities**

<u>Contract Document Review</u> – This activity reviews prepared construction and bid contract documents to achieve quality, cost effectiveness and timeliness in the deliverables.

<u>Construction Management</u> – This activity provides for management and inspection for all pipeline construction projects, including new house connections, pipeline relocations, site utilities and rehabilitations. Rehabilitation contracts include water and sewer replacement, water main cleaning and lining, large water meter replacement, cathodic protection, house connection renewals, and sewer main lining.

<u>Street Repair and Restoration</u> – This activity manages and inspects street and landscaping restoration contracts, including processing internal patch tickets, issuing work orders, supervising consultant paving inspectors, inspecting sites, coordinating permit requirements with county regulators, and managing contractor payments.

# PIPELINE CONSTRUCTION DIVISION (Continued)

<u>Electronic As-Built Prep</u> – This activity prepares pipeline rehabilitation as-built contracts using AutoCad, including integrating the Global Positioning System (GPS) units to transmit digital appurtenance locations to AutoCad. The AutoCad results are then transmitted to the Enterprise-Geographic Information System (EGIS).

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Construction contract starts	168	168	170	170
Miles of Water Distribution Replacement	47	69.21	43	43
Miles of Water Transmission Replacement	8	4.44	6	6
Miles of Sewer Replacement/Bursting/Lining	41	34.0	38	38
Number of service connection permits inspected	290	290	300	300
Restoration work orders issued	4,356	4,356	4,000	4,000

# ENGINEERING & ENVIRONMENTAL SERVICES DIVISION

The Engineering & Environmental Services Division provides a full range of in-house civil, mechanical and electrical engineering support including: technical services for capital planning, design and construction; maintenance of engineering records and Geographic Information Systems (GIS); environmental engineering and science support; infrastructure management; and land services (rights-of-way, land acquisition and recordation, and land surveys).

### **Budget Summary**

	FISCAL YE	AR 2017	FISCAL YE	AR 2018	FISCAL YE	AR 2019	2018 - 2019		
	ACTU	AL	APPRO	VED	PROPO	SED	VARIANCE		
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent	
Salaries & Wages	\$ 5,365,931	58.8	\$ 5,750,219	62.0	\$ 5,929,974	62.0	\$ 179,755	3.1%	
Services	540,256		1,327,204		1,252,100		(75,104)		
Land	1,474,799		3,970,009		2,895,000		(1,075,009)	-27.1%	
Consultant Engineers	3,750,888		3,405,004		3,405,000		(4)	0.0%	
All Other	796,673		942,707		978,599		35,892	3.8%	
Totals	\$ 11,928,547	58.8	\$ 15,395,143	62.0	\$ 14,460,673	62.0	\$ (934,470)	-6.1%	

### **Explanation of Major Variances**

The FY'19 Proposed Budget reflects a decrease of approximately 6% from the Approved FY'18 Budget due to a reduction in planned land acquisitions.

## **Core Activities**

<u>Construction Contract Services</u> – This activity reviews and produces contract bid documents for all construction, rehabilitation, and new and renewal house connection contracts. The Division also calculates and validates engineer bid estimates and contractor market responses.

<u>Geographic Information System (GIS) Services</u> – This activity develops and maintains the web-based Enterprise Geographic Information System (EGIS) including: development, installation and programmatic oversight, collaboration with government agencies and other entities, and providing GIS data access to WSSC employees and other entities.

# ENGINEERING & ENVIRONMENTAL SERVICES DIVISION (Continued)

<u>Electrical / Mechanical Support</u> – This activity provides electrical and mechanical support for: existing and future asset management, on-going project engineering and construction projects, research and evaluation of associated materials and methods, and emerging technologies and traditional practices. The activity includes Facility Master Plans, standardization, in-house engineering, and technical support.

<u>Civil Engineering Support</u> – This activity provides in-house general civil, hydraulic, structural, corrosion and geotechnical engineering expertise to support asset management. It includes reviewing pipeline and facility designs, specification documents, manuals and guidelines, shop drawings, and preparing contract documents and specialty designs.

<u>Infrastructure Management</u> – This activity's responsibilities include the Dam Safety and Inspection Program, and the Corrosion Management Program. Dam Safety and Inspection includes monthly water supply dam inspections and repair recommendations, piezometer readings, silt measurements, and preparation of the annual dam report submitted to the State. Corrosion Management includes monitoring approximately 1,500 corrosion test stations, providing and coordinating corrosion design and repair recommendations, and developing and maintaining corrosion design guidelines.

<u>Property and Rights-of-Way Acquisition</u> – This activity provides real estate acquisition and rights-of-way support relating to new development, capital pipelines and facility projects. The services include preparing land plats and documents, legal descriptions and sketches, and maintaining the real property inventory. Mapping is reviewed and entered into the EGIS.

<u>Surveys</u> – This activity provides water and sewer design surveys through completion of final as-built drawings for maintenance and future design. It also includes locating structures for maintenance and field verification of assets for the EGIS.

<u>Engineering Records</u> – This activity supports quality control and tracking of engineering plans and as-built drawings, including scanning, indexing and uploading record drawings into WSSC's Webmap.

<u>Process Engineering and Water Quality Studies</u> – This activity provides treatment process expertise and services for in-house projects, external studies and designs related to treatment of water and wastewater, including managing biosolids and related permits. The Division ensures quality process engineering and site specific services to meet regulations. In addition, it is the technical liaison with industry foundations and agencies to give WSSC access to research efforts and results.

# ENGINEERING & ENVIRONMENTAL SERVICES DIVISION (Continued)

<u>Water Resources Protection</u> – This activity develops strategies for water quality assessment and protection, including coordinating with outside agencies to pursue watershed and source water quality protection, collecting water samples, long-term modeling of land use on raw water, and obtaining grant funding for evaluation and preventive measures.

<u>Pollution Prevention Studies</u> – This activity develops and implements Pollution Prevention Plans protecting water, air and soil from possible WSSC discharge of pollutants.

<u>Environmental Assessment, Permitting and Enforcement</u> – This activity manages environmental assessments, including wetlands evaluations, forest conservation efforts, archaeological historical studies, and water quality evaluations. The Division administers WSSC's Utility Erosion and Sediment Control Program, and the Public Tree Care Program. The Division also reviews and approves design plans, issues permits, conducts field inspections, and enforces WSSC Regulations for utility construction erosion and sediment control.

<u>Innovation Center</u> – This activity researches problems, develops possible solutions, and tests results. The Division applies ideas and solutions to increase customer value and productivity.

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Construction contract cost estimates completed	175	195	200	200
Rights-of-way acquired	228	184	220	200
In-house engineering designs completed	16	10	20	10
Rights-of-way packages reviewed and transmitted	265	197	250	225
Environmental assessment plans reviewed	2,279	2,446	2,500	2,700
Erosion and Sediment Control permits issued	328	306	350	350

# POLICE & HOMELAND SECURITY OFFICE

#### **Mission Statement**

To work with our partners to ensure the safety of WSSC employees, contractors, and customers.

	FISCAL YEAR 2017			FISCAL YEAR 2018			FISCAL YE	AR 2019	2018 - 2019			
	ACTU	AL	APPROVED		PROPOSED				VARIAN	ICE		
Category	Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$ 2,787,692	36.2	\$	3,151,692	41.0	\$	3,305,718	41.0	\$	154,026	4.9%	
Services	1,348,916			2,176,000			2,176,000			-	100.0%	
All Other	79,345			75,370			75,370			-	200.0%	
Totals	\$ 4,215,953	36.2	\$	5,403,062	41.0	\$	5,557,088	41.0	\$	154,026	2.9%	

### **Budget Summary**

#### **Explanation of Major Variances**

None

## **Office Description and Core Activities**

The Police & Homeland Security Office is responsible for safeguarding Commission real property; providing for the safety of WSSC personnel, customers, and visitors to our facilities; investigating theft of service cases; investigating illegal discharge of substances into the wastewater collection system; and investigating complaints of criminal activity which occur on Commission property.

<u>Security Services</u> – This activity provides security for employees and visitors to Commission-owned property and facilities. This involves conducting proactive patrols of all the WSSC properties and facilities; implementing physical and electronic security measures; enforcing all rules, regulations, and laws regarding forestry, the environment, and protection of natural resources; and providing proprietary guard services to specific depots, the Patuxent watershed, and other facilities.

<u>Investigative Services</u> – This activity involves investigation into civil, criminal, and administrative matters, and/or incidents involving Commission property or personnel. Also included are comprehensive investigations of contractors and potential Commission employees, theft of water service, and illegal waste dumping.

# **PRODUCTION DEPARTMENT**

The Production Department performs the core business of WSSC by providing a safe and reliable supply of drinking water to WSSC customers that meets or exceeds the requirements of the Safe Drinking Water Act and other Federal and State regulations. This Department is also engaged in producing a quality effluent from the wastewater treatment plants which meets discharge standards to protect public health and the environment. Led by the Production Director, the Department is comprised of two water filtration plants (Potomac and Patuxent), six wastewater treatment plants (Piscataway, Western Branch, Parkway, Seneca, Damascus, and Hyattstown), and the Laboratory, Systems Control, Facilities Maintenance, Energy Management, and Production Support Divisions.

#### **Mission Statement**

To provide continuous, high quality, cost-effective operation and maintenance of the WSSC's water supply, dams and reservoirs, water filtration plants, water distribution facilities, wastewater collection facilities, wastewater treatment plants, bio-solids management programs, and laboratories.

	FISCAL YE	AR 2017	FISCAL YE	AR 2018	FISCAL YE	AR 2019	2018 - 2	2019
Organizations	ACTU	AL	APPRO	VED	PROPO	SED	VARIA	NCE
	Amount	Workyears	Amount	Workyears	Amount	Workyears	Dollars	Percent
Office of the Director, Production	\$ 408,944	2.9	\$ 305,398	3.0	\$ 485,014	3.0	\$ 179,616	58.8%
Laboratory Division	4,341,356	34.1	3,770,050	35.0	4,444,046	36.0	673,996	17.9%
Systems Control Division	7,081,384	34.6	12,707,941	35.0	4,750,385	34.0	(7,957,556)	-62.6%
Potomac WFP	8,646,822	31.8	8,676,642	35.0	9,739,084	35.0	1,062,442	12.2%
Patuxent WFP	3,302,897	23.1	3,764,590	24.0	3,834,036	24.0	69,446	1.8%
Piscataway WWTP	6,685,873	25.7	7,608,608	26.0	7,870,938	26.0	262,330	3.4%
Western Branch WWTP	6,833,147	30.7	6,600,249	32.0	6,851,470	32.0	251,221	3.8%
Parkway WWTP	3,332,023	22.4	3,979,600	23.0	4,125,664	23.0	146,064	3.7%
Seneca WWTP, Damascus/Hyattstown WWTPs	5,883,200	32.9	6,351,051	33.0	6,412,456	33.0	61,405	1.0%
Facilities Maintenance Division	18,506,607	65.2	15,026,764	68.0	16,776,480	68.0	1,749,716	11.6%
Energy Management Division	22,501,121	0.0	22,447,193	0.0	20,576,949	0.0	(1,870,244)	-8.3%
Production Support Division	63,498,296	16.3	80,704,229	18.0	74,473,548	18.0	(6,230,681)	-7.7%
Totals	\$151,021,670	319.7	\$171,942,315	332.0	\$160,340,070	332.0	\$ (11,602,245)	-6.7%

### **Budget Summary**

# **PRODUCTION DEPARTMENT** (Continued)

## **Explanation of Major Variances**

The FY'19 Proposed Budget reflects a decrease of approximately 7% from the Approved FY'18 Budget. This decrease is primarily attributable to the transfer of the Water Storage Facility Rehabilitation Program to the E&C Department, a reduction in the Energy Performance Program, and a reduction in electricity costs.

# Highlights

- FY'18 will mark our 100th year without a drinking water violation.
- Both Potomac and Patuxent water filtration plants earned the prestigious Partnership for Safe Water Presidents Award, the only two water filtration plants in Maryland and two of the eleven plants in the nation to achieve this honor.
- All six of our wastewater treatment plants had zero permit non-compliances earning them NACWA's Peak Performance Awards, five earned Platinum and one earned Gold.

# **OFFICE OF THE DIRECTOR, PRODUCTION**

The Production Director is responsible for the oversight and operation of two water filtration plants, six wastewater treatment facilities, and the Laboratory, Systems Control, Facilities Maintenance, Energy Management, and Production Support Divisions.

	]	FISCAL YE ACTU	-	FISCAL YE APPRO		]	FISCAL YE PROPO		2018 - 2 VARIA			
Category		Actual	Workyears	Budget	Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$	373,601	2.9	\$ 249,498	3.0	\$	429,114	3.0	\$	179,616	72.0%	
All Other		35,343		55,900			55,900			-	0.0%	
Totals	\$	408,944	2.9	\$ 305,398	3.0	\$	485,014	3.0	\$	179,616	58.8%	

# **Budget Summary**

### **Explanation of Major Variances**

None

# **Core Activities**

<u>Management & Administration Activities</u> – This activity involves the management and supervision of the Department. It also involves coordination with other regional agencies, supports employee certifications, and employee association memberships.

# POTOMAC AND PATUXENT WATER FILTRATION PLANTS

These two water filtration plants are responsible for the operation and maintenance of their respective facilities, providing high-quality, cost-effective maintenance and continual operation of the Commission's water filtration plants, water distribution facilities, and water supply dams.

### **Budget Summary**

		FISCAL YEAR 2017 ACTUAL		AR 2018 VED	FISCAL YE		2018 - 2019 VARIANCE		
Category		AL Workyears	APPROVED Budget Workyears		PROPOSED Budget Workyears			Percent	
Salaries & Wages	\$ 4,559,107	54.9	\$ 4,496,932	59.0	\$ 5,029,620	59.0	\$ 532,688	11.8%	
Services	1,147,675		1,035,000		1,035,000		-	0.0%	
Chemicals	5,033,277		5,710,500		6,309,700		599,200	10.5%	
All Other	1,209,660		1,198,800		1,198,800		-	0.0%	
Totals	\$ 11,949,719	54.9	\$ 12,441,232	59.0	\$ 13,573,120	59.0	\$ 1,131,888	9.1%	

# **Explanation of Major Variances**

None

## **Core Activities**

<u>Operations</u> – This activity is associated with monitoring, controlling, and enhancing process systems associated with water treatment and water distribution from the plants. The process systems include controlling and monitoring fluid and solids processing, and operating raw water reservoirs to mitigate and control flooding.

<u>Maintenance</u> – This activity is comprised of maintenance activities, from preventative to reactive to enhancement, for the Commission's WFPs. Preventative maintenance is performed on a regular or scheduled basis and is designed to lengthen the service life of plant equipment. It also provides for inspections necessary to monitor the operation of this equipment, which in turn reduces reactive maintenance costs. Enhancement maintenance is performed to improve or enhance a functional piece of plant equipment, system, or facility, and the costs associated with correcting faulty or failing equipment components, grounds, structures, process, or safety concerns in order for the facilities to meet permit requirements.

# POTOMAC AND PATUXENT WATER FILTRATION PLANTS (Continued)

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Potomac WFP				
Total filtered water to the distribution system (MG)	41,368	42,178	40,908	40,178
Average daily filtered water to the distribution system (MGD)	113.0	116.0	112.0	112.0
Maximum daily filtered water to the distribution system (MGD)	141.9	163.5	160.0	175.0
Solids handling (wet tons)	21,152	20,806	25,000	26,500
Patuxent WFP				
Total filtered water to the distribution system (MG)	18,736	17,341	18,952	19,710
Average daily filtered water to the distribution system (MGD)	51.2	47.5	52.0	54.0
Maximum daily filtered water to the distribution system (MGD)	65.7	66.1	77.0	77.0
Solids handling (dry tons)	1,341	1,637	6,000	6,000

# PISCATAWAY, WESTERN BRANCH, PARKWAY, AND SENECA/DAMASCUS/HYATTSTOWN WWTPs

These Waste Water Treatment Plants are responsible for the operation and maintenance of their respective facilities, providing highquality, cost-effective maintenance and continual operation of the Commission's wastewater collection facilities and wastewater treatment plants. The plants produce effluent that meets all requirements for discharging to waters of the State of Maryland; utilize the biosolids generated in an environmentally beneficial manner; and operate and maintain wastewater pumping stations to convey wastewater without overflows.

