



WASHINGTON SUBURBAN
SANITARY COMMISSION
PROPOSED BUDGET

FY 2020
July 1, 2019 - June 30, 2020



FISCAL YEAR 2020 PROPOSED BUDGET

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

Carla A. Reid, General Manager/CEO

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

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 PROPOSED BUDGET FY 2020

Public Hearings by the Commission	February 4 and 5, 2019 (held as scheduled)
Submission to County Executives	March 1, 2019
Approval by the County Councils	June 1, 2019
Adopted for the Fiscal Year	July 1, 2019

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

PROGRAM CONTACT

Contact the Budget Division at 301-206-8110 or email at BudgetGroup@wsscwater.com for more information regarding this budget document.

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CONTAINED HEREIN IS WSSC'S FY 2020 PROPOSED BUDGET DATED MARCH 1, 2019, WHICH REPLACES AND SUPERCEDES THE PREVIOUS JANUARY 15, 2019 EDITION.



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Washington Suburban Sanitary Commission
Maryland**

For the Fiscal Year Beginning

July 1, 2018

Christopher P. Morrill

Executive Director

The Government Finance Officers Association (GFOA) of the United States and Canada presented an award of Distinguished Budget presentation to the Washington Suburban Sanitary Commission for its annual budget for the fiscal year beginning July 1, 2018. This is the twenty-fourth consecutive year that the Washington Suburban Sanitary Commission has received this award.

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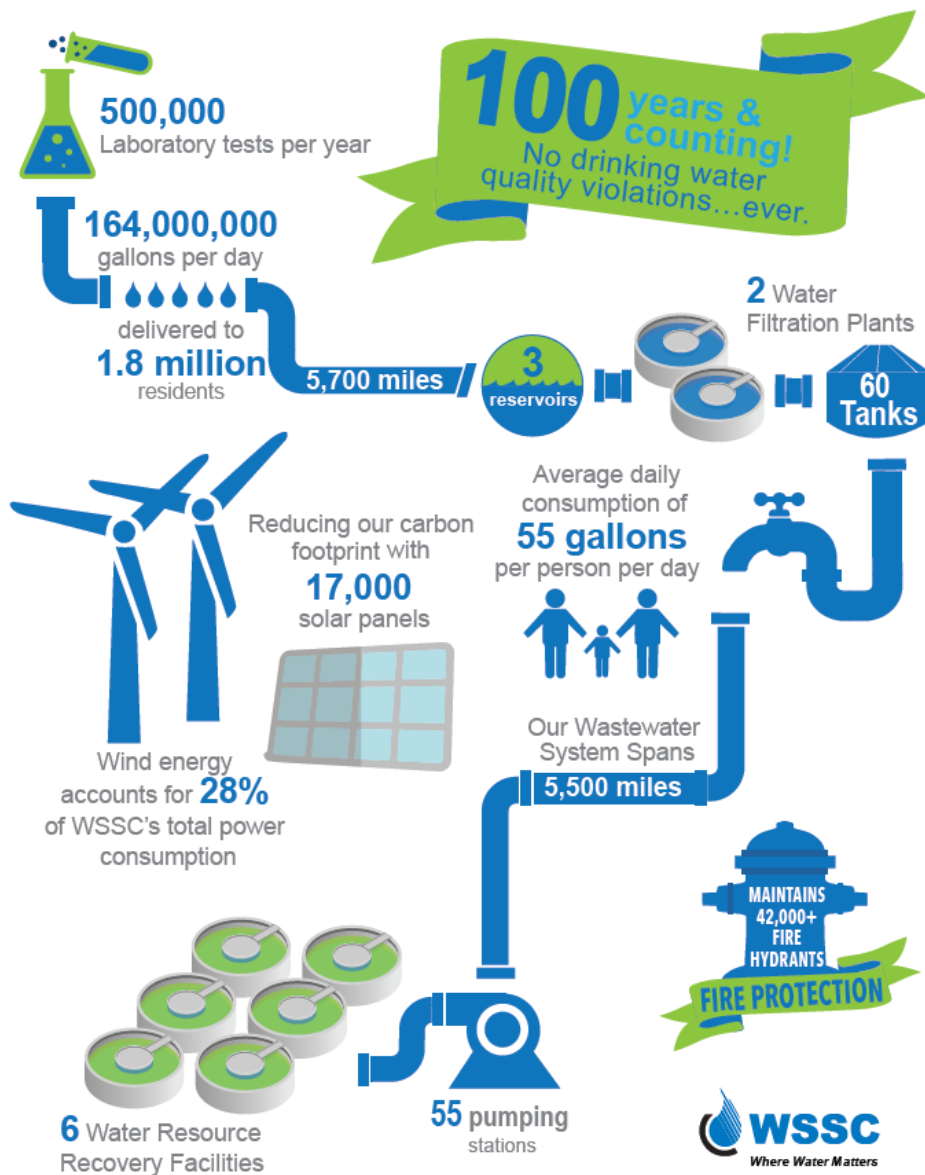
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SECTION 1

WSSC OVERVIEW, CHAIR'S LETTER, & BUDGET SUMMARIES

WSSC At A Glance

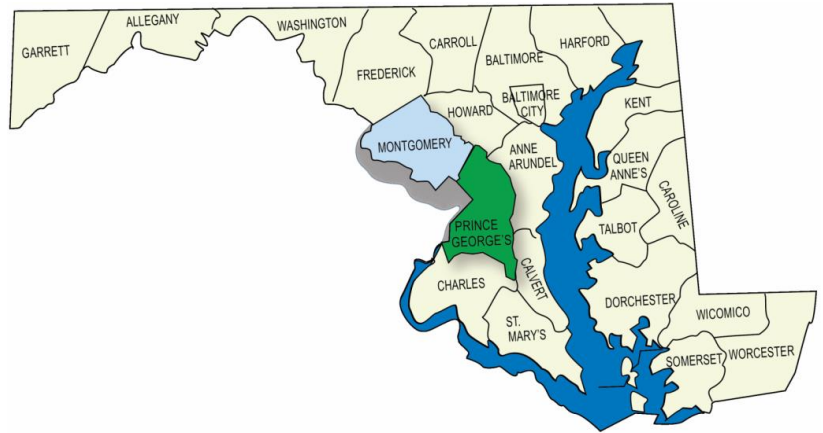
- 2 Water Filtration Plants
- 6 Water Resource Recovery Facilities
- 3 Water Storage Dam/Reservoirs
- 60 Water Storage Tanks
- 55 Wastewater Pumping Stations (WWPS)
- 42,000+ Fire Hydrants
- 17,000 Solar Panels
- 0 Water Quality Violations



ABOUT THE WASHINGTON SUBURBAN SANITARY COMMISSION

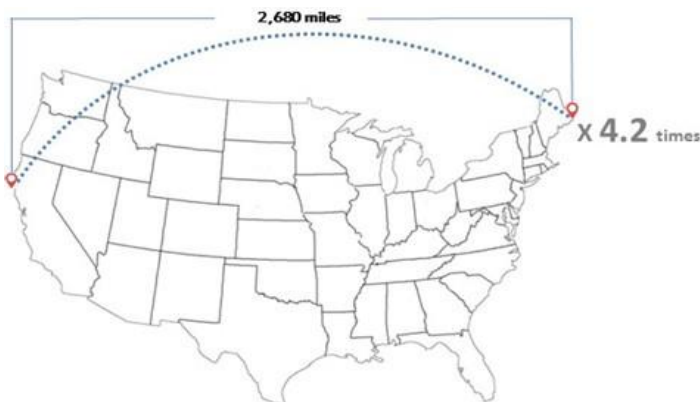
GENERAL INFORMATION

The Washington Suburban Sanitary Commission (WSSC or the Commission) 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 re-codified 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

How long is 11,354 miles of water and sewer pipeline



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 2019 and deliver that water to homes and businesses in Montgomery and Prince George's Counties, serving over 450,000 customer accounts through a system of over 5,772 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 water resource recovery facilities (WRRFs) operated by the WSSC, and the Blue Plains Advanced Wastewater Treatment Plant (Blue Plains) operated by the District of Columbia Water and Sewer Authority (DC Water). In FY 2019, 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 approximately 5,582 miles of sewer lines maintained by WSSC. The six WRRFs owned by WSSC have a combined capacity of 95 million gallons per day (MGD). Blue Plains is a regional facility that serves the District of Columbia and several northern Virginia jurisdictions, as well as the WSSC. Under the Inter-Municipal Agreement that governs WSSC's arrangement with Blue Plains, 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 gas fitting regulations in suburban Maryland and participation in numerous environmental initiatives.

FY 2020 STRATEGIC PRIORITIES AND KEY PROVISIONS

Enhance Customer Experience and Community Engagement

- Provide maintenance services at a level consistent with the objective of responding to the customer within 2 hours and restoring service within 24 hours
 - Implement a new Customer to Meter (C2M) billing system
 - Fund the Customer Assistance Program with a revenue offset of \$888,000
 - Provide additional \$1.0 million in funding to enhance the Customer Assistance Program
 - Proactively communicate WSSC's mission and vision to customers and stakeholders
-

Improve Infrastructure

- Implement the first year of the FY 2020-2025 Capital Improvements Program
 - Fund the replacement of 25 miles of water mains and 26 miles of sewer mains & laterals
 - Pay WSSC's share of the cost of operating the District of Columbia Water and Sewer Authority's (DC Water) Blue Plains Advanced Wastewater Treatment Plant
 - Optimize biosolids management at Water Resource Recovery Facilities (WRRF)
 - Continue focus on water and wastewater pipeline rehabilitation
 - Inspect and monitor large diameter water mains and large valves
 - Construct new septage discharge facilities
-

Achieve Business Process Excellence and Maintain Financial Stability

- Issue \$384.9 million in new water, sewer, and general construction debt
 - Pay debt service of \$319.9 million of which \$306.3 million is in the water and sewer operating funds
 - Continue the implementation of IT Strategic Plan
 - Implement a new four-tier water and sewer rate structure
 - Maintain the highest credit rating "AAA" on bonds and notes
 - Maintain operating reserve at 10% of water and sewer operating revenue
 - Continue to focus on Strategic Sourcing to lower costs
 - Improve business process through the Innovation and Research Program
-

Protect Our People Infrastructure, Systems, and Resources

- Treat and deliver 164.0 MGD of water to over 460,000 customer accounts in a manner that meets or exceeds the Safe Drinking Water Act standards
 - Treat 201.4 MGD of wastewater and responsibly managing up to 1,000 tons of bio-solids per day in a manner that meets or exceeds federal and state permit requirements
 - Comply with the Sanitary Sewer Overflow and Potomac Plant Consent Orders
 - Update and improve the Continuity of Operations Program to ensure continued performance of essential functions during all hazards, both natural and man-made
 - Continue to upgrade automated and physical security equipment
-

Inspire Employee Engagement

- Fund employee salary enhancements in a manner coordinated with the Counties
- Continue Employee Rewards and Recognition Program
- Offer employee Health and Well-being Program
- Provide employee learning and growth programs

GOVERNANCE

A six-member commission governs the WSSC - three members from each County. The Commissioners are appointed to four-year terms by their respective County Executives and confirmed by their County Councils. 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 gas fitting installations; and
- Conducts examinations for master and journeyman plumbers and gasfitters, and issues licenses to those qualified to perform plumbing and gas fitting work.

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.

VISION

To be THE world-class water utility, where excellent products and services are always on tap.

VALUES

Our guides for daily behavior and decision making at every level include:

- **Accountability:** We are responsible employees who are accountable and take our actions seriously.
- **Transparency:** We conduct ourselves with integrity and transparency.
- **Excellence:** We achieve the highest level of quality, safety and productivity, demonstrating excellence and innovation in providing world-class service to everyone.
- **Environmental Stewardship:** We continuously enhance and protect natural resources and the environment for the health of future generations.
- **Cost Effectiveness:** We balance cost and benefit in our daily actions to achieve optimal value for our customers.

GOVERNANCE (CONTINUED)

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.