#### **Budget Summary**

	FISCAL YE	FISCAL YEAR 2017		AR 2018	FISCAL YE	AR 2019	2018 - 2019		
	ACTU	ACTUAL		VED	PROPO	SED	VARIANCE		
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent	
Salaries & Wages	\$ 9,041,985	111.7	\$ 9,447,008	114.0	\$ 9,533,328	114.0	\$ 86,320	0.9%	
Services	6,183,145		8,031,000		8,031,000		-	0.0%	
Chemicals	3,209,201		3,744,200		3,783,700		39,500	1.1%	
All Other	4,299,912		3,317,300		3,912,500		595,200	17.9%	
Total	\$ 22,734,243	111.7	\$ 24,539,508	114.0	\$ 25,260,528	114.0	\$ 721,020	2.9%	

### **Explanation of Major Variances**

None

# **Core Activities**

<u>Operations</u> – This activity is associated with monitoring, controlling, and enhancing process systems associated with wastewater collection and wastewater treatment. The process systems include controlling and monitoring processes with wastewater in its fluid stage and controlling and monitoring solids processing as well.

<u>Operations Support</u> – This activity involves the oversight of operational and maintenance issues associated with regional wastewater management and bio-solids management.

<u>Maintenance</u> – This activity is comprised of maintenance activities, from preventative to reactive to enhancement, for the Commission's WWTPs. Preventative maintenance is performed on a regular or scheduled basis and is designed to lengthen the service life of plant

## PISCATAWAY, WESTERN BRANCH, PARKWAY, AND SENECA/DAMASCUS/HYATTSTOWN WWTPs (Continued)

equipment. It provides for inspections necessary to monitor the operation of this equipment, which in turn reduces reactive maintenance costs. Enhancement maintenance is performed to improve or enhance a functional piece of plant equipment, system, or facility, and the costs associated with correcting faulty or failing equipment components, grounds, structures, process, or safety concerns in order for the facilities to meet permit requirements.

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Piscataway WWTP				
Wastewater treated flow (MGD)	24.8	23.9	25.6	26.7
Biosolids production (wet tons)	35,000	33,000	39,000	38,000
Western Branch WWTP				
Wastewater treated flow (MGD)	19.1	20.1	22.3	22.0
Biosolids production (wet tons)	29,677	30,500	30,000	30,000
Parkway WWTP				
Wastewater treated flow (MGD)	6.4	6.0	7.2	6.8
Biosolids production (wet tons)	13,970	13,578	16,200	16,200
Seneca/Damascus/Hyattstown WWTPs				
Wastewater treated flow (MGD)	15.2	14.6	17.5	17.5
Biosolids production (wet tons)	22,689	22,961	26,092	30,000

# LABORATORY DIVISION

This Division is responsible for the operation and maintenance of the Commission's lab facilities and for providing high quality analytical data to the WSSC and other organizations for the benefit of public health and environmental quality.

#### **Budget Summary**

	FISCAL YEAR 2017 ACTUAL		FISCAL YEAR 2018 APPROVED			FISCAL YEAR 2019 PROPOSED			2018 - 2019 VARIANCE		
Category	ACTUAL Actual Workyears			VED Workvears			Workvears		Dollar Percei		
Salaries & Wages	\$	2,746,040	N	\$ 2,811,950	<i></i>	\$	2,985,846	36.0	\$	173,896	6.2%
All Other		1,595,316		958,100			1,458,200			500,100	52.2%
Totals	\$	4,341,356	34.1	\$ 3,770,050	35.0	\$	4,444,046	36.0	\$	673,996	17.9%

### **Explanation of Major Variances**

The FY'19 Proposed Budget reflects an increase of approximately 18% over the Approved FY'18 Budget due to greater focus on the Water Quality Program.

## **Core Activities**

<u>Laboratory Services</u> – This activity operates and maintains a state-of-the-art, EPA-certified environmental laboratory providing the highest quality analytical data to the WSSC and other organizations for the benefit of public health and environmental quality. The activity handles all laboratory testing necessary to operate the treatment processes, including biological, organic, and metals testing; analyzing the chemical and physical properties of a variety of liquid, solid, and gaseous samples; and optimizes treatment processes in order to meet or exceed the requirements of the Safe Drinking Water Act and other federal and state regulations. Also included in this activity is the Water Quality Program.

# LABORATORY DIVISION (Continued)

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Laboratory analyses performed (by Purpose)				
Clean Water Act	143,144	125,025	180,000	180,000
Safe Drinking Water Act	163,369	156,610	100,000	100,000
Customer Concerns	7,080	16,829	10,000	10,000
Process Control & Support	145,070	133,625	160,000	160,000
Outside Client Support	71,965	74,305	50,000	50,000
Analyses per workyear	16,634	14,850	14,286	13,889

# SYSTEMS CONTROL DIVISION

This Division is responsible for the operation and maintenance of the water distribution system's pumping stations, water storage tank throttling valves, specialty valves, electrically operated valves, and associated instrumentation. The Division operates and maintains supervisory control and data acquisition (SCADA) system through the Control Center, monitoring remote water and wastewater facilities to ensure reliable service, and minimizing environmental damage. The ultimate goal of the Division is to provide reliable and safe water throughout the distribution system.

## **Budget Summary**

	FISCAL YEAR 2017		FISCAL YE	AR 2018	FISCAL YE	AR 2019	2018 - 2019		
	ACTU	AL	APPRO	VED	PROPO	SED	VARIAN	VARIANCE	
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent	
Salaries & Wages	\$ 2,922,540	34.6	\$ 2,980,941	35.0	\$ 3,023,485	34.0	\$ 42,544	1.4%	
Construction	2,726,786		8,000,000		-		(8,000,000)	-100.0%	
All Other	1,432,058		1,727,000		1,726,900		(100)	0.0%	
Totals	\$ 7,081,384	34.6	\$ 12,707,941	35.0	\$ 4,750,385	34.0	\$ (7,957,556)	-62.6%	

## **Explanation of Major Variances**

The FY'19 Proposed Budget reflects a decrease of approximately 63% from the Approved FY'18 Budget. This decrease is primarily due to the transfer of the Water Storage Facility Rehabilitation Program to the Engineering & Construction Department.

# **Core Activities**

<u>Operations</u> – This activity involves the operation and maintenance of the water distribution system's pumping stations, water storage tank throttling valves, specialty valves, electrically operated valves, and associated instrumentation.

<u>Maintenance</u> – This activity maintains and operates the WSSC's Patuxent Reservoirs to protect water quality. This activity also performs maintenance required by the dam regulatory offices and the maintenance of the watershed recreational areas. In addition, this activity provides support to the Office of Communications & Community Relations for its Community Outreach events. During drought years and during the current Brighton Dam rehabilitation project, this unit removes silt from the upper reservoir reaches to maintain reservoir storage.

# SYSTEMS CONTROL DIVISION (Continued)

<u>Maintenance Support Services</u> – This activity is associated with monitoring, controlling, and enhancing process systems associated with treatment, distribution, and collection for water and wastewater systems. This activity also monitors real time energy costs to minimize the Commission's electrical costs. In addition, this activity supports project planning, project design, and project construction of new facilities within the WSSD. When necessary, the Commission's Emergency Operating Center is directed within this area.

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Standpipes, Reservoirs & Elevated Tanks - Total storage capacity (MG)	197.3	197.3	197.3	203.2
Remotely operated valves	82	83	87	87

# FACILITIES MAINTENANCE DIVISION

This Division provides specialized maintenance services for the Production Department facilities and general facility maintenance and renovation services for all WSSC facilities.

## **Budget Summary**

	FISCAL YEAR 2017 ACTUAL		FISCAL YE		FISCAL YE		2018 - 2019 NADIANCE		
			АРРКО	APPROVED		SED	VARIANCE		
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent	
Salaries & Wages	\$ 5,440,278	65.2	\$ 5,512,464	68.0	\$ 5,624,280	68.0	\$ 111,816	2.0%	
Services	7,950,493		7,658,000		8,000,000		342,000	4.5%	
Construction	2,101,991		-		-		-	0.0%	
All Other	3,013,845		1,856,300		3,152,200		1,295,900	69.8%	
Totals	\$ 18,506,607	65.2	\$ 15,026,764	68.0	\$ 16,776,480	68.0	\$ 1,749,716	11.6%	

# **Explanation of Major Variances**

The FY'19 Proposed Budget reflects an increase of approximately 12% over the Approved FY'18 Budget. This increase is primarily due to the transfer of the arc flash studies from the E&C Department to this Division.

# **Core Activities**

<u>Maintenance Support Services</u> – This activity provides operational support and maintenance services for all of the Commission's facilities and properties. This activity includes specialized maintenance services such as electrical, mechanical, instrumentation, welding, metal fabrication, and carpentry services, which are provided in the form of enhancements, repairs, replacements, and preventative and predictive maintenance services. This activity also includes all buildings and grounds maintenance and repairs.

# ENERGY MANAGEMENT AND PRODUCTION SUPPORT DIVISIONS

The primary focus of these Divisions is on utilities cost control, bio-solids management, competitive action efforts, safety, training and security. They also support other miscellaneous initiatives such as greenhouse gas planning, aerobic digester feasibility studies, and renewable energy programs.

### **Budget Summary**

	FISCAL YE	FISCAL YEAR 2017		AR 2018	FISCAL YE	AR 2019	2018 - 2019		
	ACTUAL		APPRO	VED	PROPO	SED	VARIANCE		
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent	
Salaries & Wages	\$ 1,791,084	16.3	\$ 1,767,329	18.0	\$ 1,960,848	18.0	\$ 193,519	10.9%	
Heat, Light & Power	22,501,121		22,447,193		20,576,949		(1,870,244)	-8.3%	
Services	7,596,744		7,024,900		10,068,700		3,043,800	43.3%	
Construction	-		18,249,000		8,780,000		(9,469,000)	-51.9%	
Regional Sewage Disposal	53,946,152		53,617,000		53,617,000		-	0.0%	
All Other	164,316		46,000		47,000		1,000	2.2%	
Totals	\$ 85,999,417	16.3	\$103,151,422	18.0	\$ 95,050,497	18.0	\$ (8,100,925)	-7.9%	

### **Explanation of Major Variances**

The FY'19 Proposed Budget reflects a decrease of approximately 8% from the Approved FY'18 Budget. This decrease is primarily due to reductions in the Energy Performance Program and electricity costs.

## **Core Activities**

<u>Operations Support</u> – This activity involves energy project consultants and bio-solids management. It also includes shared operation and maintenance costs for utilities in other jurisdictions, and shared costs to support coordination of regional water supply issues and water system emergencies. Also included in this activity is the purchase of electricity, natural gas, propane, and diesel fuel associated with the operation of all Commission facilities.

# UTILITY SERVICES DEPARTMENT

The Utility Services Department is directly responsible for maintaining the distribution and collection systems including all of the Commission's water and sewer mains, thus ensuring the consistent flow of water and outflow of wastewater within the Washington Suburban Sanitary District, and preserving the infrastructure in order to provide quality service for our customers. Led by the Utility Services Director, the Department is comprised of the Utility Services North, West, Central, South, Pipeline Infrastructure Strategic Planning, Utility Services Learning and Development, Water/Wastewater Systems Assessment, and Meter Services Divisions.

### **Mission Statement**

To maintain the water and wastewater infrastructure and protect the environment all to serve our customers.

#### **Budget Summary**

	FISCAL YE	AR 2017	FISCAL YE	AR 2018	FISCAL YE	AR 2019	2018 - 2	.019
Organizations	ACTU	AL	APPRO	VED	PROPO	SED	VARIANCE	
	Amount	Workyears	Amount	Workyears	Amount	Workyears	Dollars	Percent
Office of the Chief, Utility Services	\$ 7,398,474	8.7	\$ 25,215,289	8.0	\$ 20,358,848	9.0	\$ (4,856,441)	-19.3%
Utility Services North Division	8,824,311	66.7	7,894,123	53.0	8,981,566	61.0	1,087,443	13.8%
Utility Services West Division	9,037,516	70.0	8,546,268	54.0	9,570,946	61.0	1,024,678	12.0%
Utility Services Central Division	13,417,240	68.5	10,628,842	56.0	11,776,619	63.0	1,147,777	10.8%
Utility Services South Division	14,627,522	82.9	9,303,128	51.0	10,732,796	62.0	1,429,668	15.4%
Pipeline Infrastructure Strategic Planning	9,946,738	109.3	7,939,101	69.0	6,145,465	38.0	(1,793,636)	-22.6%
Utility Services Learning & Development	788,114	6.6	734,912	8.0	780,414	8.0	45,502	6.2%
Water/Wastewater Systems Assessment Division	33,708,671	58.4	36,647,638	83.0	36,265,044	81.0	(382,594)	-1.0%
Meter Services Division	-	-	7,100,696	117.0	19,018,769	116.0	11,918,073	167.8%
Totals	\$ 97,748,586	471.1	\$114,009,997	499.0	\$123,630,467	499.0	\$ 9,620,470	8.4%

# UTILITY SERVICES DEPARTMENT (Continued)

### **Explanation of Major Variances**

The FY'19 Utility Services Proposed Budget is approximately 8% greater than the FY'18 Approved Budget. This increase is primarily due to costs associated with the implementation of an Advanced Metering Infrastructure (AMI) project. The system will provide comprehensive real-time information to both the customer and the utility.

### Highlights

- The Utility Services Department underwent a realignment of responsibilities to better meet customer needs and expectations. The realignment resulted in the creation of a new Meter Services Division, centralizing meter reading, meter installation and replacement, and meter shop operations.
- The departmental reorganization also included the transfer of Customer Advocate positions to the Customer Service Department, to better serve customers.
- The number of crews performing in-house water main replacements were reduced. The positions were redistributed within the Utility Services North, West, Central and South Divisions to provide greater focus on planning and scheduling maintenance activities, developing water and wastewater asset management plans, and improving business workflows.

## OFFICE OF THE DIRECTOR, UTILITY SERVICES

The Utility Services Department, led by the Utility Services Director, is comprised of the Utility Services North, West, Central and South Divisions; along with the Pipeline Infrastructure Strategic Planning, the Utility Services Learning & Development, the Water/Wastewater Systems Assessment, and the Meter Services Divisions. The Department is directly responsible for maintaining water and sewer mains throughout the Washington Suburban Sanitary District.

	FISCAL YE	AR 2017	FISCAL YE	AR 2018	FISCAL YE	AR 2019	2018 - 2	019	
	ACTU	ACTUAL		APPROVED		SED	VARIANCE		
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent	
Salaries & Wages	\$ 1,024,615	8.7	\$ 802,943	8.0	\$ 1,083,648	9.0	\$ 280,705	35.0%	
Services	1,588,730		1,891,000		2,000,000		109,000	5.8%	
Construction	4,662,984		22,504,176		17,250,000		(5,254,176)	-23.3%	
All Other	122,145		17,170		25,200		8,030	46.8%	
Totals	\$ 7,398,474	8.7	\$ 25,215,289	8.0	\$ 20,358,848	9.0	\$ (4,856,441)	-19.3%	

### **Budget Summary**

### **Explanation of Major Variances**

The FY'19 Proposed Budget reflects a decrease of approximately 19% from the Approved FY'18 Budget due to a reduction in the amount budgeted for design and construction associated with the PCCP program.

### **Core Activities**

<u>PCCP Program Management</u> – This activity provides for the engineering, design, construction, inspection, investigation and analysis/assessment of Pre-stressed Concrete Cylinder Pipe (PCCP).

# UTILITY SERVICES NORTH, WEST, CENTRAL, AND SOUTH DIVISIONS

These Divisions are responsible for maintaining WSSC's distribution and collection systems including all of the Commission's water and sewer mains and water meters, thus ensuring the consistent flow of water and outflow of wastewater within their geographical regions and preserving the infrastructure in order to provide quality service for our customers.

## **Budget Summary**

	FISCAL YE ACTU		FISCAL YE APPRO		FISCAL YE PROPO		2018 - 2 VARIA	
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent
Salaries & Wages	\$ 22,419,494	288.1	\$ 18,766,479	214.0	\$ 21,508,127	247.0	\$ 2,741,648	14.6%
Materials	4,607,619		3,894,891		3,894,900		9	0.0%
Construction	16,470,826		10,735,817		12,760,000		2,024,183	18.9%
All Other	2,408,650		2,975,174		2,898,900		(76,274)	-2.6%
Totals	\$ 45,906,589	288.1	\$ 36,372,361	214.0	\$ 41,061,927	247.0	\$ 4,689,566	12.9%

## **Explanation of Major Variances**

The FY'19 Proposed Budget reflects an increase of approximately 13% over the Approved FY'18 Budget. This increase is the result of a transfer of positions from the Pipeline Infrastructure Strategic Planning Division to Utility Services North, West, Central and South Divisions. In addition, a \$2M increase in funding for emergency contract infrastructure repair/replacement is reflected in the FY'19 proposed budget.

## **Core Activities**

<u>Maintenance</u> - This activity involves performing measures designed to lengthen the service life of water and sewer mains. This includes providing regular interval flushing to minimize discolored water and regularly locating and exercising large valves to ensure system operability. These measures seek to minimize or avoid costlier corrective maintenance activities. Adjustment, repair, and replacement of components after failure within the water distribution and wastewater collection systems are also included in this activity.

<u>Inspection Maintenance</u> - This activity involves routine and emergency inspection of integral components of the water distribution and wastewater collection systems. The primary objective of this activity is to respond to and assess emergency maintenance requests from customers.

## UTILITY SERVICES NORTH, WEST, CENTRAL, AND SOUTH DIVISIONS (Continued)

<u>Capital Project Support</u> – This activity involves the maintenance crew support of capital construction projects, such as water main shut downs, locating and exposing facilities, and new house connections. Also included is contract administration for PCCP rehabilitation, which includes pipe replacement, pipe repairs, joint repair, mobilization and excavation. The timing and approach to rehabilitation is determined following PCCP inspection and assessment. Rehabilitation of these mains provides value to the customer by minimizing the risk of failure and ensuring a safe and reliable water supply.

Field Crew Scheduling – This activity involves simulating and scheduling water main shutdowns.

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Emergency clean sewer service	99	76	191	148
Emergency clean sewer main	505	507	604	586
Emergency flush for discolored water	3,372	2,850	2,388	2,325
Water main repairs performed	1,596	1,672	1,836	1,677
Emergency sewer inspections performed	3,118	3,412	3,185	3,213
Emergency water inspections performed	12,775	13,437	13,887	12,926
Emergency water main shutdowns performed	171	162	212	188
Routine flush for discolored water	1,473	1,329	1,086	1,120

# PIPELINE INFRASTRUCTURE STRATEGIC PLANNING DIVISION

This Division is for the collection of quality data to assist in the management and administration of predictive and preventive maintenance activities impacting our pipeline infrastructure. The data is utilized to plan and schedule maintenance activities, develop water and wastewater asset management plans, and improve business workflows within the Utility Service Department.

### **Budget Summary**

	FISCAL YEAR 2017 ACTUAL		FISCAL YEAR 2018 APPROVED			FISCAL YEAR 2019 PROPOSED			2018 - 2019 VARIANCE		
Category			Workyears		Budget Worky			Budget Workvears			Percent
Salaries & Wages	\$	6,738,239	109.3	\$	4,908,001	69.0	\$	3,114,366	38.0	\$ (1,793,635)	-36.5%
Materials		2,200,666			2,401,300			2,300,000		(101,300)	-4.2%
All Other		1,007,833			629,800			731,099		101,299	16.1%
Totals	\$	9,946,738	109.3	\$	7,939,101	69.0	\$	6,145,465	38.0	\$ (1,793,636)	-22.6%

### **Explanation of Major Variances**

The FY'19 Proposed Budget reflects a decrease of approximately 23% from the Approved FY'18 Budget. As a result of the departmental reorganization, positions were transferred from the Pipeline Infrastructure Strategic Planning Division to the Utility Services North, West, Central and South Divisions. In addition, in-house water main replacement is being scaled back.

### **Core Activities**

<u>Planning</u> – This activity is associated with the utilization of data to plan and schedule maintenance activities, the development of water and wastewater asset management plans and the improvement of business workflows.

<u>Water Main Replacement</u> – This activity is associated with the replacement of water mains that are undersized or aged past their useful life by in-house staff. This function contributes to the reduction of discolored water complaints and service interruptions due to frequent main breaks, and increased fire protection.

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Miles of water mains replaced by in-house crews	9.8	8.2	10.0	2.0

# UTILITY SERVICES LEARNING & DEVELOPMENT DIVISION

This Division is responsible for training Utility Services employees and ensuring that the Department's current work practices are operationally effective. This Division searches for best practices and/or technology that will provide greater efficiencies and increase productivity in the various work sections of the Utility Services Department.

### **Budget Summary**

	I		CAL YEAR 2017 ACTUAL		FISCAL YEAR 2018 APPROVED			FISCAL YEAR 2019 PROPOSED			2018 - 2019 VARIANCE		
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$	762,003	6.6	\$	679,448	8.0	\$	724,914	8.0	\$	45,466	6.7%	
All Other		26,111			55,464			55,500			36	0.1%	
Totals	\$	788,114	6.6	\$	734,912	8.0	\$	780,414	8.0	\$	45,502	6.2%	

### **Explanation of Major Variances**

None

### **Core Activities**

<u>Research and Development</u> – This activity is associated with identifying initiatives that increase productivity and efficiency; evaluating the cost impact of "best in class" business practices, with specific emphasis on training and technology integration; and evaluating new products and metering systems.

<u>Design/Deliver/Evaluate Courses</u> – This activity involves identifying training requirements, developing training materials, coordinating and providing training courses, and evaluating course effectiveness. Course development includes specific business process computer skills, non-technical skills such as customer relations (telephone) etiquette, and technical skills such as pipe repair.

## WATER/WASTEWATER SYSTEMS ASSESSMENT DIVISION

This Division is responsible for water distribution and transmission condition assessment activities in line with WSSC's effort to execute the Asset Management Program; proper maintenance of the wastewater collection system, including inspection; line blockage analysis; routine, preventive, and emergency collection system cleaning; Sewer System Evaluation Surveys (SSES) for flow reduction; trunk sewer/creek crossing inspections; administration and reporting of Sanitary Sewer Overflow (SSO) Consent Decree requirements; the management of Pre-stressed Concrete Cylinder Pipe (PCCP) inspections; and oversight of Acoustic Fiber Optic (AFO) monitoring of major pipelines.

## **Budget Summary**

	FISCAL YE	FISCAL YEAR 2017		AR 2018	FISCAL YE	AR 2019	2018 - 2019		
	ACTU	ACTUAL		APPROVED		SED	VARIANCE		
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent	
Salaries & Wages	\$ 6,547,089	58.4	\$ 6,877,002	83.0	\$ 6,744,444	81.0	\$ (132,558)	-1.9%	
Services	17,273,529		16,338,600		16,338,600		-	0.0%	
Construction	1,229,335		4,220,000		4,220,000		-	0.0%	
Consultant Engineers	8,123,550		8,529,996		8,280,000		(249,996)	-2.9%	
All Other	535,168		682,040		682,000		(40)	0.0%	
Totals	\$ 33,708,671	58.4	\$ 36,647,638	83.0	\$ 36,265,044	81.0	\$ (382,594)	-1.0%	

### **Explanation of Major Variances**

None

### WATER/WASTEWATER SYSTEMS ASSESSMENT DIVISION (Continued)

### **Core Activities**

<u>Planning</u> – The purpose of this activity is to provide the necessary management and administration related to compliance with the requirements of the federal Sanitary Sewer Overflow (SSO) Consent Decree, and execution of the Line Blockage Analysis (LBA) Program, which provides for review of sewer lines and service stoppage data and recommendations for preventive maintenance sewer cleaning and other measures to eliminate repetitive backups and overflows.

<u>Field Maintenance</u> – This activity provides for the proactive cleaning and/or televising of sewer mains (Proactive Maintenance Program); preventive sewer cleaning in order to reduce or eliminate the possibility of future sewer backups or overflows; corrective sewer main and service cleaning on an emergency basis; and closed circuit television (CCTV) inspection of sewer main lines and service laterals after a customer has experienced a sewage backup into their home or business. It includes the analysis of related videotapes to provide a recommendation for preventive or corrective maintenance.

<u>Condition Assessment</u> – The purpose of this activity is to provide condition assessment of the Commission's water distribution and transmission systems, as well as the wastewater collection and disposal systems. Condition assessment of the water systems (PCCP and Non-PCCP mains) includes leak detection, acoustic testing, and other related techniques to determine pipeline deficiencies and condition ratings. Condition assessment of the wastewater and collections systems involves the investigation of problem sewer basins and development of flow monitoring projects to evaluate the magnitude of the problem(s); physical surveys, smoke testing, dye testing, and internal inspection to identify specific defects; Sewer System Evaluation Surveys (SSES) of selected basins for the purpose of identifying and eliminating extraneous flows; inspecting and documenting the condition of manholes, trunk sewer lines, and creek crossings to identify and correct problems having the potential for causing sewer overflows; and managing and operating the flow surveillance components of the WSSC's Comprehensive Sewer Model.

Large Valve Assessment, Repair & Replacement – The purpose of this activity is to provide inspection of the water transmission systems' large valves. This activity systematically inspects, exercises, repairs and replaces (when necessary) large diameter valves located throughout the system. Based upon results of valve condition assessments, annual valve rehabilitations are projected to be approximately 85 repairs and 5 replacements.

# WATER/WASTEWATER SYSTEMS ASSESSMENT DIVISION (Continued)

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Percentage of on-schedule delivery of federal and state mandated reports	100%	100%	100%	100%
Miles of sewer mains cleaned for preventive maintenance	618	552	650	650
Miles of sewer mains cleaned on emergency basis	9	10	9	10
Emergency clear sewer services performed	771	764	800	800
Number of repeat backups within 90 days of corrective cleaning	5	1	1	1
Miles of mainline sewer televised for preventative maintenance program (WSSC Crews) Miles of mainline sewer televised for proactive maintenance program (by contract)	55 190	48 181	60 225	60 225
Number of line blockage analysis reviews completed after CCTV inspection	880	1,042	600	940
Miles of sewer smoke-tested	1	3	2	3
Manholes inspected (by contract)	3,366	5,322	5,000	5,000
Telemetered gauges operated	227	225	235	245
Calibrations performed	865	870	940	940
Chemical root control (work order count)	3,294	32	2,500	2,500

# METER SERVICES DIVISION

The Meter Services Division is responsible for the water meter evaluation, testing, and replacement/repair program for large and small meters; and for reading the WSSC's water meters to ensure accurate customer billing. Additional support services provided include the fire hydrant meter leasing; warehousing, transporting, and issuing of meters to customers; along with research and development.

#### **Budget Summary**

	FISCAL YE	FISCAL YEAR 2017		FISCAL YE	AR 2018	F	TISCAL YE	AR 2019	2018 - 2019		
	ACTU	ACTUAL		APPROVED		PROPOSED			VARIANCE		
Category	Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$ -	0.0	\$	6,622,136	117.0	\$	6,776,269	116.0	\$	154,133	2.3%
Advanced Metering Infrastructure	-			-			11,764,000			11,764,000	100.0%
All Other	-			478,560			478,500			(60)	0.0%
Totals	\$ -	0.0	\$	7,100,696	117.0	\$ 1	19,018,769	116.0	\$	11,918,073	167.8%

### **Explanation of Major Variances**

The FY'19 Proposed Budget reflects an increase of approximately 168% over the Approved FY'18 Budget. The increase is associated with the implementation of an Advanced Metering Infrastructure (AMI) project. This is an automated system that communicates remotely with metering devices to measure, collect, and analyze consumption data.

### **Core Activities**

<u>Temporary Fire Hydrant Meter Leasing and Maintenance</u> – This activity involves administering the Commission's Temporary Fire Hydrant Meter Leasing Program, which permits the temporary use of metered fire hydrants to individuals or firms. All fire hydrant meters are tested, repaired, and maintained to further ensure proper registration and billing accuracy.

<u>Flow Test</u> – This activity involves routine inspection of the water distribution system and performing fire flow tests for outside agencies.

<u>Large Meter Testing, Repair & Replacement</u> – This activity involves testing, repairing, and replacing large meters to ensure billing accuracy. Meters that are tested and repaired on a routine preventive maintenance basis are more likely to operate at optimum levels with fewer instances of inaccurate registration. Some meters lose accuracy over time and it may be necessary to replace them to ensure accurate registration for our customers.

### METER SERVICES DIVISION (Continued)

<u>Small Meter Testing, Repair & Replacement</u> –This activity involves testing, repair, and/or replacement of small meters in the WSSD service area. Meters that are tested and repaired on a routine preventive maintenance basis are more likely to operate at optimum levels with fewer instances of inaccurate registration. Some meters lose accuracy over time and it may be necessary to replace them to ensure accurate registration for our customers.

<u>New Meters</u> – This activity involves processing requests for both small and large meters from external customers. The primary function of this activity is to ensure that all activated meters are assigned an account number and properly billed.

<u>Meter Reading</u> – This activity is associated with providing timely and accurate meter readings in order to render customer bills based on actual usage.

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Large meter tests and, if necessary, repairs	1,256	1,167	1,189	1,070
Small meters replaced	12,573	13,781	11,423	13,500
Small meters installed (new connections)	2,872	3,585	3,213	3,500
Small meter shop tests	6,587	7,240	5,500	7,250
Regular meter readings completed	2,031,026	1,827,714	2,050,000	1,900,000
Percentage of meter readings secured on first visit	99%	99%	95%	95%
Special meter readings completed	39,672	39,918	35,266	40,000
Property inspections performed	916	1.,006	1,286	1,000
Collection turn-offs performed	16,793	30,041	29,300	8,890
Fire hydrant meters issued	1,627	1,650	1,600	1,670
Fire flow tests performed	235	217	240	240

# **ADMINISTRATION**

Administration refers to the Departments and Offices providing centralized advisory and support services to the Commission. The Deputy Manager for Administration is responsible for ensuring core activities align with and are in support of the General Manager's strategic vision, goals, and objectives. The Departments/Offices falling under Administration include the Finance, Information Technology, and General Services Departments, along with the Procurement Office, and the Office of Supplier Diversity & Inclusion.

### **Budget Summary**

Organizations	FISCAL YE ACTU		FISCAL YE APPRO		FISCAL YE PROPO		2018 - 2019 VARIANCE	
	Amount	Workyears	Amount	Workyears	Amount	Workyears	Dollars	Percent
Finance Department	\$ 6,662,576	59.0	\$ 7,198,969	64.0	\$ 7,691,928	64.0	\$ 492,959	6.8%
Information Technology Department	37,274,618	81.8	45,053,733	104.0	70,230,482	104.0	25,176,749	55.9%
General Services Department	18,432,689	88.0	18,057,793	94.0	18,441,208	94.0	383,415	2.1%
Procurement Office	2,407,048	23.4	3,388,073	35.0	3,677,370	35.0	289,297	8.5%
Office of Supplier Diversity & Inclusion	1,406,957	9.3	1,378,288	9.0	1,414,076	9.0	35,788	2.6%
Totals	\$ 66,183,888	261.5	\$ 75,076,856	306.0	\$ 101,455,064	306.0	\$ 26,378,208	35.1%

# FINANCE DEPARTMENT

The Finance Department maintains the fiscal integrity of the Commission and helps ensure that the available resources are efficiently allocated and productively used to provide value to Commission customers at the lowest possible price. The Department, led by the Chief Financial Officer, is comprised of the Retirement, Revenue, Accounting, Disbursements and Budget Divisions.

### **Mission Statement**

To ensure the financial sustainability and fiscal integrity of the Commission by providing leadership and guidance on financial services and activities to a wide range of stakeholders in an ethical and responsible manner.

#### **Budget Summary**

	FISCAL YE	CAR 2017	FISCAL YI	EAR 2018	FISCAL YE	AR 2019	2018 - 2	2019	
Organizations	ACTU	JAL	APPRO	<b>VED</b>	PROPO	SED	VARIANCE		
	Amount	Workyears	Amount	Workyears	Amount	Workyears	Dollars	Percent	
Office of the Chief Financial Officer	\$ 800,867	3.1	\$ 1,248,785	4.0	\$ 1,246,298	4.0	\$ (2,487)	-0.2%	
Retirement Division	802,930	6.0	864,145	6.0	906,998	6.0	42,853	5.0%	
Revenue Division	1,396,424	13.8	1,465,995	14.0	1,514,526	14.0	48,531	3.3%	
Accounting Division	1,299,112	13.6	1,344,480	17.0	1,634,416	17.0	289,936	21.6%	
Disbursements Division	1,323,560	13.3	1,239,991	14.0	1,286,818	14.0	46,827	3.8%	
Budget Division	1,039,683	9.2	1,035,573	9.0	1,102,872	9.0	67,299	6.5%	
Totals	\$ 6,662,576	59.0	\$ 7,198,969	64.0	\$ 7,691,928	64.0	\$ 492,959	6.8%	

### **Explanation of Major Variances**

None

# FINANCE DEPARTMENT (Continued)

## Highlights

- WSSC successfully retained its AAA bond rating from all three major credit rating agencies in the fall of 2017.
- The Commission successfully issued \$459.25 million in GO Bonds in FY'17 with an interest rate of (True Interest Cost) 3.303% which was 60 basis points below the 10 Year historical average of the 30 Year Municipal Market Data (MMD) Index for AAA Credits.
- \$299.3 million in GO bonds were refunded for a total savings of \$16.7 million.
- In April 2017, the Commission completed its first comprehensive Cost of Service analysis in over 25 years.
- Twenty-six public meetings were conducted to explain the Rate Study, alternative rate structures, and potential bill impacts. These meetings were attended by nearly 1,500 WSSC customers.
- WSSC was presented with the GFOA Distinguished Budget Presentation award for the 23<sup>rd</sup> consecutive year.
- Strong investment performance throughout FY'17 and the first half of FY'18 resulted in asset increases totaling \$125 million for the Pension fund and \$39 million for the other post-employment benefits (OPEB) fund.