GUIDING PRINCIPLES

- Simplify
- Focus
- Connect

GOVERNANCE (CONTINUED)

COMMISSIONERS



MONTGOMERY COUNTY



T. Eloise Foster
Chair



Fausto R. Bayonet
Commissioner



Howard A. Denis
Commissioner



PRINCE GEORGE'S COUNTY



Chris Lawson
Vice Chair



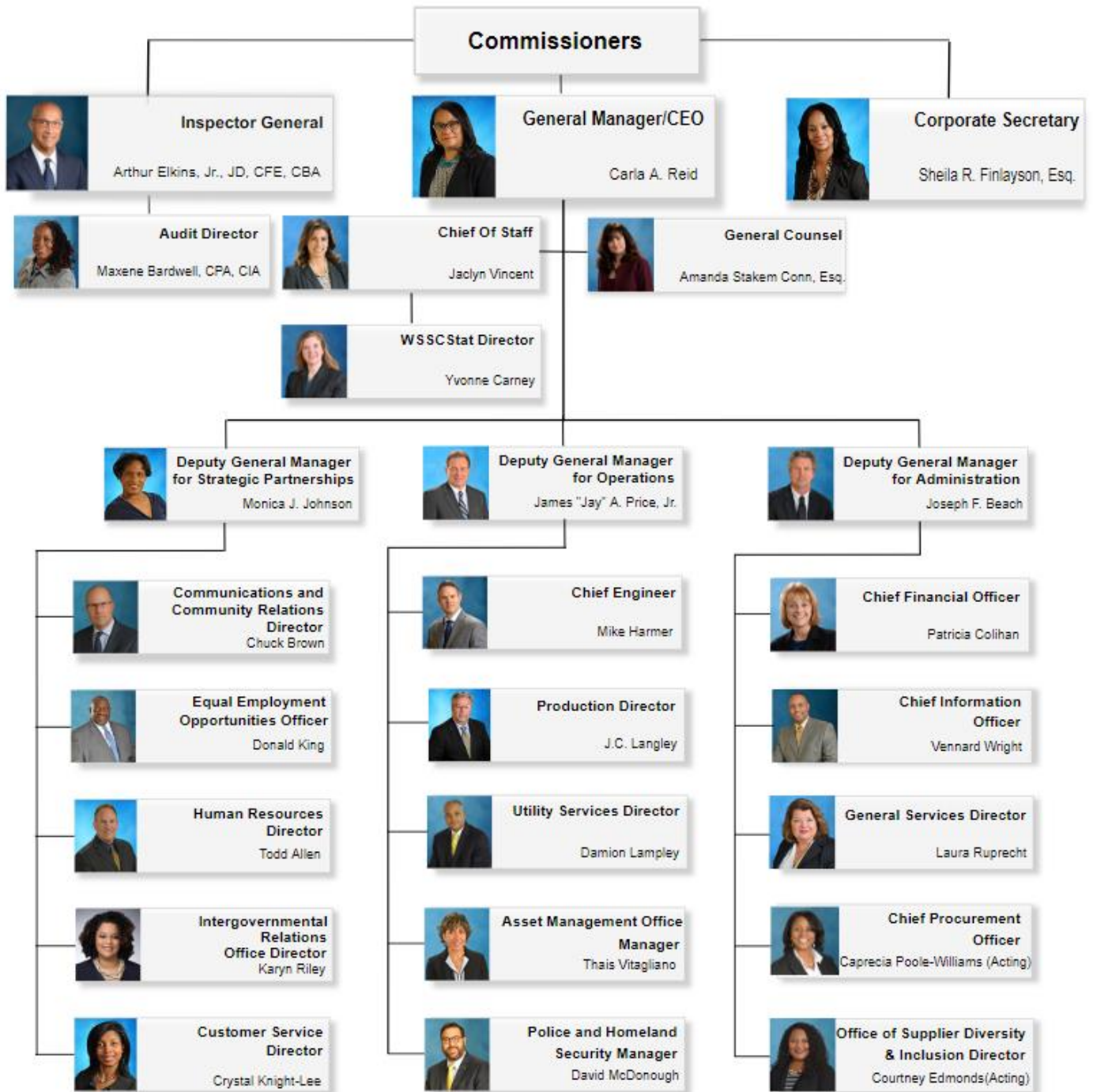
Omar M. Boulware
Commissioner



Thomasina V. Rogers
Commissioner

Commissioners are appointed to four-year terms by the County Executive of either Montgomery or Prince George's County. Commissioners are subject to confirmation by the County Council of the county from which they are appointed. Each county appoints three Commissioners. For more information regarding the term of office and duties of the WSSC Commissioners, see Division II of the Public Utilities Article of the Annotated Code of Maryland.

OUR LEADERSHIP AND ORGANIZATION



CHAIR'S LETTER



14501 Sweitzer Lane, Laurel, MD 20707-5901
(301) 206-8000 1(800) 828-6439 TTY: (301) 206-8345 www.wsscwater.com

March 1, 2019

The Honorable Angela D. Alsobrooks, Prince George's County Executive
The Honorable Marc Elrich, Montgomery County Executive
The Honorable Todd M. Turner, Chair, Prince George's County Council
The Honorable Nancy Navarro, President, Montgomery County Council

Dear Ms. Alsobrooks, Mr. Elrich, Mr. Turner, and Ms. Navarro:

We are hereby transmitting WSSC's Proposed Fiscal Year 2020 (FY 2020) Capital and Operating Budget document. 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 our customers 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:

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

FY 2020 PROPOSED CAPITAL AND OPERATING BUDGETS

The proposed budget for FY 2020 for all operating and capital funds totals \$1.456 billion or \$18.0 million (1.3%) more than the Approved FY 2019 Budget. The proposed operating budget of \$817.4 million represents an increase of \$35.8 million (4.6%) over the FY 2019 Approved Operating Budget of \$781.6 million. This increase is primarily driven by a \$25.5 million increase in debt service to support infrastructure renewal in the FY 2020 capital budget, a \$5.4 million increase in regional sewage disposal expenses as DC Water's operation and maintenance cost share methodology within the Blue Plains Inter-Municipal Agreement has been revised, and a \$2.8 million increase in paving costs. When controlling for the non-discretionary increases in debt service and regional sewage disposal costs, the FY 2020 Operating Budget is only 1.1% over the FY 2019 Approved Budget. The proposed capital budget of \$638.5 million represents a decrease of \$17.8 million (-2.7%) from the FY 2019 Approved Capital Budget of \$656.3 million.

The proposed budget calls for a combined 5.0% average increase in water and sewer consumption revenue. This proposed increase meets the Spending Affordability Guidelines (SAG) as both Prince George's and Montgomery counties recommended 5.0%. Even with this change, WSSC rates continue to be favorable when compared to many similar sized water and sewer utilities. The average WSSC customer's residential bill is 1% (page 2-3) of the median household income. The impact of the revenue increase, combined with the implementation of the new 4-tier rate structure, will add approximately \$1.29 per month to the bill of a customer using 165 gallons per day, the average per person consumption of 55 gallons per day for a 3-person household. A low-usage customer with consumption of 100 gallons per day will experience an increase of approximately \$3.98 per month, while a customer using 500 gallons per day will see a decrease of approximately \$19.11 per month.

It is important to point out that WSSC's budget is capital intensive and driven by changes in the construction market, commodity prices and tariffs. It is not driven by the more commonplace consumer price index (CPI). Other investments drive our budget, including: compliance with the Sanitary Sewer Overflow (SSO) and the Potomac Plant Consent Decree; environmental regulation directives; 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 many residents who struggle to meet their monthly expenses. In response to this need, the Customer Assistance Program (CAP) was created in FY 2016 to help economically disadvantaged customers by providing financial assistance with water and sewer bills. In FY 2018, CAP helped more than 10,000 customers save more than \$900,000 in fixed fees. We are working with nationally recognized customer affordability experts on an enhanced affordability plan to launch with the FY 2020 implementation of the new rate structure. This proposed budget includes an additional \$1.0 million for these enhancements.

In addition, in accordance with House Bill 408 enacted in last year's legislative session, the proposed budget includes \$100,000 to implement the new Connection Pipe Emergency Replacement Loan Program, which will provide affordable financing of up to \$5,000 per eligible customer.

SPENDING AFFORDABILITY GUIDELINE LIMITATIONS

In order to reconcile our Departments' initial FY 2020 budget requests with the Counties' Spending Affordability Guidelines, a funding gap of \$30.0 million dollars was closed. Actions to close this gap included limiting growth for certain budget programs and very difficult decisions to reduce existing programs including the continued deferred implementation of several initiatives to improve system performance and reliability. For the third consecutive year, this proposed budget includes no new positions. However, this will prevent the Commission from implementing some important improvements that would support and advance our strategic priorities including:

- Implementing a system-wide flushing program of our water distribution pipe network in order to reduce discolored water complaints and improve water quality;
- 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 provide proactive repairs and reduce water loss; and
- Accelerating large water valve inspections from a four-year to a three-year cycle.

In addition, nearly \$17.0 million in FY 2018 reductions were not reinstated and a \$2.5 million reduction was made to a request for critical maintenance to facilities. We will work diligently to maintain service at current expected levels despite these reductions, though it may be necessary to further reduce certain preventative and non-essential services during FY 2020 in order to remain within approved budget limitations. During the 2018 session, the Maryland General Assembly enacted legislation requiring WSSC to establish an Office of the Inspector General. The FY 2020 budget includes \$500,000 to secure permanent office space and accommodate staffing requirements for the Inspector General's Office. It is expected that these additional costs will be offset by savings, reimbursements, and other resources generated by this new office.

COST SAVING MEASURES

This budget reflects the Commission's continuing commitment to maintaining affordability through the active pursuit and implementation of cost savings measures. In addition to the reductions in the operating and capital budgets noted above, the Commission has several ongoing strategies to identify more cost effective ways of providing clean water to our customers including the following:

- Our efforts in the Supply Chain Management Transformation project, which has been supported by the Commission and both Counties since FY 2013, have produced significant cost reductions in excess of \$40.0 million in the operating and capital budgets since the inception of this program and cost avoidance savings of over \$44.0 million during the same 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 2018, our efforts resulted in \$7.3 million in cost reductions and \$1.4 million in cost avoidances over the terms of the contracts awarded;
- By continually monitoring and revising our Group Insurance plan design we have identified \$4.3 million in savings since FY 2017;
- There has been no net increase in the number of WSSC positions since FY 2017 and we have currently frozen 32 positions from being filled at all to produce ongoing personnel cost savings;
- Changes to our Workers Compensation have resulted in the following:
 - 50% reduction in lost workday cases
 - 65% reduction in lost work days
 - 54% reduction in costs;
- Our Innovation program has identified promising methods for identifying and remediating water system leakages as well as new approaches to wastewater treatment that may significantly reduce processing costs while improving our environmental stewardship efforts; and
- Changes made in monitoring and supervision of overtime costs have reduced these expenses by \$2.0 million since FY 2017.

WATER AND SEWER INFRASTRUCTURE RELIABILITY

New technologies and tools are emerging to help WSSC better assess the condition of our existing water/sewer mains so we can improve our ability to target pipes in need of replacement. Because we are better able to identify pipes in poor condition, WSSC is decreasing the Water Reconstruction Program (rehabilitation of smaller water mains <16 inches in diameter) over the next few years to 45 miles in FY

Chair's Letter

2019 and to 25 miles in FY 2020. This strategic decrease will allow us to develop a more efficient and effective pipe reconstruction program, and provide us time to pilot new rehabilitation techniques and minimize disruption for our customers and control costs. To that end, starting with the FY 2020 Capital Improvements Program (CIP), we are including \$3.0 million in funding for enhanced condition assessment initiatives and new leak detection system technologies.

INFORMATION TECHNOLOGY STRATEGIC PLAN

In addition to our ongoing investments in the Commission’s physical infrastructure, the FY 2020 budget invests in the Commission’s organizational infrastructure. Strategic contributions of \$11 million from Fund Balance will be used to fund the Information Technology (IT) Strategic Plan to modernize the Commission’s IT infrastructure, streamline our business processes and help fund the implementation of the Project Cornerstone. This project replaces our oldest computer systems, including our billing system, Customer Connect/Field Service System, and our asset tracking, service requests, work orders, inspections and patch ticket systems. These new systems will provide real time data in the field and help improve our decision making on replacing, rehabilitating and refurbishing our assets. Release I of Project Cornerstone delivers the Customer-to Meter (C2M) billing system in May of 2019 and will be followed by Release II in FY 2020 consisting of the Work Asset Management and Mobile Work Order Management systems. These innovative technologies will lay the foundation for the Advanced Metering Infrastructure project.

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 November 2018, the Montgomery County Council and Prince George’s County Council approved resolutions establishing four limits on the WSSC’s FY 2020 budget. As indicated in the following table, the proposed FY 2020 budget is in compliance with the spending affordability limits for New Water and Sewer Debt and Water/Sewer Rate Revenue Increase.

WSSC FY 2020 PROPOSED BUDGET VS. SPENDING AFFORDABILITY LIMITS
(\$ in Millions)

	FY 2020 Proposed Budget	Prince George’s County Limit	Montgomery County Limit
New Water and Sewer Debt	\$384.9	\$385.5	\$385.5
Total Water and Sewer Debt Service	\$306.3	\$306.4	\$306.4
Total Water/Sewer Operating Expenses	\$802.6	\$799.0	\$799.0
Water/Sewer Rate Revenue Increase	5.0%	5.0%	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, and to better align fees with program costs, some new fees and adjustments to current fees are recommended on pages 2-8 through 2-13.

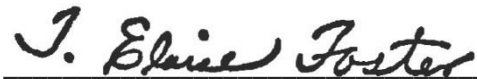
SYSTEM DEVELOPMENT CHARGE

State law provides that the System Development Charge (SDC), a charge to new applicants for WSSC service which 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 do the same this year. Although we are not recommending it at this time, the Commission should begin to have conversations with both counties on the advisability of modifying the SDC in order to ensure that it covers all growth-related costs.

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, 2019.