# OFFICE OF THE CHIEF FINANCIAL OFFICER

The Office of the Chief Financial Officer is responsible for maintaining the fiscal integrity of the Commission through leadership, oversight, and management of the Finance Department, keeping the Commission on a solid financial footing.

### **Budget Summary**

	FISCAL YEAR 2017 ACTUAL				FISCAL YE	AR 2018	]	FISCAL YE	AR 2019		2018 - 2	019
					APPRO	VED	PROPOSED				VARIAN	NCE
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$	370,699	3.1	\$	446,085	4.0	\$	443,598	4.0	\$	(2,487)	-0.6%
All Other		430,168			802,700			802,700			-	0.0%
Totals	\$	800,867	3.1	\$	1,248,785	4.0	\$	1,246,298	4.0	\$	(2,487)	-0.2%

## **Explanation of Major Variances**

None

### **Core Activities:**

<u>Grants Administration & Capital Funding</u> – This activity administers Maryland Water Quality (MWQ) loans and grant monies received from the Environmental Protection Agency and the Maryland Department of the Environment. The office is also responsible for all efforts associated with Bond and Note operations, and MWQ loan administration.

## **RETIREMENT DIVISION**

The Retirement Division is responsible for administering the WSSC Employees' Retirement Plan for employees and retirees in accordance with the Plan and Internal Revenue Service regulations. The Division also supports the Plan's Board of Trustees in managing and investing Plan assets, and is responsible for investing the Plan's available funds in accordance with State laws.

### **Budget Summary**

	FISCAL YEAR 2017 ACTUAL				FISCAL YE	AR 2018	]	FISCAL YE	AR 2019	2018 - 2	019
					APPRO	VED		PROPO	SED	VARIAN	VCE
Category		Actual	Workyears	Budget		Workyears		Budget	Workyears	Dollar	Percent
Salaries & Wages	\$	659,192	6.0	\$	650,645	6.0	\$	693,498	6.0	\$ 42,853	6.6%
All Other		143,738			213,500			213,500		-	0.0%
Totals	\$	802,930	6.0	\$	864,145	6.0	\$	906,998	6.0	\$ 42,853	5.0%

### **Explanation of Major Variances**

None

### **Core Activities**

<u>Retirement Administration</u> – This activity administers the WSSC's Employees' Retirement Plan by providing retirement benefits counseling for employees and processing monthly annuity payments to retirees in accordance with the Plan and Internal Revenue Service regulations.

Investment Operations - This activity invests the Commission's funds in accordance with Maryland law.

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Actuarial valuations for Employees' Retirement Plan and Other Post-Employment	2	1	2	1
Retirement workshops conducted	3	3	3	3
Reports on the Employees' Retirement Plan for the Board of Trustees prepared	9	9	9	9

# **REVENUE DIVISION**

The Revenue Division is responsible for receiving, processing, depositing and recording all funds received by the Commission, in an accurate and timely manner. The Division also recovers the WSSC's construction and related financing costs for non-program size water and sewer lines by assessing Front Foot Benefit Charges (FFBC) as outlined by the Annotated Code of Maryland.

### **Budget Summary**

	FISCAL YEAR 2017			FISCAL YE	AR 2018		FISCAL YE	AR 2019	2018 - 2019			
	A	CTUAL		APPRO	VED		PROPO	SED		NCE		
Category	Actual Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent		
Salaries & Wages	\$ 1,081,	788 13.8	\$	1,084,991	14.0	\$	1,133,526	14.0	\$	48,535	4.5%	
All Other	314,	636		381,004			381,000			(4)	0.0%	
Totals	\$ 1,396,	424 13.8	\$	1,465,995	14.0	\$	1,514,526	14.0	\$	48,531	3.3%	

### **Explanation of Major Variances**

None

### **Core Activities**

<u>Revenue Operations</u> – This activity includes processing, depositing and recording all revenue received by the Commission, including payments for water and sewer bills, billed work invoices, grants, permits, and other miscellaneous revenue.

<u>Assessments Preparation and Services</u> – This activity identifies properties within Montgomery and Prince George's Counties that have newly constructed water and/or sewer mains, completed within the prior calendar year, to determine FFBC assessments. In addition, property usage reclassifications are identified, evaluated and recorded.

# **REVENUE DIVISION** (Continued)

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Water and sewer bills processed	2,090,300	2,106,100	2,100,000	2,100,500
Total money processed	\$750,000,00	\$845,000,00	\$785,000,000	\$800,000,000
Percentage of bills processed within 24 hours of receipt	99.8%	99.8%	99.5%	99.5%
Percentage of bills processed without errors	99.9%	99.9%	99.9%	99.9%
Cash receipts processed	3,420	3,470	3,600	3,500
Petty cash vouchers processed	980	950	825	900
Petty cash replenishments	70	87	68	90
Assessments levied	362	382	275	325
New assessment notices generated	327	337	235	290
Reclassification notices generated	35	45	40	35
Plats, splits, and combinations processed	700	630	650	635
Mainline contracts released for service	66	84	60	70
Deeds Stamped - Acquisitions, Condemnations, and Redemptions	145	217	100	150
Development Services contract reviews	50	59	55	55

# **ACCOUNTING DIVISION**

The Accounting Division is responsible for maintaining the financial books and records of the Commission and preparing financial statements that fairly present the fiscal position of the Commission's debt service and health care records.

### **Budget Summary**

	FISCAL YEAR 2017 ACTUAL				FISCAL YE	AR 2018		FISCAL YE	AR 2019	2018 - 2019			
					APPRO	VED		PROPO	SED		VARIAN	NCE	
Category		Actual Workyears			Budget	Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$	1,248,940	13.6	\$	1,322,580	17.0	\$	1,612,416	17.0	\$	289,836	21.9%	
All Other		50,172			21,900			22,000			100	0.5%	
Totals	\$	1,299,112	13.6	\$	1,344,480	17.0	\$	1,634,416	17.0	\$	289,936	21.6%	

### **Explanation of Major Variances**

None

### **Core Activities**

<u>General Ledger</u> – This activity maintains the Commission's books and records in a standard that allows the reporting of its operations and financial conditions in accordance with Generally Accepted Accounting Principles (GAAP).

<u>Research, Special Handling, and Special Studies</u> – This activity performs special analyses and studies on both regular and as-needed bases to support rates, fees, and charges calculations ensuring that Commission decisions and policies are based on accurate data and reliable financial information. In addition, it tests, implements and enhances information technology initiatives.

<u>Capital Assets</u> – This activity maintains, monitors, tracks, analyzes and reports on water and sewer lines, water distribution, wastewater collection, multi-purpose facilities, capital equipment and the Commission's vehicle fleet.

<u>Invoicing and Delinquent Accounts</u> – This activity compiles Commission reimbursable costs, prepares invoices and monitors collections. Billings include damages to Commission facilities, citations, special cost sharing arrangements, fire hydrant meter leases, and final accounting for developer projects.

# ACCOUNTING DIVISION (Continued)

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Internal financial statements prepared	11	11	11	11
Operational reports provided	280	276	275	275
Audited financial statements prepared	1	1	1	1
Uniform financial statements prepared	1	1	1	1
Account code data maintained	1	1	1	1
Mass allocations (overhead rates) performed	12	12	12	12
U.S. Bureau of Census surveys completed	1	1	1	1
Moveable assets tracked	22,323	24,346	21,000	23,000
House Connection Cost Studies completed	1	1	1	1
Cash monitoring analyses prepared	12	12	12	12
Returned items processed (water and sewer service)	7,385	7,849	7,500	7,900
Customer bankruptcy adjustments completed	466	452	500	500
Claims reimbursement requests processed	49	49	50	50
State fuel usage reports prepared & audit trail maintained for State of Maryland	12	12	12	12
Monthly and annual antennae lease collections	310	197	310	310
Fire hydrant meter lease reconciliations prepared	862	870	900	900
Invoices processed	1,056	923	1,150	1,050
Reconcile fuel usage data	12	12	12	12

# DISBURSEMENTS DIVISION

The Disbursements Division maintains and processes all the Commission's disbursements, including payroll. In addition, the Division maintains and reconciles the Commission's debt service and health care records.

### **Budget Summary**

	FISCAL YEAR 2017 ACTUAL				FISCAL YE	AR 2018	]	FISCAL YE	AR 2019	2018 - 2	019
					APPRO	VED		PROPO	SED	VARIAN	NCE
Category		Actual	ctual Workyears		Budget	Workyears		Budget	Workyears	Dollar	Percent
Salaries & Wages	\$	1,141,726	13.3	\$	1,111,791	14.0	\$	1,158,618	14.0	\$ 46,827	4.2%
All Other		181,834			128,200			128,200		-	0.0%
Totals	\$	1,323,560	13.3	\$	1,239,991	14.0	\$	1,286,818	14.0	\$ 46,827	3.8%

### **Explanation of Major Variances**

None

### **Core Activities**

<u>Accounts Payable</u> – This activity processes invoices; generates disbursement checks; makes electronic payments; and prepares and maintains detailed note, bond principal, and interest expense records.

<u>Maintenance of Debt Service Records</u> – This activity maintains and reconciles the Commission's debt service schedules and tables, and prepares debt service information booklets.

<u>Health, Dental and Other Benefits Accounting</u> – This activity maintains and reconciles the Commission's health care and dental plans' financial records.

<u>Bank Account Reconciliations</u> – This activity prepares timely reconciliations of all Commission checking, collection, general receiving, disbursing, and payroll bank accounts. It also processes approved travel advances, ensures timely travel expense accounting, and verifies travel policy compliance.

<u>Payroll Processing</u> – This activity processes bi-weekly payrolls including: collecting, editing and reviewing payroll activity; complying with all federal and state regulations; implementing appropriate deductions; handling direct deposits; preparing W-2s; preparing applicable journal entries; and maintaining the Commission's vendor database.

# DISBURSEMENTS DIVISION (Continued)

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
	<b>51 0</b> 04		<b>53</b> 000	<b>72</b> 000
Payroll checks and direct deposit statements prepared	51,284	51,467	52,000	52,000
W-2 forms prepared	1,815	1,817	1,900	1,900
Payroll / Levies attachments processed	4,675	2,926	4,700	4,000
Invoices processed, including construction contract payments and consultants	34,777	38,946	35,000	40,000
Corporate credit card transactions processed	11,764	12,127	12,000	13,000
Checks disbursed, ACH and EFT payments processed	10,088	11,519	10,000	11,000
Bank reconciliations performed	156	156	156	156

## **BUDGET DIVISION**

The Budget Division is responsible for formulating, preparing, justifying and administering the Commission's Operating and Capital Budgets, and the six-year Capital Improvements Program (CIP), in accordance with Maryland State law. The Division forecasts the impacts of budget and CIP decisions, provides staff support to the County Spending Affordability Groups, and prepares the monthly status report on the Commission's budget performance.

### **Budget Summary**

	FISCAL YEAR 2017 ACTUAL				FISCAL YE	AR 2018	FISCAL YE	AR 2019	2018 - 2019			
					APPRO	VED	PROPO	SED		VARIAN	NCE	
Category		Actual	Workyears	Budget		Workyears	Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$	905,038	9.2	\$	881,577	9.0	\$ 916,776	9.0	\$	35,199	4.0%	
All Other		134,645			153,996		186,096			32,100	20.8%	
Totals	\$	1,039,683	9.2	\$	1,035,573	9.0	\$ 1,102,872	9.0	\$	67,299	6.5%	

### **Explanation of Major Variances**

None

### **Core Activities**

<u>Budget and CIP Preparation and Administration</u> – This activity prepares and transmits a proposed capital budget by October 1<sup>st</sup> and an operating budget by March 1<sup>st</sup> of each year to both counties. Preparation includes developing assumptions, workload projections, guidance policies, project costs and expenditure timelines, procedures and formats, performance measures, and analyzing the results, while maintaining relationships with the counties regarding budgetary and fiscal policies. The budgets are presented to the General Manager, Commissioners, and County staffs.

<u>Financial Planning and Studies</u> – This activity prepares long-range financial policies, conducts special studies and analyses including those driven by government mandates, prepares the Commission's Monthly Status Report, and provides support to the Spending Affordability Group.

# BUDGET DIVISION (Continued)

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Proposed and Approved budget documents prepared for public distribution	8	8	8	8
Monthly Status Reports prepared	10	10	10	10
Status of Employment Reports prepared	26	12	26	12
Spending affordability work sessions conducted	2	2	2	2
Six-Year Financial Forecasts completed	24	10	10	12
System Development Charge annual reports prepared	1	1	1	1
Bond rating briefings conducted	6	3	3	3
State and federal grant and loan applications prepared	2	3	2	2

# INFORMATION TECHNOLOGY DEPARTMENT

The Information Technology (IT) Department provides information technology support services and resources (hardware, software, and communications) to enhance customer service, to improve operational efficiencies, and to reduce overall operating costs. The IT Department, led by the Chief Information Officer, is comprised of the following Divisions: Information Technology Infrastructure & Operations, Governance, and Applications & Development Divisions.

### **Mission Statement**

To provide fully-integrated information technology solutions for the Commission to service its customers more effectively and efficiently.

### **Budget Summary**

	FISCAL YE	AR 2017		FISCAL YE	AR 2018		FISCAL YE	AR 2019	2018 - 2019		
Organizations	ACTU	AL		APPROVED			PROPO	SED		VARIA	NCE
	Amount	Workyears		Amount	Workyears		Amount	Workyears		Dollars	Percent
Office of the Chief Information Officer	\$ 14,388,614	8.7	\$	9,666,938	13.0	\$	5,441,324	12.0	\$	(4,225,614)	-43.7%
IT Infrastructure & Operations Division	10,275,292	41.7		10,263,452	49.0		10,891,244	38.0		627,792	6.1%
IT Governance Division	6,937,116	5.6		19,921,130	8.0		25,401,648	13.0		5,480,518	27.5%
IT Applications & Development Division	5,673,596	25.8		5,202,213	34.0		28,496,266	41.0		23,294,053	447.8%
Totals	\$ 37,274,618	81.8	\$	45,053,733	104.0	\$	70,230,482	104.0	\$	25,176,749	55.9%

### **Explanation of Major Variances**

The FY'19 Proposed IT Budget is approximately 56% greater than the FY'18 Approved Budget. This increase is due to costs associated with Project Cornerstone, an organizational and technology initiative centered around the replacement of WSSC's Customer Service and Information System (CSIS) with a new Customer to Meter (C2M) application.

### Highlights

• The Project Cornerstone initiative will improve WSSC's ability to deliver leading customer service across all customer interactions. This initiative includes a new C2M application which will handle every aspect of the customer lifecycle, from service connection to payments processing, promising to improve processes and performance while reducing operating costs.

# OFFICE OF THE CHIEF INFORMATION OFFICER

The Office of the Chief Information Officer develops, maintains, and supports the IT Strategic Plan while assessing technology solutions and implementation priorities to meet the Commission's long-term business needs. The Office is also responsible for IT security and risk management functions and for providing governance over IT policies, procedures and project management best practices.

### **Budget Summary**

	FISCAL YEAR 2017			FISCAL YE	AR 2018	FISCAL YEAR 2019				2018 - 2019		
	ACTUAL			APPRO	VED	PROPOSED				VARIANCE		
Category	Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$ 982,334	8.7	\$	1,310,051	13.0	\$	1,342,524	12.0	\$	32,473	2.5%	
Services	8,161,976			6,965,500			3,220,000			(3,745,500)	-53.8%	
Professional Services	5,120,731			1,235,000			600,000			(635,000)	-51.4%	
All Other	123,573			156,387			278,800			122,413	78.3%	
Totals	\$ 14,388,614	8.7	\$	9,666,938	13.0	\$	5,441,324	12.0	\$	(4,225,614)	-43.7%	

### **Explanation of Major Variances**

The FY'19 Proposed Budget is approximately 44% less than the FY'18 Approved Budget due to reorganization of the Department, realigning responsibilities to better serve customers and reallocating funds within the IT Department accordingly.

## **Core Activities**

<u>IT Security</u> – This activity involves managing and developing the strategic direction for WSSC's enterprise information technology security framework and activities. It encompasses all IT projects or initiatives directly supporting the Commission's cyber security programs.

# **INFRASTRUCTURE & OPERATIONS DIVISION**

The Infrastructure & Operations Division is responsible for the day-to-day leadership and direction for all operational work efforts. This includes data center operations, voice/data/video networks, operating system hardware/software and computer infrastructure, and customer service/help desk operations. In addition, this Division is responsible for planning, managing and operating complex IT systems to ensure system function, availability, and performance.

	FISCAL YE ACTU		FISCAL YE APPRC		FISCAL YE PROPO		2018 - 2019 VARIANCE		
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent	
Salaries & Wages	\$ 4,219,231	41.7	\$ 5,096,844	49.0	\$ 3,964,944	38.0	\$ (1,131,900)	-22.2%	
Services	1,034,522		586,996		4,125,000		3,538,004	602.7%	
Professional Services	2,753,174		1,599,804		500,000		(1,099,804)	-68.7%	
Telephone & Communications	1,637,580		2,565,700		2,000,000		(565,700)	-22.0%	
All Other	630,785		414,108		301,300		(112,808)	-27.2%	
Totals	\$ 10,275,292	41.7	\$ 10,263,452	49.0	\$ 10,891,244	38.0	\$ 627,792	6.1%	

## **Budget Summary**

## **Explanation of Major Variances**

The FY'19 Proposed Budget is approximately 6% greater than the FY'18 Approved Budget due to reorganization of the Department. The former Information Technology Network Infrastructure & Data Center Division was incorporated into the Infrastructure & Operations Division.

### **Core Activities**

<u>IT Customer Support Ops</u> – This activity supports the Commission's information technology users through the IT Solution Center (ITSC) and platform technologies. ITSC is responsible for monitoring, maintaining and supporting all Commission desktop, laptop and mobile workforce initiatives and operations. Platform technologies are primarily responsible for the Commission's server and storage infrastructure. This includes assessing, implementing, and maintaining server and storage technologies; and developing a strategic plan to ensure the stability and availability of these foundational elements.

# **INFRASTRUCTURE & OPERATIONS DIVISION** (Continued)

<u>Network Infrastructure & Data Center Ops</u> – This activity provides day-to-day oversight and management of the Commission's data centers, mainframe operations, data network, and telecommunications infrastructure. This includes management of a 24/7/365 mission-critical data center and infrastructure operation; and oversight of related infrastructure activities throughout the entire product lifecycle, from requirements gathering through implementation, and to all subsequent on-going production and on-call support.

# **GOVERNANCE DIVISION**

The Governance Division is responsible for developing and operationalizing processes, plans, policies and performance metrics that aid IT in delivering efficient, cost-effective, reliable services that support WSSC's strategic priorities. This responsibility includes project governance (IT Project Management and Enterprise Project Management), business analysis, technical writing, quality assurance and organizational readiness.

### **Budget Summary**

	FISCAL YEAR 2017 ACTUAL			FISCAL YEAR 2018 APPROVED				FISCAL YE PROPO		2018 - 2019 VARIANCE		
Category		Actual	Workyears		Budget	Workyears		Budget Workye			Dollar	Percent
Salaries & Wages	\$	711,522	5.6	\$	1,101,121	8.0	\$	1,353,948	13.0	\$	252,827	23.0%
All Other		6,225,594			18,820,009			24,047,700			5,227,691	27.8%
Totals	\$	6,937,116	5.6	\$	19,921,130	8.0	\$	25,401,648	13.0	\$	5,480,518	27.5%

### **Explanation of Major Variances**

The FY'19 Proposed Budget is approximately 28% greater than the FY'18 Approved Budget due to reorganization of the Department.

## **Core Activities**

<u>IT Quality Assurance</u> – This activity concentrates on the software testing and software quality assurance processes across the Software Development Life Cycle (SDLC). Working in conjunction with the CIO and various development teams to set objectives, scope, and strategies for IT quality assurance at WSSC, critical success factors are identified and various processes and strategies are developed to mitigate those risks through testing, benchmarking, development of a toolkit and methodology.

<u>Systems Acquisitions & Process Engineering</u> – This activity is responsible for managing the identification, specification, and documentation of business area challenges and opportunities, transforming them into feasible business requirements and process improvement blueprints for systems acquisition and implementation within Commission.

# **APPLICATIONS & DEVELOPMENT DIVISION**

The Applications & Development Division is responsible for refining and implementing WSSC's strategic technical vision and leading significant aspects of the Commission's information technology development by fostering innovation, prioritizing technology initiatives, and coordinating the evaluation, deployment and management of current and future technology systems across the organization.

	FISCAL YI ACTU	-	FISCAL YE APPRO		FISCAL YE PROPO		2018 - 2019 VARIANCE		
Category	Actual	Workyears	Budget	Workyears	Budget	Workyears	Dollar	Percent	
Salaries & Wages	\$ 3,269,786	25.8	\$ 4,052,213	34.0	\$ 5,164,566	41.0	\$ 1,112,353	27.5%	
Services	87,373		350,000		13,152,500		12,802,500	3,657.9%	
Professional Services	2,316,297		800,000		10,037,500		9,237,500	1,154.7%	
All Other	140		-		141,700		141,700	100.0%	
Totals	\$ 5,673,596	25.8	\$ 5,202,213	34.0	\$ 28,496,266	41.0	\$ 23,294,053	447.8%	

### **Budget Summary**

## **Explanation of Major Variances**

The FY'19 Proposed Budget is approximately 448% greater than the FY'18 Approved Budget primarily due to Project Cornerstone and the Advanced Metering Infrastructure (AMI) initiatives. In addition, reorganization of the Department realigned responsibilities to better serve customers.

## **Core Activities**

<u>Customer Care Information Systems</u> – This activity supports the mainframe applications of the Customer Service Information System (CSIS), Permit Processing Information System (PPIS), Assessment Information System (AIS), Maintenance Management Information System (MMIS), Fat Oil and Grease (FOG) Program, and Primavera/Analytics.

<u>Innovation & Advanced Analytics</u> – This activity supports the implementation of the Commission-wide IT Strategic Plan for reporting and advanced analytics. This activity is responsible for the research, facilitation, and promotion of IT innovations and advanced analytics; Business Intelligence/enterprise reporting function and back-end data warehousing; along with analytical support to business users to enable strategic use of information across the Commission.

### APPLICATIONS & DEVELOPMENT DIVISION (Continued)

<u>Application & Database Services (ADS)</u> – This activity supports the organization's application and database services, including web application development, and internet and intranet site support. Developers design, update, and maintain web solutions for Commission use, by development of strategies for middle tier and portal architecture, eCommerce, legacy to web migration, system requirements analysis, system design, programming, testing, implementation, and system maintenance.

<u>Geographic Information Systems (GIS)</u> – This activity manages WSSC's map-based enterprise technology solutions. This activity leads projects and initiatives related to GIS application development, custom tools, geodatabase design and implementation, maintenance and update of map databases, coordination of data acquisitions, and development and updates of standards. The GIS Support Section must often work with external teams and collaborate with local, state, and federal resources to strategize the Commission's overall GIS approach; support initiatives to consolidate and centralize data repositories; and research, initiate, and support all GIS-related projects.

# **GENERAL SERVICES DEPARTMENT**

The General Services Department, led by the General Services Director, is comprised of the Fleet and Fuel Services, Support Services, and Materials Management Divisions. The Department is responsible for fleet and fuel services; acquisition and distribution of materials and supplies, ensuring said materials are in compliance with Commission standards; and office services, records management, sustainability services, and space planning.

### **Mission Statement**

To plan, direct, and coordinate the activities of a number of vital support services at the WSSC including fleet management, warehousing and inventory management, mail and messenger services, printing and reprographic services, space planning, and records management.

### **Budget Summary**

	FISCAL YE	AR 2017	FISCAL YE	AR 2018	FISCAL YEAR 2019 PROPOSED				2018 - 2019		
Organizations	ACTU	AL	APPRO	VED					VARIAN	ICE	
	Amount	Workyears	Amount	Workyears		Amount	Workyears		Dollars	Percent	
Office of the Director, General Services	\$ 4,615,646	15.2	\$ 1,315,267	9.0	\$	963,242	6.0	\$	(352,025)	-26.8%	
Support Services Division	-	0.0	3,348,261	11.0		3,821,274	14.0		473,013	14.1%	
Fleet Services Division	7,233,207	45.4	7,081,821	47.0		7,214,116	47.0		132,295	1.9%	
Materials Management Division	6,583,836	27.4	6,312,444	27.0		6,442,576	27.0		130,132	2.1%	
Totals	\$ 18,432,689	88.0	\$ 18,057,793	94.0	\$	18,441,208	94.0	\$	383,415	2.1%	

### **Explanation of Major Variances**

The FY'19 Proposed Budget reflects an increase of approximately 2% over the Approved FY'18 Budget. This increase is primarily attributable to an anticipated increase in postage due to the rate structure change, as well as increased mileage, parking and tolls costs.

### Highlights

- Bar coding technology was implemented at WSSC warehouses in conjunction with new Work Order Management software to increase the efficiency and accuracy of inventory.
- A new standardization policy is being implemented to reduce the number of vehicle models and specifications overall.
- A new Bill Printing solution is being implemented to assist with rate restructure initiatives.

# GENERAL SERVICE DEPARTMENT (Continued)

• A complete space utilization study for all WSSC facilities is being undertaken to identify available or under-utilized space and needs using new space standards. The study will incorporate modern work place trends to maximize existing space and staff retention.

# OFFICE OF THE DIRECTOR, GENERAL SERVICES

The General Services Director oversees the Fleet Services, Support Services, and Materials Management Divisions. This Office is also responsible for providing reprographics, mail services and distribution, office supplies, food and vending services, and asset management of furniture and copy machines.

### **Budget Summary**

	FISCAL YEAR 2017 ACTUAL			FISCAL YEAR 2018 APPROVED				FISCAL YE PROPO		2018 - 2019 VARIANCE			
Category		Actual	Workyears	Budget		Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$	1,181,795	15.2	\$	985,097	9.0	\$	639,642	6.0	\$	(345,455)	-35.1%	
Services		1,288,478			-			-			-	100.0%	
All Other		2,145,373			330,170			323,600			(6,570)	200.0%	
Totals	\$	4,615,646	15.2	\$	1,315,267	9.0	\$	963,242	6.0	\$	(352,025)	-26.8%	

### **Explanation of Major Variances**

None

### **Core Activities**

Management & Administration Activities - This activity manages and supervises the three Divisions in this Department.

<u>General & Administrative Activities</u> – This activity ensures WSSC can successfully discharge its primary responsibilities. This activity has a broad scope, ranging from supervising a fleet of vehicles and equipment (parts and supplies) to warehousing and inventorying, as well as printing and mailing services. It also supports vending and cafeteria services.

# OFFICE OF THE DIRECTOR, GENERAL SERVICES (Continued)

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Mail posted (pieces)	2,468,980	3,016,831	2,650,000	2,650,000
Mail received (pieces)	1,467,998	1,852,081	1,875,000	1,850,000
Movable Assets tagged	473	498	1,500	2,500
Movable Assets inventoried	3,433	1,958	3,500	3,500
Number surplus items disposed of	42	214	500	600
Monies received from the sale of surplus property	N/A	N/A	N/A	50,000
Printing Job Requests	1,313	1,450	3,000	1,500
Copier machine duplications	4,752,110	4,997,161	4,750,000	4,000,000
Color Copies	2,220,679	1,321,544	2,220,679	1,500,000
% of time all daily mail routes completed	95%	95%	95%	95%

# SUPPORT SERVICES DIVISION

The Support Services Division manages office services, including reprographics and mail services, records management, sustainability services and space planning for the Commission.

### **Budget Summary**

	FISCAL YEAR 2017 ACTUAL			FISCAL YEAR 2018 APPROVED				FISCAL YE PROPO		2018 - 2019 VARIANCE		
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$	-	0.0	\$	686,391	11.0	\$	1,044,174	14.0	\$	357,783	52.1%
Services		-			1,135,000			1,235,000			100,000	200.0%
All Other		-			1,526,870			1,542,100			15,230	300.0%
Totals	\$	-	0.0	\$	3,348,261	11.0	\$	3,821,274	14.0	\$	473,013	14.1%

### **Explanation of Major Variances**

None

### **Core Activities**

<u>Office Services</u> – This activity provides printing and reprographic services, mail services and distribution, asset management of furniture and office equipment, and the disposal of surplus property.

<u>Sustainability Services</u> – This activity provides sustainability services for the Commission, which includes space planning, design and greening of infrastructure. The Commission is working towards Leadership in Energy and Environmental Design (LEED) certification for Commission facilities, and lowering the environmental impact of our work.

# FLEET SERVICES DIVISION

The Fleet Services Division provides transportation and work site equipment that is safe and reliable, facilitating the achievement of WSSC's Mission.

#### **Budget Summary**

	FISCAL YEAR 2017			FISCAL YEAR 2018			FISCAL YEAR 2019			2018 - 2019		
	ACTU	AL	APPROVED			PROPOSED			VARIANCE			
Category	Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$ 3,391,716	45.4	\$	3,474,421	47.0	\$	3,545,316	47.0	\$	70,895	2.0%	
Services	1,321,165			840,000			840,000			-	300.0%	
Gasoline & Diesel Oil	1,338,951			1,639,000			1,639,000			-	400.0%	
All Other	1,181,375			1,128,400			1,189,800			61,400	500.0%	
Totals	\$ 7,233,207	45.4	\$	7,081,821	47.0	\$	7,214,116	47.0	\$	132,295	1.9%	

### **Explanation of Major Variances**

None

#### **Core Activities**

<u>Fuel Services</u> – This activity manages the automated gasoline and diesel fuel systems for the Commission, and provides fuel system parts for vehicles and equipment. This includes maintenance of fuel dispensing data and transaction records for all automated fuel sites in accordance with state, local and federal regulations.

<u>Management of Fleet Parts and Supplies</u> – This activity involves the purchase and management of fleet parts, supplies, and garage equipment. It ensures preventative maintenance and routine repairs are performed on the WSSC's fleet of vehicles and equipment in a timely and efficient manner.

<u>Fleet Systems and Data Management</u> – This activity tracks fleet operations using TEAMS and the Oracle Business Intelligence Suite, providing metrics and performance measures which can be accessed in real time. This data provides greater detail and feedback for day-to-day operations and management decisions.

## FLEET SERVICES DIVISION (Continued)

<u>Fleet Services</u> – This activity manages and coordinates services for a 1,740 vehicle and equipment fleet at 6 garage facilities. This is accomplished by performing preventive maintenance, repairs, and road service; operating automated fuel supply sites; processing tag and title applications; planning and acquiring vehicle and equipment replacements; performing emissions inspections; and utilizing efficient fleet management practices.

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Equipment fleet managed (pieces of equipment)	765	770	770	770
Vehicle fleet managed (number of vehicles)	960	974	970	970
Garages/equipment/body shops managed	6	6	6	6
Complete parts inventories conducted	12	12	12	12
Scheduled preventive maintenance completed on vehicles and equipment	3,369	3,231	3,000	3,000
Other (non-preventative maintenance) vehicle and equipment repairs	4,553	4,562	4,500	4,500

### **Activity Indicators**

## MATERIALS MANAGEMENT DIVISION

The Materials Management Division maintains a supply system for all materials used in the operation of the Commission's water and sewer systems, ensures materials are manufactured to Commission standards, and provides support services to all Commission organizational units.

	FISCAL YEAR 2017		]	FISCAL YEAR 2018			FISCAL YEAR 2019			2018 - 2019		
	ACTUAL		APPROVED			PROPOSED			VARIANCE		NCE	
Category	Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent	
Salaries & Wages	\$ 1,894,186	27.4	\$	1,796,444	27.0	\$	1,926,576	27.0	\$	130,132	7.2%	
Services	1,425,742			1,501,000			1,501,000			-	500.0%	
Water Meters	2,584,584			2,823,900			2,823,900			-	600.0%	
All Other	679,324			191,100			191,100			-	700.0%	
Totals	\$ 6,583,836	27.4	\$	6,312,444	27.0	\$	6,442,576	27.0	\$	130,132	2.1%	

#### **Budget Summary**

#### **Explanation of Major Variances**

None

#### **Core Activities**

<u>Warehousing</u> – This activity involves administrative and physical functions associated with the storage and distribution of goods and materials required to support construction, maintenance, and repair operations. These functions include receipt, identification, inspection, cycle counting, storage, and issuance of material to customers, both internal employees and external construction contractors. Most warehousing functions are performed in an automated environment with the assistance of Oracle E-Business Suite. Security measures, safety programs, and performance metrics are continuously monitored to ensure the efficient operation of all warehousing-related programs.