Sincerely,



T. Eloise Foster, Chair
Washington Suburban Sanitary Commission

cc:
Members of Prince George's County Council
Members of Montgomery County Council
Members of the Maryland General Assembly

BUDGET SUMMARIES

COMPARATIVE EXPENDITURES BY FUND

	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed	FY 2020 Over / (Under) FY 2019	% Change
Operating Funds						
Water Operating	\$ 300,598,657	\$ 320,087,985	\$ 340,082,785	\$ 352,471,682	\$ 12,388,897	3.64%
Sewer Operating	374,234,124	385,526,736	422,609,826	450,147,720	27,537,895	6.52%
General Bond Debt Service	15,557,107	19,107,983	18,888,188	14,773,624	(4,114,564)	-21.78%
Total Operating	690,389,888	724,722,704	781,580,799	817,393,026	35,812,228	4.58%
Capital Funds						
Water Supply	\$ 263,568,816	\$ 261,602,119	\$ 306,478,722	\$ 287,256,345	\$ (19,222,377)	-6.27%
Sewage Disposal	280,632,043	190,058,178	328,890,176	334,377,286	5,487,110	1.67%
General Construction	12,783,881	23,555,308	20,957,052	16,892,473	(4,064,579)	-19.39%
Total Capital	556,984,740	475,215,605	656,325,950	638,526,104	(17,799,846)	-2.71%
Grand Total	\$ 1,247,374,628	\$ 1,199,938,309	\$ 1,437,906,749	\$ 1,455,919,130	\$ 18,012,382	1.25%

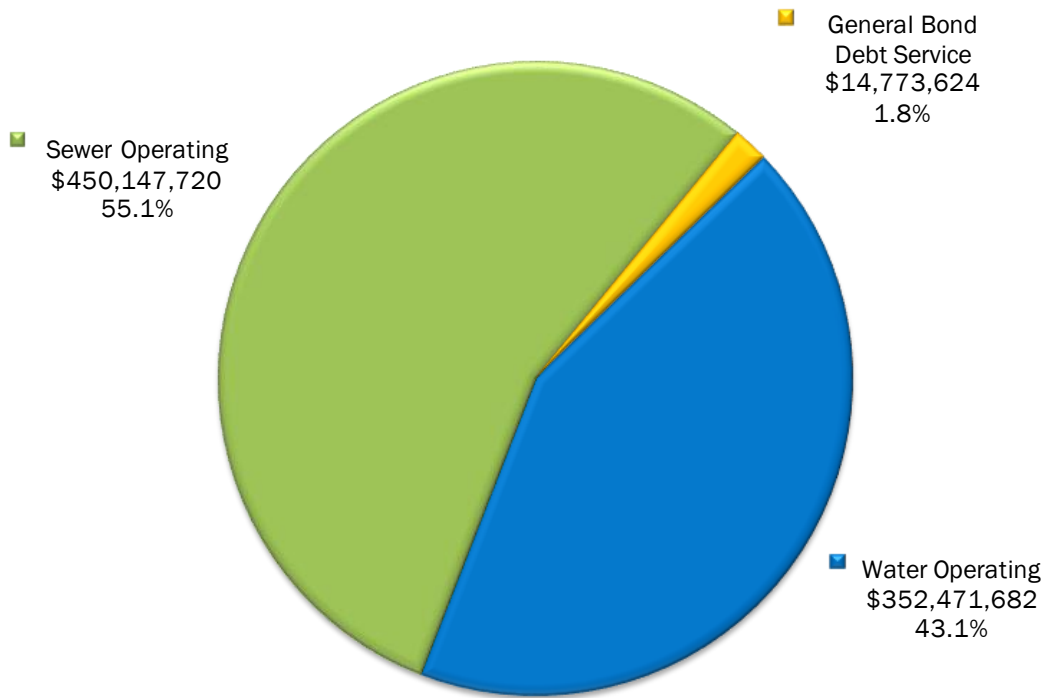
COMPARATIVE EXPENDITURES BY MAJOR EXPENSE CATEGORY

(\$ in Thousands)

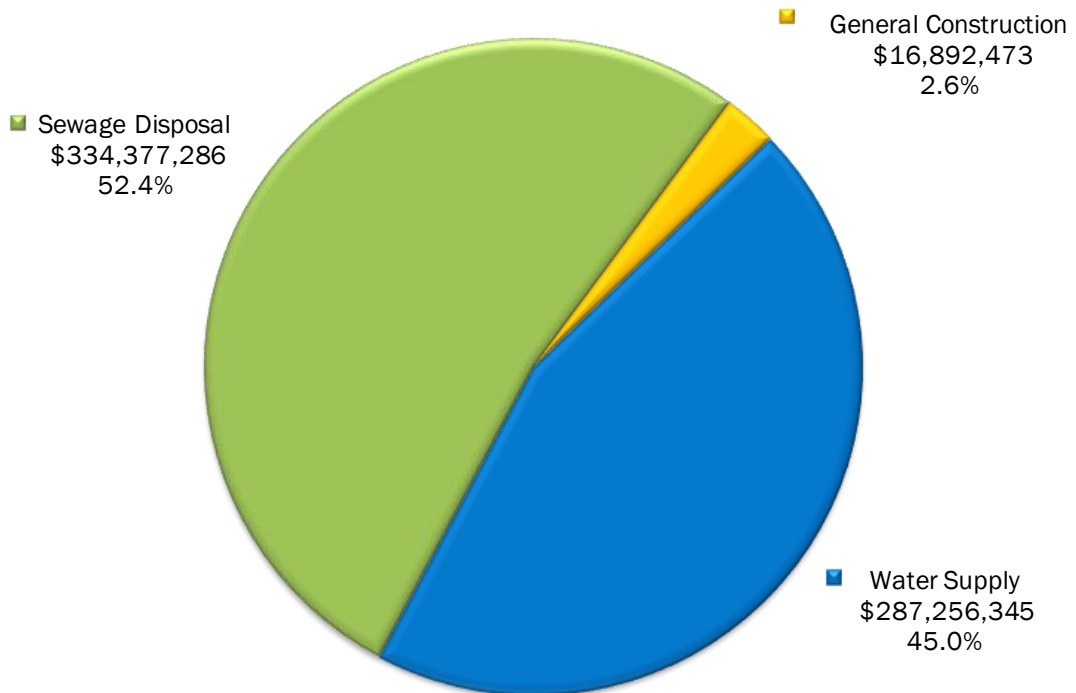
Expense Categories	FY 2018 Actual			FY 2019 Approved			FY 2020 Proposed		
	Capital	Operating	Total	Capital	Operating	Total	Capital	Operating	Total
Salaries & Wages	\$27,717	\$117,845	\$145,562	\$30,678	\$128,434	\$159,112	\$27,154	\$130,134	\$157,288
Heat, Light & Power	-	20,044	20,044	-	20,577	20,577	-	19,444	19,444
Regional Sewage	-	58,331	58,331	-	53,617	53,617	-	59,000	59,000
Contract Work	225,086	-	225,086	376,223	-	376,223	383,332	-	383,332
Consulting Engineers	41,718	-	41,718	68,912	-	68,912	58,073	-	58,073
Debt Service	-	275,096	275,096	-	294,349	294,349	-	319,883	319,883
All Other	180,695	253,407	434,102	180,513	284,604	465,117	169,967	288,932	458,899
Total	\$475,216	\$724,723	\$1,199,939	\$656,326	\$781,581	\$1,437,907	\$638,526	\$817,393	\$1,455,919

FY 2020 PROPOSED BUDGET BY FUND

GRAND TOTAL = \$1,455,919,130



Operating Funds = \$ 817,393,026



Capital Funds = \$ 638,526,104

SECTION 2
PROPOSED RATES, FEES AND CHARGES

COMBINED WATER/SEWER OPERATING FUNDS – FY 2020 PROPOSED RATE IMPACT

5.0% Average Rate Increase Proposed for FY 2020

Funding Sources	FY 2020 Proposed
Revenues at Current Rates	
Consumption Charges	\$ 627,523
Account Maintenance Fee	32,296
Infrastructure Investment Fee	39,331
Miscellaneous Revenues	41,200
Subtotal	740,350
Reconstruction Debt Service Offset	11,600
SDC Debt Service Offset	4,658
Miscellaneous Offset	395
Premium Transfer	2,900
Use of Fund Balance	11,341
Total Funding Sources	771,244
Requirements	
Expenses	
Operating, Maintenance & Support Services Expenses	465,297
Debt Service	306,307
PAYGO	31,016
Total Expenditures	802,620
Shortfall to be Covered by Rate Increase	\$ (31,376)
Proposed Average Water and Sewer Rate Increase	5.0%

The Proposed FY 2020 budget calls for a combined 5.0% average increase in water and sewer consumption revenue. This proposed increase meets the 5.0% Spending Affordability Guidelines (SAG) limit recommended by both Prince George's and Montgomery Counties. Even with this change, WSSC rates continue to be favorable when compared to many other comparable water and sewer utilities and the average residential bill is 1.0% of the median household income as shown on page 2-3. It should be noted that consumption revenue will be generated through the new 4-tier rate structure that will become effective on July 1, 2019.

WATER AND SEWER RATE SCHEDULES

Proposed Rate Structure Effective July 1, 2019

Average Daily Consumption by Customer Unit During Billing Period (Gallons Per Day)	FY 2020 July 1, 2019		Total Combined
	Proposed		
	Water Rates	Sewer Rates	
	Per 1,000 Gallons		
0 - 80.9999	\$ 5.09	\$ 6.80	\$ 11.89
81 - 165.9999	5.74	7.56	13.30
166 - 275.9999	6.62	9.47	16.09
276 & Greater	7.76	12.50	20.26

Proposed Flat Rate Sewer Charge - \$125.00 per quarter

Additional information on the proposed rate structure can be found at:
<https://www.wsscwater.com/billchanges>

Current Approved Rate Structure

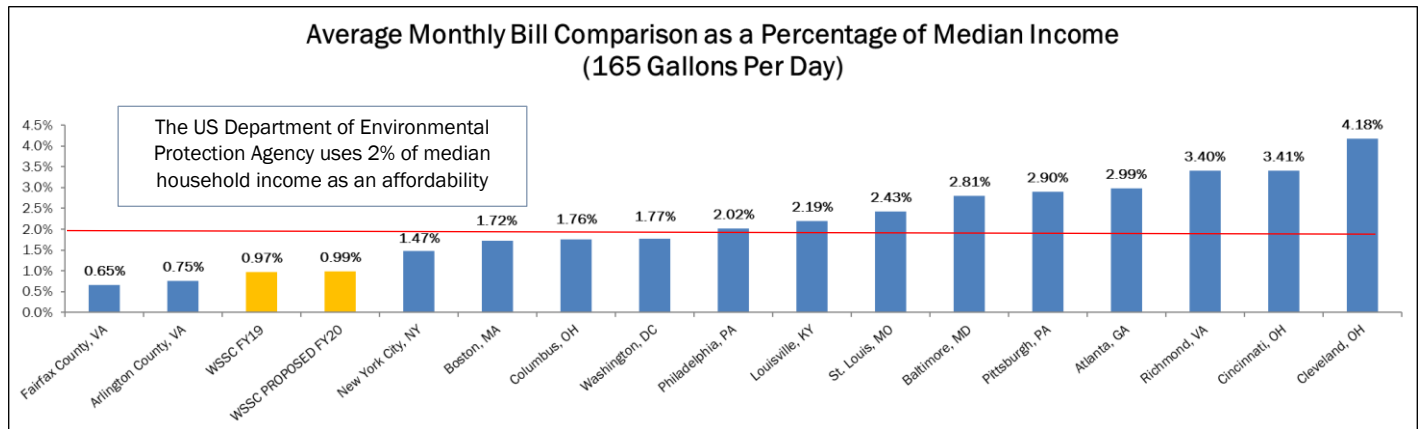
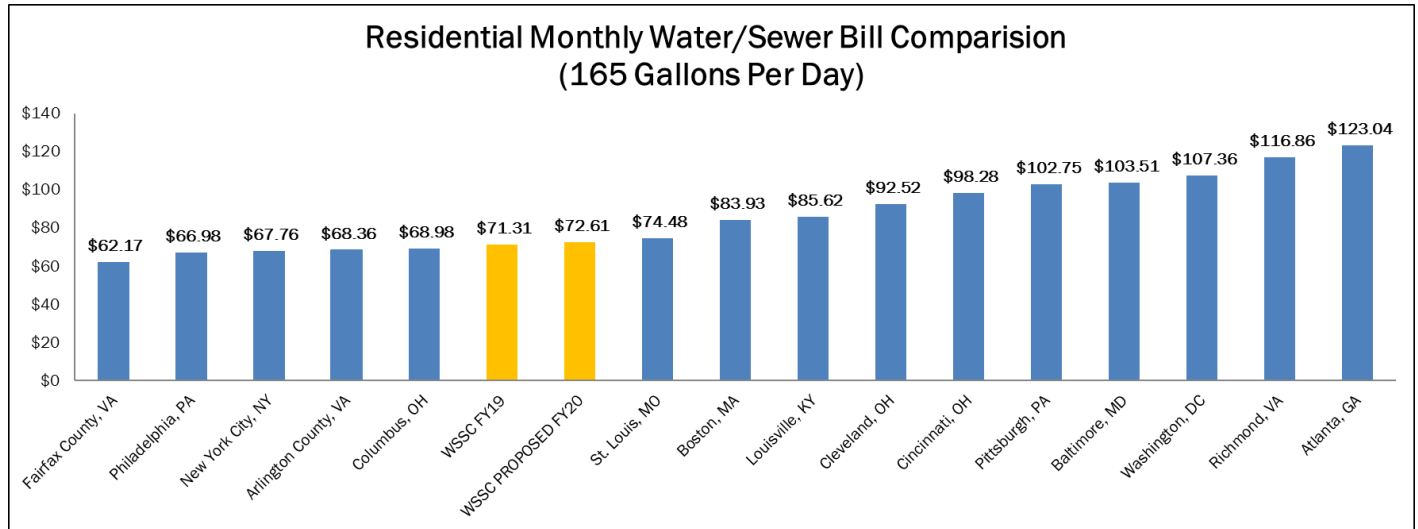
Average Daily Consumption by Customer Unit During Billing Period (Gallons Per Day)	FY 2019 July 1, 2018		Total Combined
	Approved		
	Water Rates	Sewer Rates	
	Per 1,000 Gallons		
0-49	\$ 3.61	\$ 4.70	\$ 8.31
50-99	4.04	5.49	9.53
100-149	4.47	6.38	10.85
150-199	4.98	7.37	12.35
200-249	5.83	8.03	13.86
250-299	6.32	8.70	15.02
300-349	6.70	9.27	15.97
350-399	6.97	9.73	16.70
400-449	7.24	9.95	17.19
450-499	7.46	10.25	17.71
500-749	7.59	10.47	18.06
750-999	7.77	10.71	18.48
1,000-3,999	7.91	11.16	19.07
4,000-6,999	8.10	11.41	19.51
7,000-8,999	8.20	11.58	19.78
9,000 & Greater	8.34	11.89	20.23

Current Flat Rate Sewer Charge - \$115.00 per quarter

Proposed Rates, Fees and Charges

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 165 gallons of water per day. The rates used in this comparison were in effect November 2018. The chart includes WSSC bills at FY 2019 approved and FY 2020 proposed rates.



Median household income (in 2016 dollars) 2012-2016. Figures gathered from www.census.gov, 2012-2016 American Community Survey 5-Year Estimates.

ANNUAL CUSTOMER BILLS AT VARIOUS CONSUMPTION LEVELS

Meter Size	Average Daily Consumption (Gallons Per Year)	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
3/4" Residential Meter	100 (36,500 gal/yr)	\$ 443.51	\$ 478.10	\$ 490.87	\$ 508.03	\$ 555.76
3/4" Residential Meter	165 (60,225 gal/yr)	756.50	800.37	824.46	855.78	871.31
3/4" Residential Meter	500 (182,500 gal/yr)	3,046.33	3,159.75	3,265.60	3,407.95	3,178.63
2" Meter	1,000 (365,000 gal/yr)	6,730.45	7,286.60	7,512.90	7,808.55	7,612.08
3" Meter	5,000 (1,825,000 gal/yr)	33,408.00	35,527.00	36,676.75	38,209.75	38,947.68
6" Meter	10,000 (3,650,000 gal/yr)	69,466.50	73,967.60	76,340.00	79,515.50	78,994.18

Annual customer bills include the Account Maintenance Fee and Infrastructure Investment Fee shown of the following pages.

ACCOUNT MAINTENANCE FEES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

<u>Meter Size</u>	FY 2019 Current <u>Quarterly Charges</u>	FY 2020 Proposed <u>Quarterly Charges</u>
<u>Small Meters</u>		
5/8" to 1"	\$ 16.00	\$ 16.00
<u>Large Meters</u>		
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"	246.00	246.00
<u>Detector Check</u>		
<u>Meters</u>		
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
<u>Fire Service</u>		
<u>Meters</u>		
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

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

INFRASTRUCTURE INVESTMENT FEES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

<u>Meter Size</u>	FY 2019 Current <u>Quarterly Charges</u>	FY 2020 Proposed <u>Quarterly Charges</u>
<u>Small Meters</u>		
5/8"	\$ 11.00	\$ 11.00
3/4"	12.00	12.00
1"	14.00	14.00
<u>Large Meters</u>		
1-1/2"	90.00	90.00
2"	185.00	185.00
3"	585.00	585.00
4"	813.00	813.00
6"	1,265.00	1,265.00
8"	2,845.00	2,845.00
10"	4,425.00	4,425.00
<u>Fire Service Meters</u>		
4"	499.00	499.00
6"	616.00	616.00
8"	2,524.00	2,524.00
10"	2,714.00	2,714.00
12"	5,214.00	5,214.00

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

SYSTEM DEVELOPMENT CHARGE – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

	<u>FY 2019 Current Charges</u>	<u>FY 2020 Proposed Charges</u>	<u>Current Maximum Allowable</u>	<u>Proposed Maximum Allowable</u>
Apartment				
Water	\$ 896	\$ 896	\$ 1,310	\$ 1,330
Sewer	1,140	1,140	1,669	1,694
1-2 toilets/residential				
Water	1,344	1,344	1,968	1,998
Sewer	1,710	1,710	2,500	2,538
3-4 toilets/residential				
Water	2,240	2,240	3,279	3,328
Sewer	2,850	2,850	4,171	4,234
5 toilets/residential				
Water	3,135	3,135	4,589	4,658
Sewer	3,991	3,991	5,841	5,929
6+ toilets/residential (per fixture unit)				
Water	88	88	130	132
Sewer	115	115	170	173
Non-residential (per fixture unit)				
Water	88	88	130	132
Sewer	115	115	170	173

No increase is proposed for the System Development Charge for FY 2020 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 1.5% change in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) for all items in the Washington, D.C. metropolitan area from November 2017 to November 2018.

MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

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, 2019.

<u>Item</u>	<u>Current Charge</u>	<u>FY 2020 Proposed Charge</u>
1 Inspection Fees - Water/Sewer Connection Hookup, Well/Septic Hookup		
<u>Plumbing and Gasfitting Inspections</u>		
New Single Family Detached Dwellings	\$ 835	\$ 919
New Attached Dwellings (townhouse/multiplex excluding apartments)	835	919
<u>All Other Residential:</u>		
Water/Well Hookup	109	120
Meter Yoke Inspection (meter only installation)	109	120
Water Hookup Converting from Well (includes 2 inspections)	218	240
Sewer/Septic Hookup	109	120
First Plumbing Fixture	109	120
Each Additional Fixture	40	46
SDC Credit Fixture Inspection (per fixture)	40	44
Minimum Permit Fee	200	220
Permit Reprocessing Fee	60	66
Long Form Permit Refund Fee (1B write-up form)	200	220
Long Form Permit Re-Issue Fee	200	220
<u>All Non-Residential:</u>		
<u>Plan Review (without Permit Application)</u>		
25 Fixtures or Less	454	499
26-200 Fixtures	1,541	1,772
Over 200 Fixtures	3,070	3,531
<u>2nd or 3rd Review (with or without Permit Application)</u>		
25 Fixtures or Less	160	173
26-200 Fixtures	345	397
Over 200 Fixtures	736	846
Water/Well Hookup	195	214
Meter Yoke Inspection (meter only installation)	195	214
Sewer/Septic Hookup	195	214
FOG Interceptor	195	214
First Plumbing Fixture	195	214
Each Additional Fixture	51	55
SDC Credit Fixture Inspection (per fixture)	40	44
Minimum Permit Fee	278	306
Permit Reprocessing Fee	60	65
Long Form Permit Refund Fee		
Long Form Permit Refund Fee	291	320
Long Form Permit Re-Issue Fee	291	320

Proposed Rates, Fees and Charges

MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

Item	Current Charge	FY 2020 Proposed Charge
2 Site Utility (On-Site) Review Fee		
Base Fee	\$ 3,301	\$ 3,522
Additional Fee per 100 feet	302	332
Minor (Waived) Site Utility (On-Site) Fee	1,005	1,106
3 License Fees for the Regulated Trades		
<u>Reciprocal Master Plumber, Gasfitter:</u>		
Initial Registration per type (2 years)	102	112
Registration Renewal all types (2 years)	88	96
Late Registration Renewal	52	57
<u>Examined Master Plumber, Gasfitter:</u>		
Initial Registration per type (4 years)	108	118
Registration Renewal all types (4 years)	108	118
Late Registration Renewal	52	57
Cross-connection Technician Registration	26	29
Sewer and Drain Registration and Renewal (2 years)	40	46
Sewer and Drain Late Renewal Fee	20	22
<u>Journeyman License Registration:</u>		
Initial Registration (2 years)	31	34
Registration Renewal (2 years)	31	34
Late Registration Renewal	21	23
License Replacement Fee	16	17
Apprentice License Registration Renewal	11	12
4 Short Form Permit Fee (up to 3 fixtures) – Non-Refundable	94	103
5 Fee for the Sale of WSSC Plumbing and Fuel Gas Code (Plumbing Code)		
and Cross Connection Control Manual		
Sale of Plumbing Regulation (per book)	38	42

MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

<u>Item</u>	<u>Current Charge</u>	<u>FY 2020 Proposed Charge</u>
6 Septic Hauler Discharge Permit Fee		
<u>Category I Residential & Septic Waste & Grease</u>		
50 - 799 gallons (per vehicle)	\$ 4,610	\$ 5,071
800 - 2,999 gallons (per vehicle)	13,149	14,464
3,000 - gallons and up (per vehicle)	31,188	34,307
Transfer and/or Replacement Permit Sticker	107	118
Zero Discharge Permit Fee	107	118
Temporary Discharge Permit Fee	98 + Sewer Rate/1,000 gallons	118 + Sewer Rate/1,000 gallons
	11.14/1,000 gallons of truck capacity	Delete
Sewer Rate – Domestic Low Strength Wastewater	56.00/1,000 gallons of truck capacity	Delete
Sewer Rate – Domestic High Strength Wastewater	-	Delete
Sewer Rate - Hauled Waste	-	43.00/1,000 gallons of truck capacity
7 Long Form Permit Transfer Fee (With Inspection)	160	176
8 Meter Replacement Fee (Damaged or Stolen Meter)		
6" Fire Service Meter	9,820	9,874
8" Fire Service Meter	11,495	12,315
9 Temporary Fire Hydrant Connection Fee		
<u>Service Charge</u>		
2 Weeks or Less (3/4" meter)	56	62
Water Consumption Charge - 3/4" Meter	Current approved rate for 1,000 gal ADC; \$30 min.	Proposed rate for 1,000 gal ADC; \$33 min.
Water Consumption Charge - 3" Meter	Current approved rate for 1,000 gal ADC; \$195 min.	Proposed rate for 1,000 gal ADC; \$214 min.
10 Water Turn-Off, Turn-On Fee		
Small Meter Turn-On	89	97

MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

<u>Item</u>	<u>Current Charge</u>	<u>FY 2020 Proposed Charge</u>
11 Feasibility Review Fee (WSSC Built)		
Feasibility Submission Fee (Non-refundable)	\$ 1,618	\$ 1,780
Feasibility Review & Report Fee Deposit	10,784	11,862
<i>(can be deferred as deficit when extension is completed)</i>		
12 Industrial Discharge Control Program Fees By Category		
<u>Industrial users subject to Categorical Pretreatment Standards</u>		
Less than 5,000 gpd (double visit)	4,623	5,085
Greater than 5,000 gpd (double visit)	7,084	7,792
Non-discharging Categorical Industries (zero discharge)	1,245	1,370
<u>Significant Industrial User</u>		
Less than 25,000 gpd (single visit - priority pollutant sampling)	4,623	5,085
Greater than 25,000 gpd (double visit - priority pollutant sampling)	7,084	7,792
13 Fees for Sale of Contract Specifications, Contract Specification Books, Drawings, Design Manuals, Standard Details, and General Conditions		
Utility Contracts	17	11-20
Construction Standard Details	55	60
Construction General Conditions & Standard Specifications	46	53
SEP Construction General Conditions & Standard Specifications	46	53
14 Watershed Use Permit Fees		
<u>Watershed Use Permit Fees</u>		
Watershed Use Permit (January 1 - December 31)	70	72
Open Season Boat Mooring (March 15 – November 30)	80	82
Winter Boat Mooring (December 1 – March 14)	55	57
Boat/Craft Removal Fee	100	103
Monthly Storage Fee for Removed Boats	80	82
Rental for the Azalea Garden	75/4 hours	77/4 hours
Rental for the Bio-Brick Pavilion	75/4 hours	77/4 hours
Boarding Stable Entrance Permit	250	258
Adjacent Landowner Entrance Permit	80	82
<u>Picnic Permit</u>		
Groups 11-15	18	19
15 Call Back Fees (large meters, plumbers)	228	262

MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

Item	Current Charge	FY 2020 Proposed Charge
16 Utility Erosion and Sediment Control Permit Fee		
Minor Projects (less than 125 linear ft OR less than 42 in. deep and 20 in. width)	\$0.20/linear ft	\$0.23/linear ft
Major Projects	0.30/linear ft	0.34/linear ft
17 Erosion and Sediment Control Training Certification Session Fee	79/session, per participant	Delete
18 Fee for Sale of Erosion and Sediment Control Field Guide	10	Delete
19 Shut Down/Charge Water Main Fee	1,144	1,177
20 Right-of Way Release Review Fee (per document)	1,144	1,236
21 Fee for Review and Inspection of Site Work Potentially Impacting WSSC Pipelines		
Complex Review / Non-DR Type Design Review	2,179	2,615
22 Discharge Authorization Permit Fees		
Significant Industrial User – Initial Permit (4 years)	5,496	6,046
Significant Industrial User – Renewal (4 years)	2,694	2,963
Initial zero-discharge CIU Permit (4 years)	2,087	2,296
Reissued zero-discharge CIU Permit (4 years)	1,392	1,531
Temporary Discharge Permit (Non – SIU)	5,496	6,046
23 Property Inspection Fee	107	115
24 Hydraulic Planning Analysis and System Planning Forecast		
Modeling and Re-Modeling Fee - Up to 3 parts	1,600	1,840
Modeling and Re-Modeling Fee - per part Over 3	696	765
25 Environmental Site Review Fee		
with Database Search Conducted by WSSC	379	Delete
with Database Search Submitted by Applicant	288	331
26 Partial Release for Service Fee	1,331	1,398
27 Facilities Design Guideline Fee	35	40
28 Feasibility Review Fee for On-Site Takeover Projects	974	1,120

MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2019

<u>Item</u>	<u>Current Charge</u>	<u>FY 2020 Proposed Charge</u>
29 Fee for the Preparation of Hold Harmless Agreement	\$ 1,068	\$ 1,228
30 Warehouse Restocking Fee	33	39
31 Residential Outside Meter Housing Upgrade/Pipe Alteration	6,540	6,786
32 Pre-Screen All Plan Types Fee	338	365
33 Cross Connection Fees		
Test Report Fee	35	38
Base Fee for High Hazard Commercial Water Customer - per month	13	16
Base Fee for All Other Commercial Water Customer- per month	7	8
34 Name/Transfer of Ownership Change Fee	228	250
35 Protest Filing Fee	700	770
36 Plumbing/Fuel Gas Plans Review Pre-Screen Fee	255	Delete
37 Variance Review Fee (NEW)	-	1,238

SECTION 3

SPENDING AFFORDABILITY AND LONG-RANGE FINANCIAL PLAN

LONG-RANGE FINANCIAL PLAN FOR WATER AND SEWER OPERATING FUNDS

(\$ In Thousands)	FY 2019 Approved	FY 2020 Proposed	FY 2021 Projected	FY 2022 Projected	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected
OPERATING REVENUES							
Water and Sewer User Charges	\$ 627,942	\$ 658,899	\$ 698,900	\$ 740,834	\$ 785,284	\$ 828,475	\$ 869,899
Other Sources/Fees:							
Account Maintenance Fees	32,182	32,296	32,331	32,376	32,441	32,505	32,570
Rockville Sewer Use	2,700	3,000	3,000	3,000	3,000	3,000	3,000
Plumbing and Inspection Fees	12,231	12,900	12,975	13,364	13,765	14,178	14,604
Infrastructure Investment Fee	38,894	39,331	39,409	39,484	39,560	40,544	40,623
Miscellaneous	19,800	19,800	20,198	20,400	20,604	20,810	21,018
Interest Income	1,500	5,500	4,821	4,844	4,846	3,941	3,939
Total Revenues	\$ 735,249	\$ 771,726	\$ 811,634	\$ 854,302	\$ 899,500	\$ 943,453	\$ 985,653
OTHER CREDITS AND TRANSFERS							
Use of Fund Balance	11,580	11,341	8,000	7,000	6,000	5,000	-
Premium Transfer	-	2,900	-	-	-	-	-
SDC Debt Service Offset	3,364	4,658	4,984	4,983	4,982	4,984	4,984
Reconstruction Debt Service Offset (REDO)	12,500	11,600	9,500	7,400	6,000	-	-
Miscellaneous Offset	-	395	-	-	-	-	-
Total Funds Available	\$ 762,693	\$ 802,620	\$ 834,118	\$ 873,685	\$ 916,482	\$ 953,437	\$ 990,637
OPERATING EXPENSES							
DEBT SERVICE							
Bonds and Notes Principle and Interest	277,061	306,307	324,047	341,953	357,427	377,262	393,204
OTHER TRANSFERS AND ADJUSTMENTS							
Unspecified Adjustments	-	-	(10,000)	(10,000)	-	-	-
PAYGO	31,016	31,016	31,016	31,016	31,016	31,016	31,016
Total Expenses	\$ 762,693	\$ 802,620	\$ 830,487	\$ 861,812	\$ 901,136	\$ 935,270	\$ 965,975
Net Revenue (Loss)	-	-	3,631	11,873	15,346	18,167	24,662
BEGINNING FUND BALANCE - JULY 1	\$ 185,297	\$ 173,717	\$ 162,376	\$ 158,006	\$ 162,879	\$ 172,225	\$ 185,393
Net Increase (Decrease) in Fund Balance	-	-	3,631	11,873	15,346	18,167	24,662
Use of Fund Balance/Other Adjustments	(11,580)	(11,341)	(8,000)	(7,000)	(6,000)	(5,000)	-
ENDING FUND BALANCE - JUNE 30	\$ 173,717	\$ 162,376	\$ 158,006	\$ 162,879	\$ 172,225	\$ 185,393	\$ 210,055
Debt Service Coverage (1.10 is target)	1.01	1.00	1.01	1.04	1.08	1.10	1.13
Debt Service as a Percentage of Total Expenditures (Below 40% is target)	36.3%	38.2%	39.0%	39.7%	39.7%	40.3%	40.7%
Operating Reserve Required 10% Level (\$)	\$73,525	\$77,173	\$81,163	\$85,430	\$89,950	\$94,345	\$98,565
Days Operating Reserve-on-Hand (60 - 90 days is target)	84.4	74.4	69.9	69.4	70.2	72.8	79.8
Total Workyears (All Funds)	1,776.0	1,776.0	1,776.0	1,776.0	1,776.0	1,776.0	1,776.0

Assumptions:

- The FY 2021-2025 projections reflect WSSC's multi-year forecast and assumptions. The projected expenditures, revenues, and fund balances for these years may be based on changes to rates, fees, usage, inflation, future labor agreements, and other factors not assumed in the FY 2020 Proposed Budget. Data excludes General Construction Debt Service and General Construction Bonds.
- Debt service for bonds and notes includes Maryland Water Quality Bonds and interfund debt service transfers. General Construction debt service is excluded.
- Adjustment for Rate Increase assumes rate increases in effect for 12 months.
- Debt Service Coverage is Operating Revenues less Operating Expenses (excluding Debt Service) divided by the debt service on bonds and notes.
- Operating Reserve represents 10% of Operating Revenue.

SPENDING AFFORDABILITY AND LONG-RANGE FINANCIAL PLAN

INTRODUCTION

In May 1993, the Montgomery and Prince George's County Councils created the Bi-County Working Group on WSSC Spending Controls (Working Group) to review WSSC finances and recommend spending control limits. The Working Group's January 1994 report recommended "the creation of a spending affordability process that requires the Counties to set annual ceilings on the WSSC's rates and debt (debt in this context means both bonded indebtedness and debt service), and then place corresponding limits on the size of the capital and operating budgets of the Commission."

Each year, 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.

The Commission has submitted an annual budget, which generally conforms to the Spending Affordability Guidelines (SAG) established by both county governments every year since 1994.

A long-range financial plan complements the spending affordability process by utilizing approved SAG limits to forecast outer year implications and strategize potential problems and opportunities which may impact WSSC's work program. The plan is WSSC's road map and reflects financial strategic intent, as well as imposing discipline by highlighting cumulative effects of decisions. Addressing issues earlier, not only protects WSSC's long-term financial condition, but ensures that necessary actions and/or changes are properly communicated to our customers, County Councils, and other stakeholders.

MAJOR ASSUMPTIONS AND WORKLOAD INDICES

Below is a summary of budget outcomes related to results from FY 2020 Spending Affordability.

- Fiscal Policy Guidelines - Fund Balance - It was assumed for the purpose of preparing the Proposed Budget FY 2020 that, at the end of FY 2019, accumulated net revenues for the water and sewer operating funds would total \$173.7 million. For FY 2020, approximately \$77.2 million will be held in accumulated net revenues in adherence to the Commission's reserve policy (see Fiscal Guidelines page 5-1). Fund balance of \$11.0 million will also be used to finance the IT Strategic Plan which includes AMI and Work and Asset Management (WAM) system. An additional \$0.3 million will be used to fund the strategic energy plan and climate vulnerability assessment. This leaves an unallocated reserve of approximately \$85.2 million.
- Revenues - The estimated FY 2020 revenues from water consumption and sewer use charges are \$281.0 million and \$377.9 million, respectively. Water production is assumed to be 164.0 MGD and water purchases are projected to remain the same.

MAJOR ASSUMPTIONS AND WORKLOAD INDICES (CONTINUED)

- Capital Improvement Program (CIP) and Capital Budget - 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. The FY 2020 Capital Budget is \$638.5 million.
- Debt Service - The debt service estimates for FY 2020 assume that \$155.2 million in Water bonds and \$229.7 million in Sewer bonds will be issued in FY 2020, in addition to repayment of existing debt. The WSSC water and sewer issues will be 30-year bonds with an estimated 3.75% net interest rate.
- Reconstruction Debt Service Offset (REDO) - For FY 2020, \$11.6 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 systems reconstruction activities.
- Workforce and Compensation - Funding for employee salary enhancements in a manner coordinated with the Counties is included in the budget.

SECTION 4
EXPLANATION OF BUDGET AND SUMMARIES

EXPLANATION OF BUDGET AND SUMMARIES

BUDGET FORMULATION

Maryland State law requires that the WSSC prepare capital and operating budgets each fiscal year. The Proposed Budget FY 2020 shows funding and staff requirements, organizational components, and program and fund sources.

The budgets for all funds are prepared on a modified 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 Governmental Accounting Standards Board Statement 68 – Accounting & Finance Reporting for Pensions).

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.

FISCAL YEAR

The 12-month period used to account for revenues and expenditures commences on July 1 of each year and ends on June 30 of the following year.

CAPITAL BUDGET & CIP

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

CAPITAL BUDGET & CIP (CONTINUED)

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.

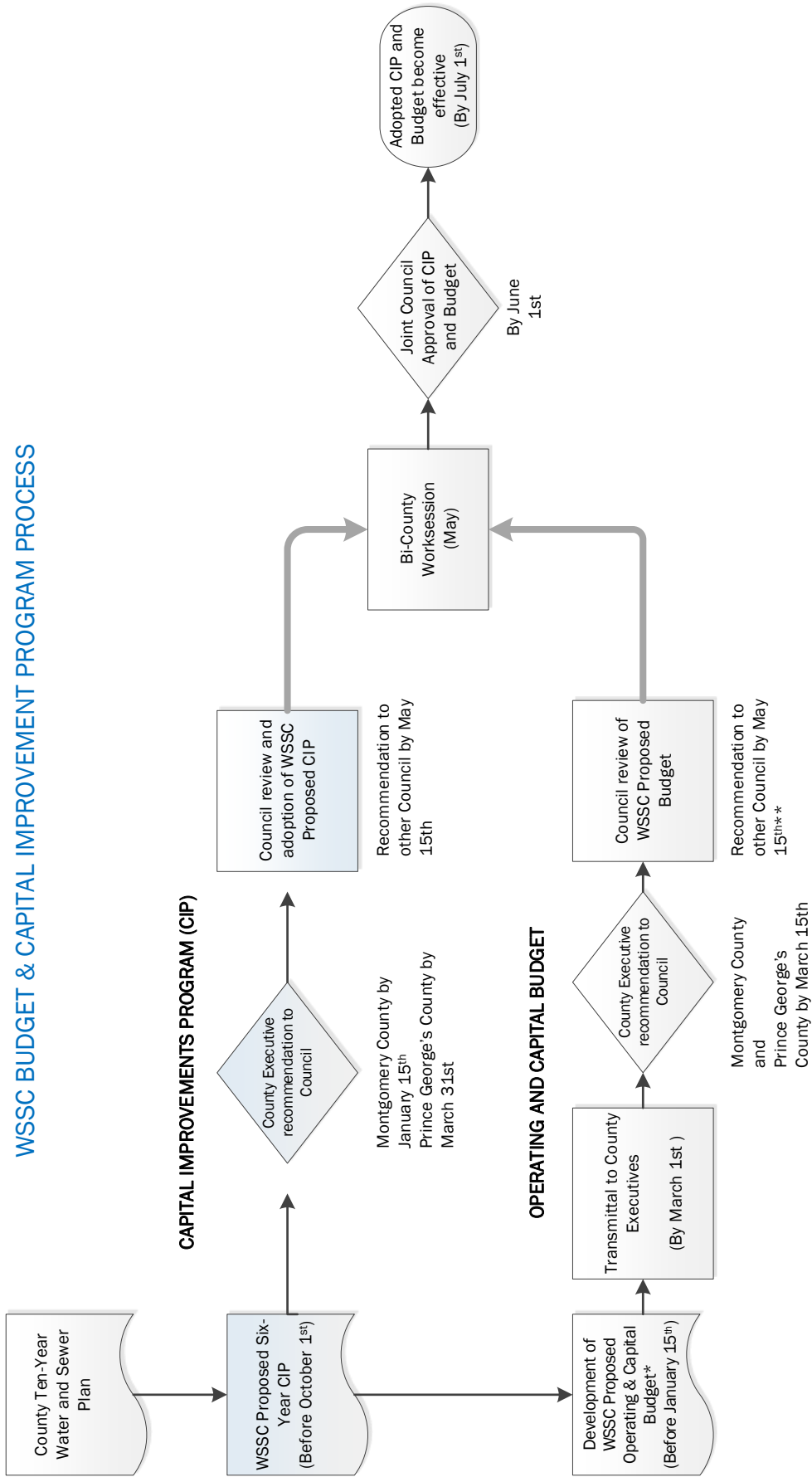
OPERATING BUDGET

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 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.

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 Advanced Wastewater Treatment Plant, budget planning by DC Water - and the budget's subsequent review and approval by DC Water's multi-jurisdictional Board of Directors - can have important impacts on planning for the WSSC's capital and operating budgets.