<u>Materials Management</u> – This activity involves the acquisition and management of materials stocked at the Commission's warehouses, and used by employees and contractors in the maintenance and repair of the distribution and collection systems. This includes receiving, storing, and issuing materials; inspecting, testing and evaluating materials; developing new material specifications; and certifying the manufacturing processes, materials, and plants. Funding for the purchase of water meters is included in this activity.

# MATERIALS MANAGEMENT DIVISION (Continued)

# **Activity Indicators**

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Stock quantities issued	960,274	853,224	1,000,000	1,000,000
Stock line items received	4,736	5,434	6,000	6,000
Supply contracts managed	75	75	75	75

# **PROCUREMENT OFFICE**

#### **Mission Statement**

To provide unified Supply Chain Management functions that ensure integrity and fairness, with centralized responsibility for oversight of solicitation, vendor selection, negotiation, award, contract administration, and reporting.

#### **Budget Summary**

	FISCAL YEAR 2017			FISCAL YEAR 2018			FISCAL YEAR 2019			2018 - 2019		
	ACTUAL		APPROVED		PROPOSED		VARIANCE		NCE			
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$	2,054,784	23.4	\$	3,143,177	35.0	\$	3,262,470	35.0	\$	119,293	3.8%
All Other		352,264			244,896			414,900			170,004	700.0%
Totals	\$	2,407,048	23.4	\$	3,388,073	35.0	\$	3,677,370	35.0	\$	289,297	8.5%

### **Explanation of Major Variances**

None

### **Office Description and Core Activities**

The Procurement Office, led by the Chief Procurement Officer, is responsible for acquiring all necessary commodities, supplies, and services, including professional services, necessary to support Commission operations and functions, and to oversee the bid and award process for all construction contracts.

<u>Procurement Services</u> – This activity involves purchasing all commodities, supplies, equipment, and services necessary to support the WSSC's operations, maintenance, and staff functions at the lowest possible price through public competitive bidding. This is accomplished through competitive solicitation processes which result in the award of contracts which are effectuated by purchase orders using Master and Blanket Purchase Orders, Requests for Proposal, Invitations for Bid, multi-year contracts, and procurement cards for small dollar item purchases. Also included in this activity are all contracting functions, from Request to Advertise through Notice to Proceed; and maintenance of a complete contract file for all contracts regardless of contracting method.

# **PROCUREMENT OFFICE** (Continued)

<u>Operations and Administration</u> – This activity involves implementing, maintaining and administering programs for the WSSC Supplier Portal, Procurement Card Program, and verification of vendor bonding and insurance. This activity also involves risk management and operations analysis; monitoring and reporting of suppliers' sub-contracting participation on contracts; and through participation in outreach events with OSDI to provide information to perspective suppliers.

<u>Contracting Officer Representatives (CORs)</u> – This activity involves CORs who are responsible for managing all pre-award and postaward contracting functions, including procurement forecasting, Statement(s) of Work (SOW) and specification development support, change orders, task orders and cure notices. CORs are also responsible for ensuring suppliers meet the performance requirements and the policies and procedures of a contract in terms of quality, quantity, schedule and cost/price.

<u>Strategic Sourcing</u> – This activity evaluates and manages current and potential sourcing opportunities; builds sustainable supplier relationships; formulates and implements actions, plans and processes for critical commodities or supply networks. This is accomplished by utilizing a fact-based and data driven approach to drive process improvement and to reduce the total cost of operations. This activity also leads the Commission in the development of cross functional teams which support the development and implementation of sourcing strategies.

WORKLOAD DATA	FY'16 ACTUAL	FY'17 ACTUAL	FY'18 APPROVED	FY'19 PROPOSED
Purchase Orders awarded	1.020	1,230	1,000	1,230
Invitations for Bid/Requests for Proposal issued	200	144	200	144
Notices to Proceed issued (number of contracts)	361	797	350	800

#### **Activity Indicators**

# **OFFICE OF SUPPLIER DIVERSITY & INCLUSION**

#### **Mission Statement**

To create an inclusive purchasing environment while building sustainable relationships, expanding opportunities and cultivating growth of Small, Local and Minority Business Enterprises (SLMBE).

#### **Budget Summary**

	FISCAL YEAR 2017		]	FISCAL YEAR 2018			FISCAL YEAR 2019			2018 - 2019		
	ACTUAL		APPROVED		PROPOSED		VARIANCE		NCE			
Category		Actual	Workyears		Budget	Workyears		Budget	Workyears		Dollar	Percent
Salaries & Wages	\$	772,320	9.3	\$	778,988	9.0	\$	814,776	9.0	\$	35,788	4.6%
All Other		634,637			599,300			599,300			-	0.0%
Totals	\$	1,406,957	9.3	\$	1,378,288	9.0	\$	1,414,076	9.0	\$	35,788	2.6%

#### **Explanation of Major Variances**

None

#### **Office Description and Core Activities**

The Office of Supplier Diversity & Inclusion (OSDI) assists with the development of the Commission's Minority Business Enterprise (MBE) and SLBE policies. The Office seeks products and services from minority and women-owned businesses to ensure that the Commission has a vendor base that is reflective of the community it serves.

<u>Small, Local and Minority Business Enterprise</u> – This activity plans, manages, coordinates and monitors the Commission's MBE and SLBE Programs, in accordance with state law.

# FINANCE NON-DEPARTMENTAL

This organization budgets for all payments associated with insurance premiums, Social Security, the WSSC Employees' Retirement Plan, and the health care trust for Other Post Employment Benefits (OPEB). Debt service, along with all bond sales expenses, and bond coupon payment redemption expenses, is also included under this umbrella.

#### **Budget Summary**

	FISCAL YEAR 2017		FISCAL YE		FISCAL YE		2018 - 2019		
	ACTU	AL	APPRO	VED	PROPOSED		VARIA	NCE	
	Amount	Workyears	Amount	Workyears	Amount	Workyears	Dollars	Percent	
Finance Non-Departmental	\$ 43,250,005	-	\$ 52,090,496	-	\$ 53,825,526	-	\$ 1,735,030	3.3%	
Debt Service	253,769,022	-	271,216,000	-	294,348,690	-	23,132,690	8.5%	
Totals	\$ 297,019,027	-	\$ 323,306,496	-	\$ 348,174,216	-	\$ 24,867,720	7.7%	

#### **Explanation of Major Variances**

The FY'19 Proposed Budget is approximately 8% greater than the FY'18 Approved Budget. This increase is primarily attributable to an increase in debt service associated with the FY'19 CIP.

# HUMAN RESOURCES NON-DEPARTMENTAL

This organization budgets for payments associated with Group Life, Accidental Death & Dismemberment, Accident & Sickness, and Workers' Compensation insurance premiums; health care programs; and Maryland Unemployment Insurance.

### **Budget Summary**

	FISCAL YE ACTU		FISCAL YE APPRO		FISCAL YE PROPO		2018 - 2019 VARIANCE	
	Amount	Workyears	Amount	Workyears	Amount	Workyears	Dollars	Percent
Human Resources Non-Departmental	\$ 28,407,088	-	\$ 36,724,900	-	\$ 34,524,900	-	\$ (2,200,000)	-6.0%
Totals	\$ 28,407,088	-	\$ 36,724,900	-	\$ 34,524,900	-	\$ (2,200,000)	-6.0%

#### **Explanation of Major Variances**

The FY'19 Proposed Budget reflects a decrease of \$2.2 million from the Approved FY'18 Budget. This decrease is primarily due to lower healthcare rates negotiated with the insurance providers resulting in lower healthcare cost to the Commission.

APPENDICES

### A PROFILE OF THE WASHINGTON SUBURBAN SANITARY COMMISSION AND ITS SERVICE AREA

The Washington Suburban Sanitary Commission (WSSC) and the Washington Suburban Sanitary District (WSSD) were created in 1918 by an Act of the Maryland General Assembly under Article 29 of the Annotated Code of Maryland and recodified into Division II of the Public Utilities Article of the Annotated Code of Maryland in 2010. The WSSC operates as a public corporation and provides water supply and sewage disposal services for Montgomery and Prince George's Counties in Maryland. The area initially incorporated within the Sanitary District has been expanded by legislative enactments to its present boundaries and includes almost 1,000 square miles within Montgomery and Prince George's Counties. The Sanitary District now encompasses nearly all of the two counties except for the municipalities of Bowie, Rockville, and Poolesville, and rural areas in northeast Montgomery County and southeast Prince George's County.

The WSSC, which manages the Sanitary District, is a corporate body governed by six members who are required to be residents of the WSSD. Three Commissioners are appointed by the County Executive of Montgomery County, and three Commissioners are appointed by the County Executive of Prince George's County, subject to confirmation by the respective County Councils. The term of office for the Commissioners is four years, with staggered termination dates. The Chair and the Vice Chair of the Commission are elected by their fellow Commissioners and may not be from the same county. These two offices rotate annually between the two counties.

The Commission currently operates two water filtration plants, three raw water reservoirs, and six wastewater treatment plants, in addition to sharing the use of the regional Blue Plains Wastewater Treatment Plant (WWTP) in the District of Columbia and the Mattawoman WWTP in Charles County, Maryland.

#### Water Sources and Filtration Facilities

Two major sources—the Patuxent and Potomac Rivers—provide raw water for processing and delivery to the Commission's customers. The Patuxent system includes two raw water storage reservoirs, the Triadelphia and T. Howard Duckett reservoirs, which have a combined surface of 1,600 acres and store over 10 billion gallons. These reservoirs feed the Patuxent Water Filtration Plant (WFP) in northern Prince George's County, with a production capacity of 72 million gallons per day (MGD). The Commission owns 5,500 acres of watershed land adjoining the two reservoirs and maintains this property under strict soil conservation control. The Potomac WFP withdraws water from the natural flow of the Potomac River near Watts Branch in western Montgomery County. The effective filtration capacity of this plant is 250 MGD. An additional Potomac source, the Jennings Randolph Reservoir 200 miles upstream from the Potomac WFP intake, is operated by the U.S. Army Corps of Engineers. This reservoir has 13 billion gallons of storage for water supply that is shared by the District of Columbia, the Fairfax County Water Authority, and the WSSC, and 17 billion for river quality and flow. Little Seneca Lake, on a tributary of the Potomac, provides nearly 4 billion gallons of water supply storage that is shared by the District of Columbia, the WSSC.

The Commission maintains a water distribution network that includes approximately 5,600 miles of water mains. There are filtered water storage structures located at strategic points along this network to assist in meeting peak customer demands and fire protection requirements. These structures have a combined gross storage capacity of more than 193 million gallons.

#### **Wastewater Treatment Facilities**

The Commission operates six wastewater treatment plants with a total capacity of 95 million gallons per day (MGD): Piscataway, Western Branch, Parkway, Seneca, Damascus, and Hyattstown. The majority of the sewage from the Sanitary District flows to the Blue Plains Wastewater Treatment Plant (WWTP) in Washington, D.C. Blue Plains, which is operated by the District of Columbia Water and Sewer Authority, is an advanced wastewater treatment facility with a treatment capacity of 370 MGD. The WSSC is allocated 169 MGD of Blue Plains' capacity under a regional agreement. In return, the Commission pays a share of Blue Plains' operating and capital expenses. The Commission has also purchased one-fifth of the capacity of the Mattawoman WWTP (operated by Charles County, Maryland). Wastewater is conveyed through the Commission's system of sewage pipelines, which includes approximately 5,500 miles of sewers. These conveyance systems employ 49 pumping stations.

In FY'17, the Blue Plains WWTP received 39.1 billion gallons of sewage from the Commission's system, while the following flows were handled during the year at Commission-operated facilities: Piscataway Plant, 8.7 billion gallons; Western Branch Plant, 7.3 billion gallons; Parkway Plant, 2.2 billion gallons; Seneca Plant, 5.1 billion gallons; and other smaller plants, 0.3 billion gallons.

In recent years, as part of the efforts to improve water quality in the Chesapeake Bay, the Commission has emphasized the expansion and improvement of its wastewater treatment facilities to serve the current and future needs of the WSSC's bi-county service area. Every plant receiving wastewater from the Commission's system has been equipped to provide advanced treatment.

Fiscal Year	Estimated Population Served	Miles of Water Mains	Water Connections	Water Delivered (million gallons)	Average MGD	Miles of Sewer Mains	Sewer Connections
2017	1,759,000	5,624	460,891	59,532	163.1	5,476	434,586
2016	1,774,000	5,586	457,393	59,933	164.2	5,451	431,589
2015	1,765,000	5,552	453,004	59,469	162.9	5,424	428,279
2014	1,757,000	5,521	449,333	58,603	160.6	5,402	425,445
2013	1,749,000	5,494	446,453	58,830	161.2	5,376	423,110

#### Historical Water and Sewerage Service Statistics

#### **Customer Characteristics**

As of December 2017, the Commission had 453,802 active customer accounts. The vast majority of these (94.4%) are residential users, another 4.8% are commercial and industrial customers, and 0.8% are government facilities. Nearly three quarters of the Commission's customer accounts are single-family residences.

## WSSC Active Customer Accounts

(As of December 2017)

	Number of Customer Accounts	Percentage of <u>Accounts</u>
Total Customer Accounts	453,802	100.0%
By Type of Customer Residential Commercial and Industrial Government	428,645 21,627 3,530	94.4% 4.8% 0.8%
By Type of Property Single-Family Residence Townhouse General Commercial Garden Apartment Multi-Unit (individually metered) High-Rise Apartment Other	332,976 87,652 21,627 4,264 3,084 470 3,729	73.4% 19.3% 4.8% 0.9% 0.7% 0.1% 0.8%