WSSC BUDGET & CAPITAL IMPROVEMENT PROGRAM PROCESS



*Includes the operating budget and first year capital budget of the Proposed Six-Year CIP. Capital budget also incorporates "Information Only Projects" and General Construction Bond projects.

**Incorporates changes to funding in the first year of capital budget.

FUND STRUCTURE

The Proposed Budget FY 2020 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.

The respective purpose and revenue source of each fund are described in the table below. Although each fund is essentially a separate entity authorized to expend funds for prescribed purposes and derive revenues from specific rates and charges as prescribed by state law, WSSC audited annual financial statements consider only a single operating budget without further fund delineation. Audited financial statements can be found at <https://www.wsscwater.com/financereports>.

Capital Fund	Major Purpose	Major Revenue Source
Water Supply Bond	Construct major water supply treatment and transmission facilities; Reconstruct water distribution system.	Water Supply Bonds and System Development Charge
Sewage Disposal Bond	Construct major sewage treatment and transmission facilities; Reconstruct sewerage collection system.	Sewage Disposal Bonds, System Development Charge, and Grants
General Construction Bond	Construct minor water and sewer lines and support facilities.	General Construction Bonds and House Connection Charges

Operating Fund	Major Purpose	Major Revenue Source
Water Operating	Operate and maintain water facilities and pay debt service on Water Supply Bonds.	Customer Water Bill
Sewer Operating	Operate and maintain sewerage facilities and pay debt service on Sewage Disposal Bonds.	Customer Sewer Bill
General Bond Debt Service	Pay debt service on General Construction Bonds.	Front Foot Benefit Charges

WATER

The Commission issues Water Supply Bonds (Capital Fund) and collects System Development Charges 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. 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

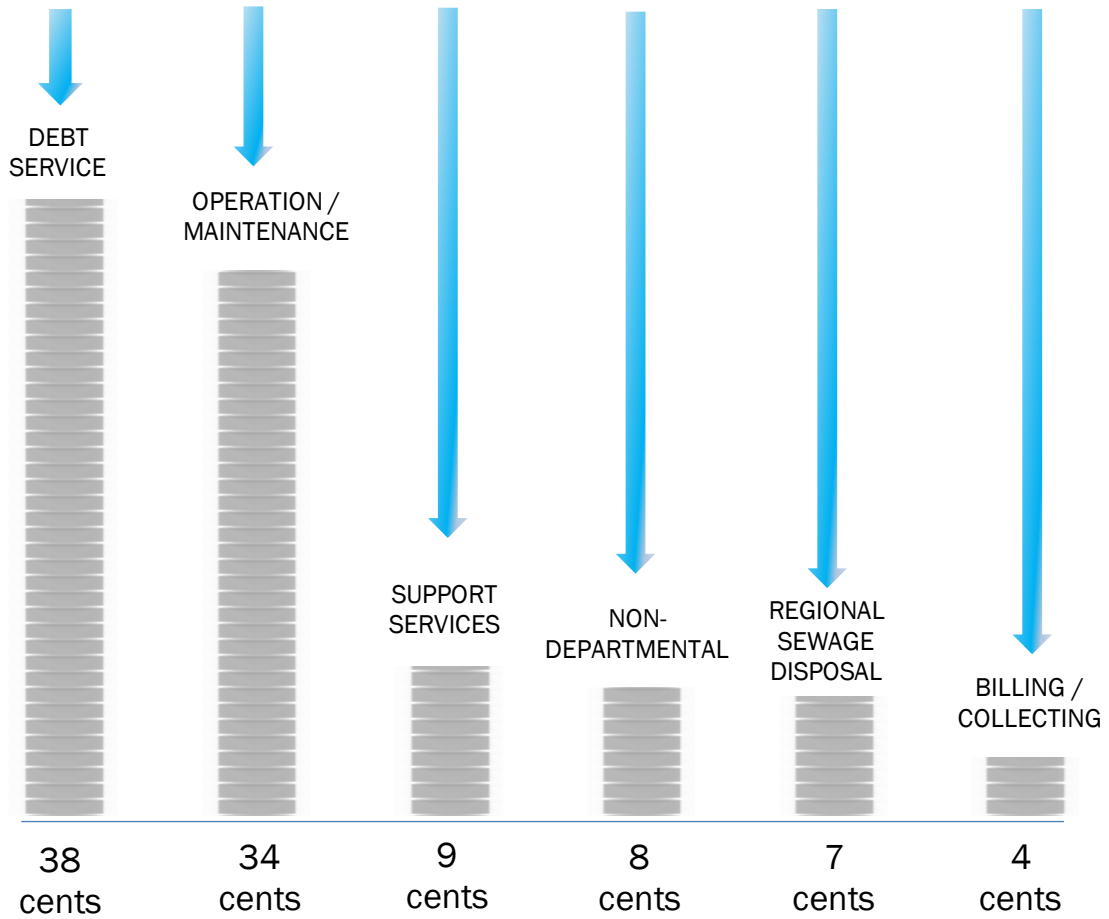
The Commission issues Sewage Disposal Bonds (Capital Fund) collects System Development Charges, and receives grants to finance the planning, design, and construction of major sewage disposal and treatment facilities and the reconstruction of the sewerage collection system. The facilities include sewage pumping stations and force mains, sewer lines, sewage treatment facilities (including reimbursement to the District of Columbia Water (DC 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.

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.

PROPOSED BUDGET FY 2020

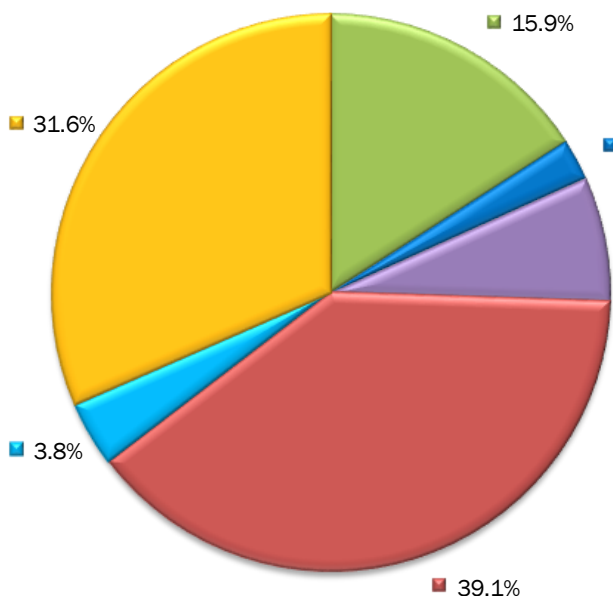
HOW EACH DOLLAR OF A WATER & SEWER BILL IS SPENT



PROPOSED BUDGET FY 2020 – BY MAJOR EXPENSE CATEGORY

GRAND TOTAL = \$1,455,919
(\$ in Thousands)

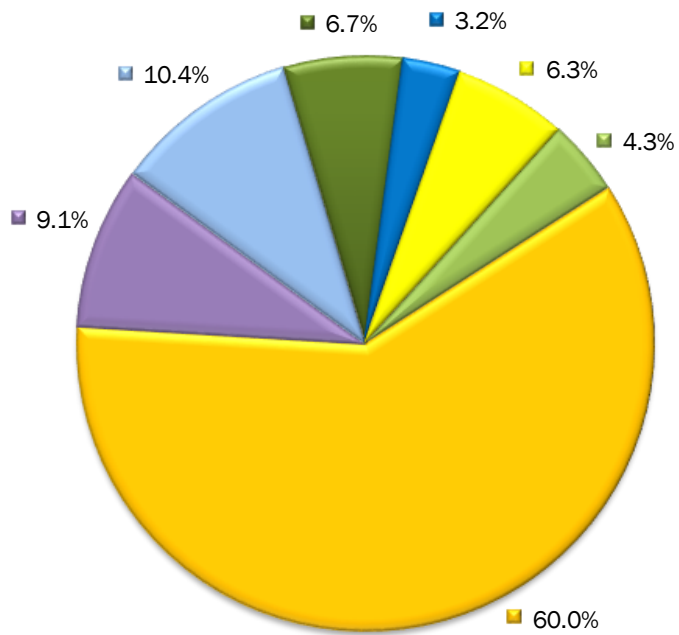
OPERATING



(\$ in Thousands)		FY 2020 Proposed
Salaries & Wages		\$ 130,134
Heat, Light & Power		19,444
Regional Sewage Disposal		59,000
Debt Service		319,883
PAYGO		31,016
All Other *		257,916
Total		\$ 817,393

*All other includes Non-Departmental Accounts, Services and Contracts, Materials and Chemicals, Gas and other Petroleum Products, Communications, and Claims & Damages.

CAPITAL

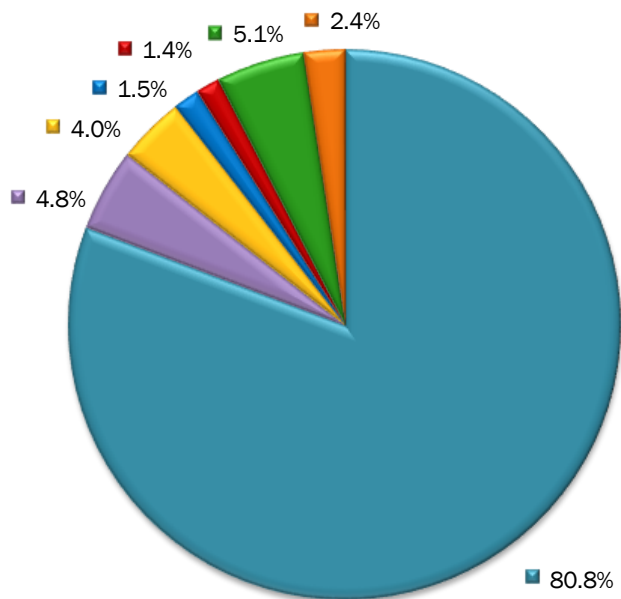


(\$ in Thousands)		FY 2020 Proposed
Salaries & Wages		\$ 27,154
Contract Work		383,332
Consulting Engineers		58,073
Contribution to Construction		66,280
Contract Restoration		42,600
Materials		20,636
Other*		40,451
Total		\$ 638,526

*Other includes Land, Professional Services, Non-Departmental Accounts, and Water Meters.

PROPOSED BUDGET FY 2020 – BY SOURCES

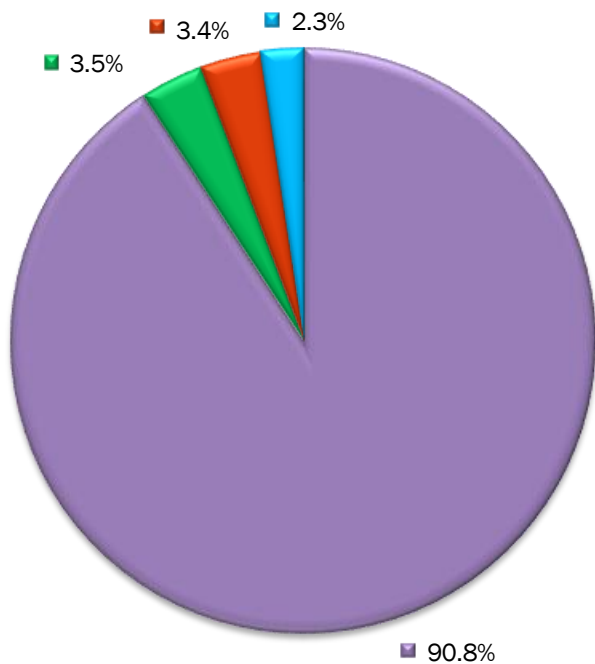
OPERATING



(\$ in Thousands)	FY 2020 Proposed
Water & Sewer Charges	\$ 658,899
Infrastructure Investment Fee	39,331
Account Maintenance Fee	32,296
Front Foot Benefit & House Connection Charge	12,507
Fund Balance Use	11,341
Miscellaneous (Licenses, Permits, Interest)	41,960
Other Credits & Transfers *	19,553
Total	\$ 815,887

*Other includes: Reconstruction Debt Service Offset (REDO) and SDC Debt Service Offset.