## Key Characteristics of Montgomery County, Maryland

Lexibility BranchElected Nine-Member County CouncilIncorporated Municipalities19Land Area (square miles)495Population (2016 estimate)1,043,863K-12 Public School Enrollment (2017)159,010Payroll Employment (2016) Government Sector Federal48,068State1,217Local40,478Private Sector Goods-Producing Strie335,588Service-Providing Unclassified35,588Verage Monthly Employment (2017)546,690Average Monthly Employment (2017)546,690Average Unemployment Employees (2017) Holy Cross HealthVerizon Westat Suburban Hospital Henry M. Jackson Foundation for the Advancement of Military Medicine Lockheed MartinMajor Federal Employers (2017) National Institutes of Health National Oceanic & Atmospheric Administration Navial Suport Activity Bethesda (NSAB) National Oceanic & Atmospheric AdministrationNational Institute of Standards & Technology U.S. Nuclear Regulatory Commission U.S. Nuclear Regulatory Commission <b< th=""><th>Form of Government: Executive Branch</th><th>Elected County Executive</th></b<>	Form of Government: Executive Branch	Elected County Executive
Land Area (square miles)495Population (2016 estimate)1,043,863K-12 Public School Enrollment (2017)159,010Payroll Employment (2016)Government SectorGoods-Producing40,478Private Sector336,098Unclassified		
Population (2016 estimate)1,043,863K-12 Public School Enrollment (2017)159,010Payroll Employment (2016) Government Sector Federal State 	Incorporated Municipalities	19
K-12 Public School Enrollment (2017)159,010Payroll Employment (2016) Government Sector Federal Local48,068 1,217 1,217 LocalLocal Private Sector Goods-Producing Service-Providing Unclassified35,588 338,098 1,217TOTAL EMPLOYMENT463,449Average Monthly Employment (2017) Marriott International, Inc. Adventist Health Care Kaiser Foundation Health Plan Medimmune Government Employees Insurance Co. (GEICO) Holy Cross HealthVerizon Westat Subroha Hospital Henry M. Jackson Foundation for the Advancement of Military Medicine Lockheed MartinMajor Federal Employers (2017) National Institutes of Health U.S. Food and Drug Administration Naval Support Activity Bethesda (NSAB) National Oceanic & Atmospheric AdministrationNational Institute of Standards & Technology U.S. Nuclear Regulatory Commission U.S. Department of EnergyPer Capita Income (2016 estimate)\$49,906	Land Area (square miles)	495
Payroll Employment (2016) Government Sector Federal48,068 (48,068) (1,217) (2,024)State Local1,217 (40,478)Private Sector Goods-Providing Unclassified35,588 (338,098) (	Population (2016 estimate)	1,043,863
Government Sector48,068State1,217Local40,478Private Sector35,588Goods-Producing338,098Unclassified	K-12 Public School Enrollment (2017)	159,010
Goods-Producing Service-Providing Unclassified35,588 338,098 	Government Sector Federal State Local	1,217
Average Monthly Employment (2017)546,690Average Unemployment Rate (2017)3.2%Largest Private Employers (2017)VerizonMarriott International, Inc.VerizonAdventist Health CareSuburban HospitalMedimmuneGovernment Employees Insurance Co. (GEICO)Holy Cross HealthVerizonMajor Federal Employers (2017)National Institutes of HealthNational Institutes of HealthNational Institutes of HealthU.S. Food and Drug AdministrationNational Institute of Standards & TechnologyNaval Support Activity Bethesda (NSAB)National Institute of EnergyPer Capita Income (2016 estimate)\$49,906	Goods-Producing Service-Providing	,
Average Unemployment Rate (2017)3.2%Largest Private Employers (2017) Marriott International, Inc. Adventist Health Care Kaiser Foundation Health Plan Medimmune Government Employees Insurance Co. (GEICO) Holy Cross HealthVerizon Westat Suburban Hospital Henry M. Jackson Foundation for the Advancement of Military Medicine Lockheed MartinMajor Federal Employers (2017) National Institutes of Health 	TOTAL EMPLOYMENT	463,449
Largest Private Employers (2017) Marriott International, Inc. Adventist Health Care Kaiser Foundation Health Plan Medimmune Government Employees Insurance Co. (GEICO) Holy Cross HealthVerizon Westat Suburban Hospital Henry M. Jackson Foundation for the Advancement of Military Medicine Lockheed MartinMajor Federal Employers (2017) National Institutes of Health U.S. Food and Drug Administration Naval Support Activity Bethesda (NSAB) National Oceanic & Atmospheric AdministrationNational Institute of Standards & Technology U.S. Nuclear Regulatory Commission U.S. Department of EnergyPer Capita Income (2016 estimate)\$49,906	Average Monthly Employment (2017)	546,690
Marriott International, Inc.VerizonAdventist Health CareWestatKaiser Foundation Health PlanSuburban HospitalMedimmuneGovernment Employees Insurance Co. (GEICO)Holy Cross HealthHenry M. Jackson Foundation for the Advancement ofMajor Federal Employers (2017)National Institutes of HealthU.S. Food and Drug AdministrationNational Institute of Standards & TechnologyNaval Support Activity Bethesda (NSAB)U.S. Nuclear Regulatory CommissionNational Oceanic & Atmospheric AdministrationU.S. Department of EnergyPer Capita Income (2016 estimate)\$49,906	Average Unemployment Rate (2017)	3.2%
National Institutes of Health U.S. Food and Drug Administration Naval Support Activity Bethesda (NSAB) National Oceanic & Atmospheric AdministrationNational Institute of Standards & Technology U.S. Nuclear Regulatory Commission U.S. Department of EnergyPer Capita Income (2016 estimate)\$49,906	Marriott International, Inc. Adventist Health Care Kaiser Foundation Health Plan Medimmune Government Employees Insurance Co. (GEICO)	Westat Suburban Hospital Henry M. Jackson Foundation for the Advancement of Military Medicine
	National Institutes of Health U.S. Food and Drug Administration Naval Support Activity Bethesda (NSAB)	U.S. Nuclear Regulatory Commission
Median Household Income (2016 estimate)\$100,352	Per Capita Income (2016 estimate)	\$49,906
	Median Household Income (2016 estimate)	\$100,352

## Key Characteristics of Prince George's County, Maryland

Form of Government:	
Executive Branch Legislative Branch	Elected County Executive Elected Nine-Member County Council
Incorporated Municipalities	27
Land Area (square miles)	487
Population (2016 estimate)	908,049
K-12 Public School Enrollment (2017)	130,814
Payroll Employment (2016) Government Sector Federal State Local Private Sector Goods-Producing Service-Providing Unclassified	26,568 20,808 41,590 33,629 189,344
TOTAL EMPLOYMENT	311,939
Average Monthly Employment (2017)	485,807
Average Unemployment Rate (2017)	4.1%
Largest Private Employers (2017) United Parcel Service (UPS) MGM National Harbor Marriott International, Inc. University of Maryland Capital Region Health	Verizon Melwood Doctor's Community Hospital Medstar Southern Maryland Hospital Center
Major Federal Employers (2017) Joint Base Andrews Naval Facility Washington U.S. Internal Revenue Service U.S. Census Bureau NASA/Goddard Space Flight Center	National Maritime Intelligence-Integration Office USDA – Beltsville Agricultural Research Center National Oceanic and Atmospheric Administration Adelphi Laboratory Center
Per Capita Income (2016 estimate)	\$33,220
Median Household Income (2016 estimate)	\$75,925

Account Maintenance Fee	A charge on customer water and sewer bills designed to recover the fixed cost of servicing a customer account independent of the amount of water used or sewage generated. The Account Maintenance Fee includes the cost of purchasing and reading meters; processing meter readings and generating, mailing, and collecting bills; and providing customer services. Prior to 1992, these costs were included in the water and sewer rate structure rather than identified and billed as a separate fee.
Accrual	The recognition of revenue or expenses at the time they are earned or incurred, regardless of when the money is received or paid out.
Accumulated Net Revenue	See Fund Balance.
Ad Valorem Tax	A property tax based "according to the value" of the property. Such taxes are levied on real and personal property according to the property's assessed valuation and the tax rate.
Advanced Metering Infrastructure	An automated system that communicates remotely with metering devices to measure, collect and analyze consumption data. The system includes both hardware and software and can provide comprehensive real-time information to both the consumer and the utility.
Applicant	Any firm, corporation, municipality, agency, person, or persons who owns or develops property which requires water or sewer service provided by systems, facilities, or service connections within the Washington Suburban Sanitary District.
Asset Management Program	A multi-year effort to create an organization-wide Asset Management Plan which identifies the infrastructure needs for a 30-year planning period. This information will serve as the basis for future investment decision making and management of water, wastewater, communications, and buildings and grounds infrastructure.
Authorized Workyears	Employee workyears that are funded in the adopted budget and may be filled during the budget year.
Balanced Budget	A financial plan showing estimated or planned revenues equaling expenses.
Billing Factor	The amount of revenue received per 1,000 gallons of water production. Billing Factor = Annual Water & Sewer Revenue ÷Annual Water Production (in thousand gallons).

Biosolids	Solids produced as a byproduct of treating sewage to produce clean water; also referred to as sludge.
Blue Plains	The regional wastewater treatment plant owned and operated by the District of Columbia Water and Sewer Authority. Approximately 65% of the wastewater from the Washington Suburban Sanitary District is treated at Blue Plains. The WSSC shares in the operating and capital costs of Blue Plains in accordance with the terms of a regional agreement signed by the Maryland and Virginia suburbs and the District of Columbia.
Bond	A written promise to pay a sum of money on a specific date at a specified interest rate.
Break/fix	Refers to any interruption to or failure of service that requires immediate attention. In a break/fix situation, the functionality of any automated system, whether hardware or software related, has been altered and must be repaired such that the service is restored.
Capital Budget	The annual request for capital funding for the first year of the Capital Improvements Program including those projects in the Information Only Section, new house connection construction, relocations and major systems contracts, water meter purchases, other engineering contracts, and for the associated administrative and support costs.
Capital Expenditures	An amount spent for the planned purchase of long-term assets (such as filtration/treatment plants and pump stations, storage, joint-use facilities, and equipment upgrades).
Capital Improvements Program	(Also referred to as CIP) The comprehensive presentation of capital project expenditure estimates, funding requirements, capital budget requests, and program data for the construction of all major water and sewerage projects planned by the WSSC over a six-year period.
Capital Project	A WSSC effort involving expenditures and funding for the creation, expansion, renovation, or replacement of major facilities and other assets having relatively long lives. Expenditures within capital projects may include costs of planning, design, land, construction, contract supervision, and associated administrative and support costs.
Capitalized Interest	Interest paid from proceeds of bond sales rather than from other operating revenues.

Consumer Price Index	(Also referred to as CPI) A measure that examines the change in the cost of a fixed basket of consumer goods and services, such as housing, utilities, transportation, food and medical care. The CPI is calculated by taking price changes for each item in the predetermined basket of goods and averaging them; the goods are weighted according to their importance. The CPI is a commonly accepted indicator of inflation, as changes in CPI are used to assess price changes associated with the cost of living.
Cost-of-Living Adjustment	(Also referred to as COLA) A general increase in salaries and wages to wholly or partially offset the adverse effect of inflation on employee compensation.
Cryptosporidium	A microbial contaminant of raw water that can potentially cause chronic or fatal intestinal disorders. In 1993, cryptosporidium was identified as the primary source of an outbreak of water-borne disease in Milwaukee that caused more than 400,000 illnesses and over 100 deaths.
Customer Care & Billing	(Also referred to as CC&B) A complete billing and customer care application that handles every aspect of the customer lifecycle, from service connection to payments processing.
Customer to Meter	(Also referred to as C2M) C2M combines the Customer Care & Billing and the Meter Data Management applications, thus providing a consolidated interface for data management and data capture from multiple sources.
Debt Service	The annual payment of principal and interest on bonded indebtedness.
Development Services Process	(Also referred to as DSP) The process by which the WSSC reviews Applicant's projects that extend the existing water or sewer system. Service to properties reviewed under the process almost always requires the extension of small-diameter subdivision lines, and may involve program-sized pipe, which must be included in the CIP. DSP projects are funded by the Applicant.
Energy Performance Program	(Also referred to as EPP) The program provides for the engineering audit, design and construction necessary to replace and upgrade energy consuming equipment and systems at all major Commission facilities. The program stipulates a reduction in energy usage and costs greater than, or equal to, the annual capital costs to be incurred.

(Continued)

Engineering Support Program (Also referred to as ESP) The consolidation of a diverse group of projects whose unified purpose is to support the extensive water and sewer infrastructure and numerous support facilities that are owned, operated, and maintained by the WSSC. The ESP does not include major projects included in the CIP or projects to serve new development.
Enhanced Nutrient Removal (Also referred to as ENR) Enhanced Nutrient Removal is the next step in the natural technological progression of wastewater treatment processes, starting with primary treatment, through secondary and advanced treatment, then biological nutrient removal, and now enhanced nutrient removal. Biological processes are used to further the removal of total nitrogen to levels as low as 3 mg/L and total phosphorus to 0.3 mg/L or less. The Maryland Department of the Environment (MDE)

Enterprise Resource Planning System (Also referred to as ERP) An automated system that integrates all data and processes of an organization into a unified system. A typical ERP system will use multiple components of computer software and hardware to achieve the integration. A key ingredient of most ERP systems is the use of a unified database to store data for the various system modules. The main benefits of implementing an ERP system are a single base of consistent information, tighter financial controls, ability to automate business processes, consolidation of redundant systems, improved system reliability, and improved long-term asset management.

Chesapeake Bay 2000 Agreement calls for the use of ENR.

Environmental Protection Agency (Also referred to as EPA) U.S. Federal agency charged with overseeing waterways and water sources, decreasing water pollution and protecting drinking water from known and emerging contaminants that endanger public health.

Expenditure/Expense Payment for an asset obtained or goods and services received.

Fats, Oils, and Grease Program(Also referred to as FOG) A federally mandated program that advises customers on how to properly<br/>manage fats, oils, and grease; monitors and controls the discharge of FOG from commercial food<br/>service establishments; investigates sanitary sewer blockages and overflows caused by FOG<br/>discharges; and initiates enforcement action to ensure appropriate corrective measures are taken.

Fee	A charge for service to the user or beneficiary of the service. According to state law, charges must be related to the cost of providing the service.
Fiscal Policy	The WSSC's policies with respect to revenues, spending, and debt management as these relate to WSSC services, programs, and capital investments. Fiscal policy provides a set of principles for the planning and programming of budgets, uses of revenues, and financial management.
Fiscal Year	The 12-month period to which the annual operating and capital budgets and their expenditure authorizations apply. The WSSC's fiscal year starts on July 1 and ends on June 30.
Fixture Unit	(Drainage fixture unit or water supply fixture unit) A measurement of the probable discharge into the drainage system (sewer) or the probable hydraulic demand on the water supply (water) by various types of plumbing fixtures (bathtubs, lavatories, water closets, drinking fountains, etc.). For example, a drinking fountain corresponds to 0.5 drainage fixture units, while a conventional bathtub corresponds to 2.0 drainage fixture units.
Force Main	The discharge pipe from a wastewater pumping station through which flow is lifted under pressure to a higher elevation. A pipe of this type is used to overcome changes in topography by conveying flow over a ridge or other high point to a nearby, existing sewer line. This avoids the need to construct a longer conventional gravity line in another direction.
Fringe Benefits	Contributions made by the WSSC to help underwrite the Commission's share of the costs for Social Security and various pension, health, and life insurance plans provided to employees. Fringe benefits are centrally budgeted in non-departmental accounts.
Front Foot Benefit	(Also referred to as FFB or FFBC) A charge assessed owners of property abutting WSSC water mains and/or sewers who derive a benefit from the construction of these water mains and sewers. Revenue from front foot benefit charges is used to pay debt service on General Construction Bonds.

(Continued)

Fund	A set of interrelated accounts to record revenues and expenditures associated with implementing specific activities or achieving certain objectives in accordance with special regulations, restrictions, or limitations, and constituting an independent fiscal and accounting entity.
Fund Balance	The amount by which resources exceed the obligations of the fund. The beginning fund balance represents the residual funds brought forward from the previous year (ending fund balance). Fund balance is also referred to as Accumulated Net Revenue in this document.
General Bond Debt Service Fund	An independent fiscal and accounting entity with a self-balancing set of accounts for recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities associated with paying the debt service on bonds issued to finance the Commission's general construction and administrative and support facility construction program; and administering the Commission's front foot benefit assessment activities.
General Bond Fund	An independent fiscal and accounting entity with a self-balancing set of accounts for recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities associated with carrying out the activities of designing and constructing the Commission's minor water supply and wastewater collection and disposal systems (water mains less than 16 inches in diameter and sewer mains less than 15 inches in diameter), and all administrative and support facilities. Water meters are also purchased from this fund.
Geographic Information System	(Also referred to as GIS) A system that integrates hardware, software, and data for capturing, storing, managing, analyzing, and displaying all forms of geographically referenced information. The technology can be used for scientific investigation, resource management, or development planning.
Goal	A long-term, attainable target for an organization – its vision of the future.

Governmental Accounting Standards Board Statement No. 45	(Also referred to as GASB 45) A pronouncement that addresses how state and local governments should account for and report their costs and obligations related to post-employment benefits other than pensions. The statement generally requires that state and local governmental employers account for and report the annual cost of other post-employment benefits (OPEB) and the outstanding obligations and commitments related to OPEB in essentially the same manner as is done for pensions, rather than on a "pay-as-you-go" basis.
Haloacetic Acids	(Also referred to as HAAs) A group of chemicals that are formed when chlorine or other disinfectants used to control contaminants in drinking water react with naturally occurring organic and inorganic matter in the water. There are five haloacetic acids (referred to as HAA5) that are regulated by the EPA: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.
House Connection Charge	A fee set annually by the WSSC to cover the cost of the installation of small diameter pipe between water and sewer mains and the owner's property line. House connections feed water to a dwelling, place of business, or other structure and convey domestic sewage into the main line sewer for transportation to a wastewater treatment facility.
Infiltration	Groundwater that flows into sewer lines due to defective pipes or manholes.
Inflow	Surface stormwater from rainfall that flows into sewer lines due to defective pipes or manholes.
Information Only Projects	The CIP document contains an Information Only Projects section. Projects in this section are not required to be in the CIP under Section 23-301 of the Public Utilities Article, WSSD Laws, Annotated Code of Maryland, but may be included for any number of reasons such as: fiscal planning purposes; the reader's improved understanding of the full scope of a specific set of projects; or in response to requests from county governments. Expenditures for Information Only projects are not included as part of the CIP six-year program costs, but are shown separately on the bottom line of the financial summary in the front section of the CIP for informational purposes.

Infrastructure Investment Fee	A fixed fee that funds a portion of the debt service associated with the Commission's water and sewer pipe reconstruction programs.
Level of Service	The existing or current services, programs, and facilities provided by the WSSC to its customers. The level of service may increase, decrease, or remain the same, depending upon needs, alternatives, and available resources.
Maryland Department of the Environment	(Also referred to as MDE) The Maryland Department of the Environment was created in 1987 to protect and preserve the state's air, water and land resources and safeguard the environmental health of Maryland's citizens. MDE's duties also encompass enforcement of environmental laws and regulations, long-term planning and research. MDE provides technical assistance to Maryland industry and communities for pollution and growth issues and environmental emergencies.
Memorandum of Understanding	(Also referred to as MOU) An agreement issued to cover design and construction of any water and sewerage system or facilities within the Sanitary District that will be constructed and financed by others.
Merit Increase	An incremental raise in an employee's pay within the salary range for a given class of work to recognize the completion of a period of satisfactory or above service. Merit increase percentages are applied based upon the overall performance review for the employee.
Meter Data Management	(Also referred to as MDM) A powerful platform critical to leveraging the full potential of meter data across the organization. The MDM application gathers and processes data from any type, variety, or brand of device; loads, validates, stores, and formats the data in ways that facilitate business processes across internal and external systems; analyzes usage and event data; and issues Service Investigative Orders based on exceptions, events, commands, missed readings and meter reader remarks. This proactive analysis supports revenue protection by initiating maintenance or repair tasks as needed, improving the performance, and prolonging the life of meter and network devices.

Mission	A written declaration of an organization's core purpose and focus. An example of a mission is " to provide safe and reliable water, life's most precious resource, and return clean water to our environment, all in an ethical, sustainable, and financially responsible manner."
Mobile Workforce Management	(Also referred to as MWM) An application providing fully integrated, real-time, best-of-breed planning, scheduling, dispatching, mobile communications, and performance analytics. It optimizes the deployment of internal and contract field workers and enhances visibility and control of assets, providing a shift from reactive to informed, proactive decision-making, enabling improved mobile workforce performance, and customer service at a lower operating cost.
National Pollutant Discharge Elimination System	(Also referred to as NPDES) The National Pollutant Discharge Elimination System is a permit program controlling water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. (Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need a NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.)
Nephelometric	A unit of measure to assess turbidity in a sample by using an instrument called a nephelometer. A nephelometer passes light through a sample and the amount of light deflected is then measured.
Nephelometric Turbidity Units	(Also referred to as NTU) A measure of the clarity of water. Maintaining very low levels of filtered water turbidity is recognized as a means of effectively guarding against Cryptosporidium and other chlorine-resistant pathogens.
Non-Departmental	Expenditure items essential to the operation of the WSSC which either do not fall within the functional assignment of any office or which provide for expenditures related to more than one office. Examples include fringe benefits and insurance.
Objective	A specific measurable and observable result of an organization's activity which advances the organization toward its goal.

(Continued)

Operating Budget	A comprehensive financial plan by which the WSSC's operating programs are funded for a single fiscal year.
Other Post-Employment Benefits	(Also referred to as OPEB) Employees in the public sector may be compensated in a variety of forms in exchange for their services. In addition to salary, employees may earn benefits over their years of service that will not be received until their service has been severed due to retirement or other reasons. The most common type of post-employment benefit is a pension. Other post-employment benefits generally take the form of health insurance, dental, prescription drug, or other health care benefits. It may also include life insurance, legal services, or other benefits.
Outcome Measure	A measure of the degree to which an objective has been achieved. For the WSSC, this usually corresponds to the impact of a service on an organization's key responsibilities, especially the effect on citizens, customers, or other users of the service.
Pay-As-You-GO Financing	(Also referred to as PAYGO) The funding of capital expenditures with operating funds instead of debt.
Potable Water	Clean, safe, drinkable water.
Potomac WFP Consent Decree	A court-enforced legal document that was negotiated between the WSSC, the Maryland Department of the Environment, the United States Environmental Protection Agency, the United States Department of Justice, and a number of Citizen Groups that requires the WSSC to take certain actions in order to reduce the amount of solids discharged back into the Potomac River.
Power Purchase Agreement	A long-term agreement with a power (energy) provider to purchase electricity at a fixed rate for a fixed period. The provider designs, builds, and operates the power generation equipment (e.g. solar or wind) either at a remote location or on the customer's property.
Products and Technology	A budget category to account for the revenues and expenses associated with the sale, lease, or licensing of certain WSSC-developed products and technology. State law requires these revenues and expenses to be itemized in the annual budget.

Public Hearing	An opportunity for customers and the citizenry in general to voice opinions and concerns to appointed or elected officials. Section 17-202 of the Public Utilities Article of the Annotated Code of Maryland, requires that the Commission publish a budget before January 15, make it available to the public upon request, and hold a public hearing on the budget not less than 21 days after the budget is released for comment, but before February 15. Notice of the WSSC's public hearings is sent to all customers. In addition, public hearing specifics (date, time, location, contact information, and procedures for testifying) are advertised in local and regional newspapers.
Rate Stabilization	The implementation of a customer bill increase greater than the amount needed to support planned operating expenses in order to avoid a large future bill increase. The excess funds collected can be used to fund capital projects with cash to avoid the issuance of additional debt.
Reconstruction Debt Service Offset	(Also referred to as REDO) The use of surplus funds from the General Bond Debt Service Fund to offset a portion of the debt service cost of the Systems Reconstruction Program. REDO was established in FY'83 to use the surplus that had accumulated in the General Bond Debt Service account to benefit all WSSC ratepayers on a long-term basis.
Regional Sewage Disposal	The WSSC's share of the maintenance and operating costs of the District of Columbia Water and Sewer Authority's Blue Plains Wastewater Treatment Plant.
Remote Terminal Unit	(Also referred to as RTU) An electronic device located at a remote facility to collect status data from the facility's equipment (e.g., if a pump is running or is off, a level in a tank, etc.). The RTU sends the data to a central computer system via a wired or wireless network. Both the RTU and the central computer system are part of the Supervisory Control and Data Acquisition (SCADA) system.
Salaries and Wages	A budget expenditure category for monetary compensation in the form of annual or hourly pay for work performed.
Salary Lapse	The reduction of gross salary and wage costs attributable to turnover, vacancies, and normal delays in filling positions.

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Sanitary Sewer Overflow Consent Decree A court-enforced legal document that was negotiated between the WSSC, the Maryland Department of the Environment, the United States Environmental Protection Agency, the United States Department of Justice, and a number of Citizen Groups that requires the WSSC to take certain actions in order to improve the performance of the wastewater collection system and reduce the number of sanitary sewer overflows.

SDC Debt Service OffsetThe use of a portion of System Development Charge (SDC) revenue to pay the debt service on bonds<br/>issued after FY'93 to pay for growth-related CIP projects. (FY'94 was the first year that the SDC<br/>was in effect.)

Sewage Disposal Bond Fund An independent fiscal and accounting entity with a self-balancing set of accounts for recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities associated with carrying out the activities of designing and constructing/reconstructing the Commission's major wastewater collection, storage, and disposal facilities, including all sewer mains 15 inches and larger, wastewater treatment plants, force mains, and wastewater pumping stations. The fund also covers the reconstruction of all sized sewer lines and lateral lines.

Sewer Operating Fund An independent fiscal and accounting entity with a self-balancing set of accounts for recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities associated with carrying out the activities of operating and maintaining the Commission's wastewater collection and disposal system.

Sewer System Evaluation Survey (Also referred to as SSES) The Sewer System Evaluation Survey is an analytical evaluation of a sanitary sewer system to detect sewer pipe defects, blockages, and capacity problems through the use of techniques such as manhole inspections, trunk sewer inspections, smoke tests, dye tests, closed circuit television (CCTV), flow monitoring, rain monitoring, building service connection location/ inspection, and night flow isolations. The SSES is performed to determine the specific location of problems, estimate dry and wet weather flow rates, possible methods of rehabilitation, and the cost of rehabilitation/replacement.

(Continued)

Significant Industrial User	(Also referred to as SIU) Defined by the Environmental Protection Agency as: (1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N; (2) Any other industrial user that: discharges an average 25,000 gallons per day or more of process wastewater; contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or (3) Is designated as a SIU by the WSSC on the basis that the industrial user has a reasonable potential for adversely affecting the operation of the WSSC's wastewater treatment plants.
Spending Affordability	An approach to budgeting that assigns expenditure ceilings for the forthcoming year prior to the development of detailed budget estimates. Limits on new water and sewer debt, total water and sewer debt service, total water and sewer operating expenses, and the amount of the water and sewer bill increase are established each year by the Montgomery and Prince George's County Councils prior to the WSSC's budget preparation. This process started with the FY'96 budget.
Supply Chain Management	The identification, acquisition, access, positioning and management of resources an organization needs or potentially needs in the attainment of its strategic objectives.
System Development Charge	(Also referred to as SDC) A charge levied on new development to pay for the construction of major water and sewerage facilities needed to accommodate growth.
System Extension Permit	(Also referred to as SEP) A WSSC-issued permit for extensions to the WSSC's system. This permit is required for the Applicant to build water and sewer systems that the WSSC will, upon satisfactory completion, take over for maintenance and operations.
Trihalomethanes	A group of potentially cancer-causing substances that can be present as low-level contaminants in finished water. Trihalomethanes can be produced as disinfection byproducts when the chlorine used to treat the raw water reacts with certain normally occurring organic contaminants present in the raw water.

Trunk Sewer	As defined in the Consent Decree, "Trunk Sewer" refers to any sewer lines in WSSC's Collection System that are 15 inches or greater in diameter, including components thereto, and stream-crossings.
Turbidity	Turbidity is the cloudy appearance of water caused by the presence of suspended matter. A turbidity measurement is used to indicate the clarity of water.
Turbidity Units	Turbidity units are a measure of the cloudiness of water. If measured by a Nephelometric (deflected light) instrumental procedure, turbidity units are expressed in Nephelometric turbidity units, or NTU.
Washington Suburban Sanitary Commission	(Also referred to as WSSC or Commission) The Commission is a bi-county agency established by an act of the Maryland General Assembly responsible for planning, designing, constructing, operating, and maintaining water and sewerage systems in Prince George's and Montgomery counties.
Washington Suburban Sanitary District	(Also referred to as WSSD) The area served by the Washington Suburban Sanitary Commission, as specified by state law. The District includes nearly all of Prince George's and Montgomery Counties, with the exception of the municipalities of Bowie, Rockville, and Poolesville, and rural areas in northeastern Montgomery County and southeastern Prince George's County.
Wastewater	Water that originates from a combination of domestic, industrial, commercial or agricultural activities and, due to sewer inflow or infiltration, may also include surface runoff or stormwater.
Water Operating Fund	An independent fiscal and accounting entity with a self-balancing set of accounts for recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities associated with carrying out the activities of operating and maintaining the Commission's water supply and distribution system.

Water Supply Bond Fund	An independent fiscal and accounting entity with a self-balancing set of accounts for recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities associated with carrying out the activities of designing and constructing/reconstructing the Commission's major water supply and distribution facilities, including all water mains 16 inches and larger, water filtration plants, water pumping stations, and water storage facilities. The fund also covers the reconstruction of all sized water lines and lateral lines.
Work and Asset Management	(Also referred to as WAM) A program providing an end-to-end roadmap maximizing the value assets can deliver. Understanding asset condition and criticality involves aggregating all asset data, including work history and condition rating into a single system, balancing the importance of one factor versus another, and updating condition changes as they occur. This process can reduce backlog and enable utilities to engage in more proactive work, eliminating future cost, tasks, and risk.
Workyear	A standardized unit for measurement of personnel effort and costs. A workyear is the equivalent of 2,080 work hours or 260 work days.

ADC	Average Daily Consumption	CEPS	Constellation Energy Projects and Services
ADS	Application & Database Services	CFR	Code of Federal Regulations
A/E	Architecture/Engineering	CIP	Capital Improvements Program
AFO	Acoustic Fiber Optic	CIU	Categorical Industrial User
AIS	Asset Information System	CoE	Center of Excellence
AMF	Account Maintenance Fee	COLA	Cost-of-Living Adjustment
AMI	Advanced Metering Infrastructure	COR	Contracting Officer Representative
AMP	Asset Management Program	CPI	Consumer Price Index
AMR	Automated Meter Reading	CRM	Customer Relations Management
AWWA	American Water Works Association	CRRT	Contamination Rapid Response Team
BG	Billion Gallons	CSC	Customer Service Center
BGE	Baltimore Gas & Electric	CSIS	Customer Service Information System
BMP	Best Management Practices	CY	Calendar Year
BOA	Basic Ordering Agreement	DBP	Disinfection Byproducts
BOD	Biological Oxygen Demand	D.C.	District of Columbia
BRF	Bay Restoration Fee	DCWASA	District of Columbia Water and Sewer Authority
C2M	Customer to Meter	DOD	Department of Defense
CADD	Computer Aided Design and Drafting	DOT	Department of Transportation
CAP	Customer Assistance Program	DSP	Development Services Process
CC&B	Customer Care & Billing	EAM	Enterprise Asset Management
CCTV	Closed Circuit Television	EEO	Equal Employment Opportunity

(Continued)

EGIS	Enterprise Geographic Information System	GPS	Global Positioning System
ENR	Enhanced Nutrient Removal	HAA	Haloacetic Acid
EPA	Environmental Protection Agency	H/C	House Connection
EPC	Energy Performance Contract	HR	Human Resources
EPP	Energy Performance Program	HVAC	Heating, Ventilating, and Air-Conditioning
ERP	Enterprise Resource Planning	IDCP	Industrial Discharge Control Program
ESA	Environmentally Sensitive Area	IFB	Invitation for Bid
ESC	Emergency Service Center	I/I	Infiltration and Inflow
ESP	Engineering Support Program	ISD	In-Service Date
FFBC	Front Foot Benefit Charge	IT	Information Technology
FIS	Financial Information System	ITSC	IT Solution Center
FLSA	Fair Labor Standards Act	IVRS	Interactive Voice Response System
FM	Fire Meter	JBAB	Joint Base Anacostia-Bolling
FMLA	Family and Medical Leave Act	KSM	Key Success Measure
FOG	Fats, Oils, and Grease	LBA	Line Blockage Analysis
FSE	Food Service Establishment	LEED	Leadership in Energy & Environmental Design
FY	Fiscal Year	MBE	Minority Business Enterprise
GAAP	Generally Accepted Accounting Principles	MCL	Maximum Contaminant Level
GASB	Governmental Accounting Standards Board	MDE	Maryland Department of the Environment
GBDS	General Bond Debt Service	MDM	Meter Data Management
GFOA	Government Finance Officers Association	MG	Million Gallons
GIS	Geographic Information System	MGD	Million Gallons per Day
GPD	Gallons per Day	MMIS	Maintenance Management Information System

(Continued)

N	I-NCP&PC	Maryland-National Capital Park & Planning Commission	QA	Quality Assurance
Ν	4OU	Memorandum of Understanding	REDO	Reconstruction Debt Service Offset
Ν	1 & V	Monitoring and Verification	RFI	Request for Information
Ν	<b>IVR</b>	Meter, Vertical Turbine	RFP	Request for Proposal
Ν	4WM	Mobile Workforce Management	RFQ	Request for Qualifications
Ν	4WQ	Maryland Water Quality	RTA	Request to Advertise
N	IPDES	National Pollutant Discharge Elimination System	RTU	Remote Terminal Unit
N	TP	Notice to Proceed	SAN	Storage Area Network
N	ITU	Nephelometric Turbidity Units	SCADA	Supervisory Control and Data Acquisition
С	DBIEE	Oracle Business Intelligence Enterprise Edition	SCM	Supply Chain Management
С	<b>PEB</b>	Other Post Employment Benefits	SDC	System Development Charge
С	)SDI	Office of Supplier Diversity & Inclusion	SDLC	Software Development Life Cycle
С	OSHA	Occupational Safety & Health Administration	SDWA	Safe Drinking Water Act
Р	AYGO	"Pay-As-You-GO" Financing	SEP	System Extension Permit
Р	ССР	Pre-stressed Concrete Cylinder Pipe	SIU	Significant Industrial User
Р	EPCO	Potomac Electric & Power Company	SLA	Service Level Agreement
Р	LC	Programmable Logic Controllers	SLBE	Small, Local Business Enterprise
Р	MO	Project Management Office	SLMBE	Small, Local and Minority Business Enterprise
Р	MP	Proactive Maintenance Program	SMECO	Southern Maryland Electric Cooperative
Р	PA	Power Purchase Agreement	SOW	Statement of Work
Р	PIS	Permits Processing Information System	SQL	Structured Query Language
Р	RV	Pressure Reducing Valve	SSES	Sewer System Evaluation Survey
Р	VC	Polyvinyl Chloride	SSO	Sanitary Sewer Overflow

SWR	Small Work Requests
TEAMS	Total Enterprise Asset Management System
THM	Trihalomethanes
TTHM	Total Trihalomethanes
UPS	Uninterruptable Power Supply
UV	Ultraviolet
WAM	Work and Asset Management
WASA	See DCWASA
WEF	Water Environment Federation
WFP	Water Filtration Plant
WPS	Water Pumping Station
WQM	Water Quality Monitoring
WSSC	Washington Suburban Sanitary Commission
WSSD	Washington Suburban Sanitary District
WWOA	Water and Waste Operators Association
WWPS	Wastewater Pumping Station
WWTP	Wastewater Treatment Plant
W/S	Water/Sewer