CAPITAL

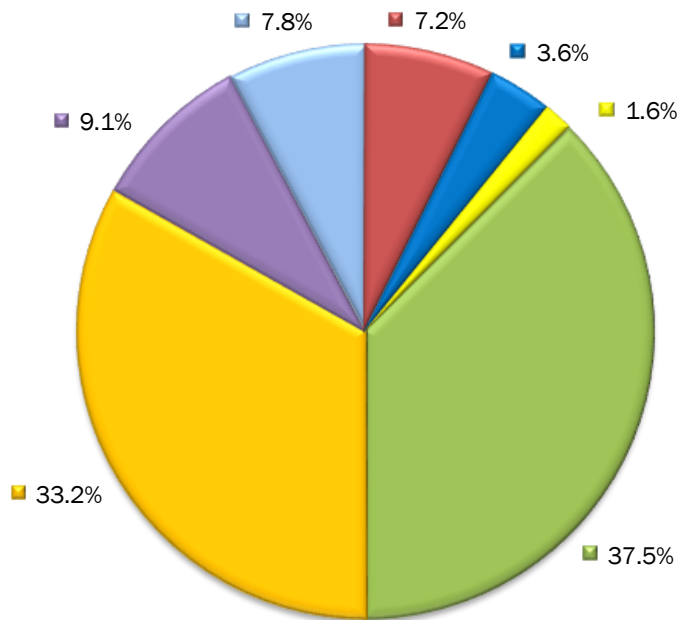


(\$ in Thousands)	FY 2020 Proposed
Bonds and Cash	\$ 579,823
Federal and State Grants*	22,291
System Development Charge	21,716
Other - Developer/Local Gov't	14,696
Total	\$ 638,526

*Includes funding under Maryland's Bay Restoration Fund Enhanced Nutrient Removal

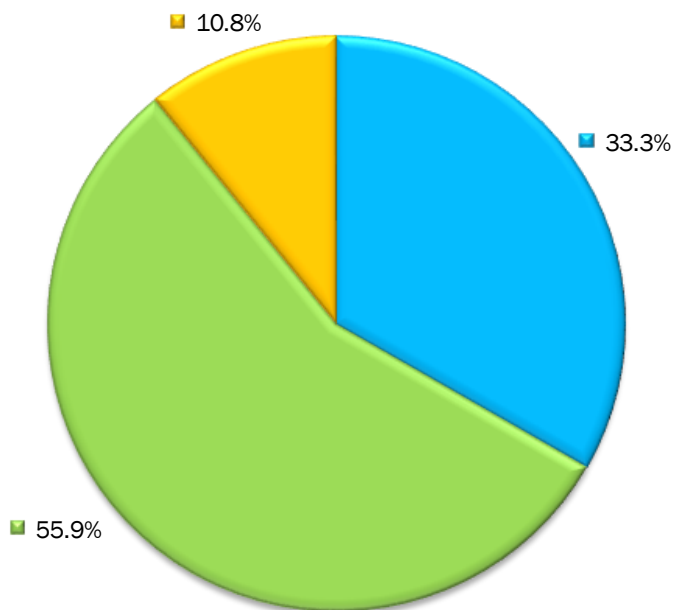
PROPOSED BUDGET FY 2020 – FUND USES

OPERATING



(\$ in Thousands)		FY 2020 Proposed
Debt Service (Water & Sewer)	\$	306,307
Operation & Maintenance		271,071
Support Services		74,570
Non-Departmental		63,713
Regional Sewage Disposal		59,000
Billing/Collecting		29,156
Debt Service (General Bond)		13,576
Total	\$	817,393

CAPITAL



(\$ in Thousands)		FY 2020 Proposed
Water Infrastructure Projects	\$	212,555
Sewer Infrastructure Projects		357,109
Other Capital Projects *		68,862
Total	\$	638,526

*Includes New House Connections, Paving, Relocations, Allocated & Other Costs

FY 2019–FY 2020 SUMMARY OF OPERATING REVENUE & EXPENSE BY BUDGET, MAJOR CATEGORY, AND FUND TYPE

BUDGET PROGRAM FUND TYPE	OPERATING						Totals		
	Water and Sewer				General Construction -				
	Water Operating		Sewer Operating		General Bond Debt Service		FY 2019 Total	FY 2020 Total	% Chg
	FY 2019 Approved	FY 2020 Proposed	FY 2019 Approved	FY 2020 Proposed	FY 2019 Approved	FY 2020 Proposed			
(\$ in Thousands)									
OPERATING REVENUES									
Water Consumption Charges	\$ 273,316	\$ 280,997	\$ -	\$ -	\$ -	\$ -	\$ 273,316	\$ 280,997	2.8%
Sewer Use Charges	-	-	354,626	377,902	-	-	354,626	377,902	6.6%
Front Foot Benefit & H/C Assessments	-	-	-	-	15,473	12,507	15,473	12,507	-19.2%
Account Maintenance Fees	16,413	16,471	15,769	15,825	-	-	32,182	32,296	0.4%
Infrastructure Investment Fee	19,836	20,059	19,058	19,272	-	-	38,894	39,331	1.1%
Plumbing and Inspection Fees	7,190	7,470	5,041	5,430	-	-	12,231	12,900	5.5%
Rockville Sewer Use	-	-	2,700	3,000	-	-	2,700	3,000	11.1%
Miscellaneous	10,900	10,600	8,900	9,200	240	260	20,040	20,060	0.1%
Interest Income	100	2,000	1,400	3,500	75	500	1,575	6,000	281.0%
Operating Revenues	327,755	337,597	407,494	434,129	15,788	13,267	751,037	784,993	4.5%
OTHER CREDITS AND TRANSFERS									
Use of Fund Balance	5,906	5,784	5,674	5,557	-	-	11,580	11,341	-2.1%
Other	-	-	-	-	12,500	11,600	12,500	11,600	-7.2%
Reconstruction Debt Service Offset	4,000	4,000	8,500	7,600	(12,500)	(11,600)	-	-	-
SDC Debt Service Offset	2,422	3,540	942	1,118	-	-	3,364	4,658	38.5%
Miscellaneous Offset	-	214	-	181	-	-	-	395	-
Premium Transfer	-	1,337	-	1,563	-	-	-	2,900	-
Total Funds Available	340,083	352,472	422,610	450,148	15,788	13,267	778,481	815,887	4.8%
OPERATING EXPENSES									
Salaries & Wages	68,672	63,707	59,229	65,968	533	459	128,434	130,134	1.3%
Heat, Light, and Power	10,642	10,808	9,935	8,628	-	8	20,577	19,444	-5.5%
Regional Sewage Disposal	-	-	53,617	59,000	-	-	53,617	59,000	10.0%
All Other	129,381	131,218	123,140	125,967	1,067	730	253,588	257,915	1.7%
Subtotal	208,695	205,734	245,921	259,563	1,600	1,197	456,216	466,494	2.3%
Debt Service									
Bonds and Notes Principal	70,988	84,505	95,000	111,564	11,425	10,182	177,413	206,251	16.3%
Bonds and Notes Interest	46,740	48,711	64,333	61,527	5,863	3,394	116,936	113,632	-2.8%
Interfund Transfer	-	-	-	-	-	-	-	-	-
Subtotal	117,728	133,216	159,333	173,091	17,288	13,576	294,349	319,883	8.7%
OTHER TRANSFERS									
PAYGO	13,660	13,522	17,356	17,494	-	-	31,016	31,016	0.0%
Total Expenditures	340,083	352,472	422,610	450,148	18,888	14,773	781,581	817,393	4.6%
Net Revenue (Loss)	0	0	(0)	0	(3,100)	(1,506)	(3,100)	(1,506)	-51.4%
Fund Balance - July 1	\$ 40,447	\$ 34,541	\$ 144,850	\$ 139,176	\$ 48,372	\$ 32,772			
Balance	0	0	(0)	0	(3,100)	(1,506)			
Use of Fund Balance	(5,906)	(5,784)	(5,674)	(5,557)	(12,500)	(11,600)			
Fund Balance - June 30	\$ 34,541	\$ 28,758	\$ 139,176	\$ 133,619	\$ 32,772	\$ 19,666			

FY 2019 – FY 2020 CAPITAL FUNDING & COSTS BY BUDGET, MAJOR SOURCE CATEGORY, AND FUND TYPE

BUDGET ► PROGRAM ► FUND TYPE ►	CAPITAL						Totals		
	Water and Sewer		Sewer Disposal Bond		General Construction		FY 2019 Total	FY 2020 Total	% Chg
	Water Supply Bond		Sewer Disposal Bond		General Construction Bond				
	FY 2019 Approved	FY 2020 Proposed	FY 2019 Approved	FY 2020 Proposed	FY 2019 Approved	FY 2020 Proposed			
(\$ in Thousands)									
FUNDS PROVIDED									
Bonds and Notes Issues/Cash on Hand	\$ 286,497	\$ 268,012	\$ 292,265	\$ 295,799	\$ 20,077	\$ 16,012	\$ 598,839	\$ 579,823	-3.2%
Anticipated Contributions:									
Federal & State Grants	-	-	13,122	22,291	-	-	13,122	22,291	69.9%
System Development Charge	17,222	16,418	6,425	5,298	-	-	23,647	21,716	-8.2%
Others	2,760	2,826	17,078	10,990	880	880	20,718	14,696	-29.1%
Total Funds Provided	306,479	287,256	328,890	334,378	20,957	16,892	656,326	638,526	-2.7%
CONSTRUCTION COSTS									
Salaries & Wages	18,222	15,065	9,649	8,828	2,807	3,261	30,678	27,154	-11.5%
Contract Work	175,055	163,664	200,785	219,668	383	-	376,223	383,332	1.9%
Consulting Engineers	40,572	30,810	25,865	24,759	2,475	2,504	68,912	58,073	-15.7%
All Other	72,630	77,717	92,591	81,123	15,292	11,127	180,513	169,967	-5.8%
Total Construction Costs	\$306,479	\$ 287,256	\$328,890	\$ 334,378	\$ 20,957	\$ 16,892	\$656,326	\$638,526	-2.7%

SUMMARY OF CHANGE IN FUND BALANCE

Fund (\$ in Thousands)		Fund Balance - July 1st	Operating Revenues	Operating Expenses ¹	Other Credits and Transfers	Use of Fund Balance	Fund Balance - June 30th	Fund Balance Increase/ (Decrease)	% Change
Water Operating	FY 2019	\$ 40,447	\$ 327,755	\$ (340,083)	\$ 12,328	\$ (5,906)	\$ 34,541	\$ (5,906)	-14.6%
	FY 2020	34,541	338,934	(352,472)	13,538	(5,784)	28,758	(5,784)	-16.7%
Sewer Operating	FY 2019	144,850	407,494	(422,610)	15,116	(5,674)	139,176	(5,674)	-3.9%
	FY 2020	139,176	435,692	(450,148)	14,456	(5,557)	133,619	(5,557)	-4.0%
General Bond Debt Service	FY 2019	48,372	15,788	(18,888)	-	(12,500)	32,772	(15,600)	-32.3%
	FY 2020	32,772	13,267	(14,773)	-	(11,600)	19,666	(13,106)	-40.0%

¹Includes debt service.

EXPLANATION OF FY 2020 SIGNIFICANT CHANGES TO FUND BALANCE

Water and Sewer Operating Funds

The Proposed FY 2020 ending fund balances are lower than the projected FY 2019 ending balance 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.

General Bond Debt Service Fund

The Proposed FY 2020 ending fund balance is 40.0% lower than the projected FY 2019 ending balance for the General Bond Debt Service Fund. Revenues for this fund are derived from Front Foot Benefit Assessments and House Connection Charges. Developers now build these types of mains and lines. 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 ratepayers.

EXPENSE TRENDS BY FUND

OPERATING BUDGET

Water & Sewer – Combined Operating Funds

(\$ In Thousands)	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed
OPERATING EXPENSES							
Salaries & Wages	\$ 95,482	\$ 100,118	\$ 104,030	\$ 109,059	\$ 117,144	\$ 127,901	\$ 129,676
Heat, Light & Power	24,443	24,229	22,000	22,099	20,033	20,577	19,436
Regional Sewage Disposal	44,631	54,485	50,068	53,946	58,331	53,617	59,000
All Other	185,487	203,934	214,607	224,975	242,540	252,521	257,185
Subtotal	350,043	382,766	390,705	410,079	438,048	454,616	465,297
Debt Service							
Principal Payments	150,069	153,968	134,171	141,817	151,057	165,988	196,069
Interest Payments	60,772	68,013	76,190	94,918	106,445	111,073	110,238
Interfund Transfer	-	-	-	-	-	-	-
Subtotal	210,841	221,981	210,361	236,735	257,502	277,061	306,307
Other Transfers:							
Working Capital Reserve Transfer	11,700	2,300	6,300	6,524	-	-	-
PAYGO	13,782	19,996	18,821	21,495	10,065	31,016	31,016
Total Expenses	\$ 586,366	\$ 627,043	\$ 626,187	\$ 674,833	\$ 705,615	\$ 762,693	\$ 802,620

General Bond Debt Service Fund

(\$ In Thousands)	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed
OPERATING EXPENSES							
Salaries & Wages	\$ 504	\$ 604	\$ 723	\$ 689	\$ 701	\$ 533	\$ 459
Heat, Light & Power	-	-	-	-	-	-	8
All Other	727	618	1,018	858	813	1,067	730
Subtotal	1,231	1,222	1,741	1,547	1,514	1,600	1,197
Debt Service							
Principal Payments	29,050	18,961	14,102	9,259	12,672	11,425	10,182
Interest Payments	9,176	7,080	4,009	4,751	4,922	5,863	3,394
Interfund Transfer	-	-	-	-	-	-	-
Subtotal	38,226	26,041	18,111	14,010	17,594	17,288	13,576
Total Expenses	\$ 39,457	\$ 27,263	\$ 19,852	\$ 15,557	\$ 19,108	\$ 18,888	\$ 14,773

CAPITAL BUDGET

All Bond Funds – Water Supply, Sewer Disposal, and General Construction

(\$ In Thousands)	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed
CAPITAL EXPENSES							
Salaries & Wages	\$ 23,882	\$ 27,502	\$ 29,390	\$ 30,229	\$ 27,717	\$ 30,678	\$ 27,154
Contract Work	214,754	307,160	379,093	328,614	225,086	376,223	383,332
Consulting Engineers	58,613	45,246	45,626	53,763	41,718	68,912	58,073
All Other	228,393	184,249	196,090	144,379	180,695	180,513	169,967
Total Expenses	\$ 525,642	\$ 564,157	\$ 650,199	\$ 556,985	\$ 475,216	\$ 656,326	\$ 638,526

SECTION 5
FISCAL GUIDELINES

FISCAL GUIDELINES

INTRODUCTION

Fiscal guidelines correspond to the practices of WSSC with respect to revenues, expenditures, and debt management. Fiscal planning, generally done within the context of the Operating Budget and the Capital Improvements Program (CIP)/Capital Budget, reflects and helps shape fiscal guidelines.

The budget process not only reflects those fiscal guidelines currently in force, but is itself a major vehicle for determining and implementing such guidelines. The fiscal guideline statements presented on the following pages are not static. They evolve as the economy and fiscal environment change and as WSSC's service population and requirements for services change.

FISCAL CONTROL

Structurally Balanced Budget

WSSC prepares a structurally balanced budget. Budgeted expenditures should not exceed projected revenues from water and sewer services plus recurring net transfers minus the mandatory contribution to reserves for that fiscal year. Recurring revenues should fund recurring expenses with minimal reliance on non-recurring (one-time) revenues or resources.

Fund Balance Operating Reserves

WSSC maintains a combined unrestricted reserve from the water and sewer operating funds equal to at least 10% of the total water and sewer operating revenues to offset unanticipated variations in water and sewer services revenues that may occur in future years. Use of reserves are as directed by WSSC management.

PAYGO

In FY 2014, WSSC began to issue debt for 30 years as opposed to the prior practice of 20 years. This change included the introduction of PAYGO. WSSC allocates at least \$31.0 million in PAYGO each fiscal year to reduce the amount of planned debt issued for capital projects.

Fiscal Plan

WSSC develops and publishes a fiscal plan, and provides updated six-year projections of the 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.

Budgetary Control

Budgetary control over WSSC is exercised following a joint review by Montgomery County and Prince George's County Governments through approval of Operating and Capital Budgets and is administered by WSSC's Budget Division which monitors operating and capital expenditures during the fiscal year.

FISCAL CONTROL (CONTINUED)

Financial Management

The methodology utilized for budgetary purposes is the “debt service” method of accounting. All internal financial statements are recorded utilizing this method. Annual audited financial statements are prepared in accordance with generally accepted accounting principles (GAAP). Comparisons between the debt service method and GAAP method require adjustments since there are differences in reporting.

Audits

WSSC will ensure the conduct of timely, effective, and periodic audit coverage of all financial records and actions of WSSC, its officials, and employees in compliance with local, state, and federal regulations and laws.

EXPENDITURES AND ALLOCATION OF COSTS

Content of Budgets

WSSC will include in the Operating Budget all programs and facilities which are not included in the CIP. There are three major impacts of the CIP on the Operating Budget: debt service; revenues applied to the CIP for debt avoidance or for projects which are not debt-eligible; and presumed costs of operating new and upgraded facilities. Please refer to the CIP for more detail at <https://www.wsscwater.com/budget>.

Expenditure Growth

The Prince George's County Council adopted Resolution No. CR-12-1994 and the Montgomery County Council adopted Resolution No. 12-1558 that requires WSSC, to the extent possible, to conform with the County Councils’ established spending affordability limits in preparing the capital and operating budgets.

Spending Affordability Guidelines are adopted each year and include limits on the amount of water and sewer volumetric rate increase, operating budget expenditures, new debt issues, and debt service that may be approved for expenditure for the first year of the CIP. The WSSC General Manager advises the County Councils on spending affordability limits and makes budget recommendations with realistic prospects for the served populations’ ability to pay, both in the upcoming fiscal year and in the ensuing years.

WSSC, where required by the two County Councils’ final action on the programs, must revise the same and then, prior to the commencement of the first fiscal year, adopt the operating and capital budget, as well as the six-year CIP.

EXPENDITURES AND ALLOCATION OF COSTS (CONTINUED)

Expenditure Reduction

WSSC will seek expenditure reductions whenever possible through efficiencies, reorganization of services, and through the reduction, elimination, or reengineering of programs, guidelines, and practices which are no longer cost effective.

Private Provision of Services

WSSC will encourage, through matching grants, subsidies, and other funding assistance, the participation of private organizations in the provision of desirable services when objectives can be more effectively met through private activity and expertise and where permitted by law.

Cost Avoidance and Cost Savings

WSSC will consider investment in equipment, land, or facilities, and other expenditure actions to reduce or avoid costs in the future.

Procurement

WSSC will make direct or indirect purchases through a competitive process, except when an alternative method of procurement is specifically authorized by law, is in WSSC's best interest, and is the most cost-effective means of procuring goods and services. WSSC uses the Strategic Sourcing Division in the Procurement Department to manage procurement costs by using a fact-based and data-driven process focused on cost savings, process improvements, supplier innovation, and category management. Cross-functional teams led by strategic sourcing specialists work collaboratively to understand WSSC's internal needs via spend analytics, process gap-analysis, and defining stakeholder requirements. The benefits to the Commission include: encourages cross-functional teams; provides visibility into spending habits; focuses on total cost of ownership; and optimizes category management.

SHORT-TERM FISCAL AND SERVICE GUIDELINES

Short-term guidelines are specific to the budget year. They address key issues and concerns that frame the task of preparing a balanced budget that achieves WSSC's priorities within the context of current and expected economic and political realities.

The budget reflects a 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 the Proposed Budget FY 2020 seek to achieve the Commission's mission through alignment with strategic priorities as stated in the Introduction.

SHORT-TERM FISCAL AND SERVICE GUIDELINES (CONTINUED)

The budget planning for FY 2020 continues to be shaped by the challenges 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 remains low when compared to other household utilities and expenses, there are still residents who struggle to meet their monthly expenses. WSSC offers financial assistance with water and sewer bills under two programs: the Customer Assistance Program (CAP) and WSSC Water Fund.

WSSC's Water Fund provides one-time or emergency assistance to customers in financial need and is funded entirely by contributions from customers, employees, and other sources. The Water Fund is administered by a third party.

Additional factors and events that shaped the budget environment include:

- Continued efforts on regulatory compliance with Consent Decrees including meeting permit levels for sewer discharge at water resource recovery facilities;
- Flat or declining water consumption revenues;
- Support for the Information Technology Strategic Plan;
- Addressing aging infrastructure; and
- Uncertainty regarding potential changes in environmental regulations.

As part of the FY 2020 Spending Affordability Guideline process, WSSC staff originally recommended a water and sewer rate increase of 6.0%. Montgomery and Prince George's Counties supported a 5.0% rate increase. In order to reconcile FY 2020 operating budget submissions, departments would not receive funding for new positions, initiatives, nor enhancements to existing programs. In addition, certain department budgets were recommended for targeted reductions. The Commission emphasized that WSSC would work to maintain service at current levels, though it may be necessary to pull back on certain preventative and non-essential services during FY 2020 in order to remain within approved budget limitations.

To cope with these fiscal challenges while ensuring that WSSC's priorities are met, the Commission reaffirmed its efforts to control and reduce costs, as well as identify opportunities for cost savings. Initiatives instituted include:

- Careful management of labor costs including overtime and group insurance plan redesign;
- Use of the Supply Chain Management Transformation process to identify savings in operating and capital procurements; and
- Reduction in energy usage and costs through the Energy Performance Program (EPP).

The cumulative effects of the many efficiencies and reductions WSSC implemented helped manage slowing revenue growth and tightening budgets.

These short-term fiscal guidelines and actions have been critical in shaping WSSC's Proposed Budget FY 2020. Together with the long-term guidelines elsewhere in this section, the short-term guidelines described here have allowed WSSC to construct a balanced, fiscally responsible budget consistent with current economic and fiscal realities while achieving the Commission's priorities.

CURRENT CIP FISCAL GUIDELINES

Guideline on Eligibility for Inclusion in the CIP

Capital expenditures included for projects in the CIP should:

- Comply with Maryland State law that defines major projects for inclusion in the CIP as water mains at least 16 inches in diameter, sewer mains at least 15 inches in diameter, water or sewage pumping stations, force mains, storage facilities, and other major facilities;
- Preserve and improve services by employing an annual Systems Reconstruction Program to reconstruct aging capital infrastructure;
- Include Information Only Projects which are capital projects that are not required to be in the program 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 responding to requests from county governments;
- Ensure compliance with all legal requirements of the ten-year water and sewerage plans and is in direct support of the two counties' approved land use plans and guidelines for orderly growth and development;
- Generally have a defined beginning and end and a reasonably long useful life;
- Successfully meet WSSC's responsibilities and the public's demand for clean water; and
- Enable decision makers to evaluate the project based on complete and accurate information.

Water and sewer capital projects requested by private applicants in support of new development, identified as Development Services Process (DSP) projects, may only proceed if built at the applicant's expense. The use of rate-payer supported debt for these projects is not allowed.

Guideline on Funding CIP with Debt

Much of the CIP should be funded with debt. Capital projects usually have a long useful life and will serve future rate payers, as well as current rate payers. It would be inequitable and an unreasonable fiscal burden to make current rate payers pay for many projects out of current rate revenues. Bond issues, retired over approximately 30 years, are both necessary and equitable.

Projects deemed to be debt eligible should:

- Have a reasonably long useful life;
- Be ineligible for other potential revenue sources within an appropriate time frame, such as WSSC's System Development Charge, governmental aid, or private contributions;
- Ensure that tax-exempt debt is issued only for those improvements that meet the IRS requirements for the use of tax-exempt bond proceeds; and
- Involve a long-term capital asset in accordance with accounting principles.

CURRENT CIP FISCAL GUIDELINES (CONTINUED)

Guideline on WSSC Debt Limits

Projects in the CIP are primarily financed with funds from the Water Supply and Sewage Disposal Bond Funds. The Water Supply and Sewage Disposal Bonds are repaid to bond holders over a 30-year period by annual principal and interest payments (or “debt service”). The annual debt service on outstanding bonds is paid from WSSC’s operating funds.

Paying principal and interest on debt is the first claim on WSSC’s revenues. By virtue of prudent financial management and the long-term strength of the regional economy, WSSC has maintained the highest quality rating of its general obligation bonds, AAA/Aaa/AAA. This top rating by Wall Street rating agencies assures WSSC of a ready market for its bonds and the lowest available interest rates on that debt.

Debt limitation strategies such as PAYGO financing, use of accumulated net revenue (fund balance), and reduction or deferral of planned capital expenditures should always be balanced against affordability considerations and the demands for the resources necessary to serve existing customers and meet environmental mandates.

Debt Capacity

The aggregate principal amount of bonds and notes issued by the Commission must not exceed the legislated allowable level of the total assessable tax base for all property assessed for County tax purposes within the WSSD, in conformance with state law governing the WSSC. 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 WSSD.

To maintain the highest issued credit rating, WSSC utilizes financial metrics as a means to monitor debt service levels:

- **Water and Sewer Debt Service as a Percentage of Water and Sewer Expenditures.** This ratio reflects the WSSC's budgetary flexibility to adapt spending levels and respond to economic condition changes. Required annual debt service expenditures should be kept at no greater than 40.0% of the WSSC's water and sewer expenditures. This measure excludes expenditures in the General Construction Bond Debt Service fund; and
- **Water and Sewer Debt Service Coverage Ratio.** The amount of net operating revenue available after operating expenses have been paid to meet the annual interest and principal payments on debt service. WSSC’s target debt service coverage ratio is 1.10. This measure excludes the General Construction Bond Debt Service fund.

The results of these metrics are calculated each year in conjunction with spending affordability, the capital budget process, and as needed for fiscal analysis.

CURRENT CIP FISCAL GUIDELINES (CONTINUED)

Guideline on Terms for General Obligation Bond Issues

WSSC's debt typically takes the form of general obligation bonds and notes, with the pledge of the levy of an unlimited ad valorem tax upon the assessable property of the WSSD for repayment. However, substantially all of the debt service is paid from its water consumption charges, sewer usage charges, Infrastructure Investment Fee, front foot benefit charges, assessments, and other available funds. WSSC has always paid General Obligation debt from its own revenues and has never relied on an ad valorem tax levy to pay its debt service.

Bonds are normally issued in a 30-year series with equal payments over the life of the bond issue, which means payments of interest on the outstanding bonds are higher at the beginning and lower at the end. When bond market conditions warrant, or when a specific project would have a shorter useful life, then different repayment terms may be used.

Guideline on Other Forms of Debt

The use of variable rate debt allows the Commission to take advantage of short-term interest rates, which are typically lower, as well as to provide interim financing for the water and sewer projects comprising a portion of the Commission's capital program. The Commission has established a General Obligation Multi-Modal Bond Anticipation Note Program (the "BANs") whereby the notes may bear interest in a weekly mode.

In deciding to utilize this note program, the Commission shall consider market conditions, funding needs, the level of variable rate debt outstanding and other relevant issues when determining in which mode the notes will be initially issued, and reserves the right to convert to a different mode if market conditions change.

The Commission participates in the revolving loan fund offered by the Maryland Water Quality Financing Administration. This loan fund was established by the Maryland General Assembly for the purpose of providing below market interest rates for qualifying water quality projects. When advantageous to the Commission, debt financing via this program will be pursued.

Guideline on Use of Federal and State Grants and Other Contributions

Grants and other contributions are used to fund capital projects whenever available on terms that are to WSSC's long-term fiscal advantage. Such revenues are used for debt avoidance and not for debt service.

Guideline on Operating Budget Impact

In the development of capital projects, the Commission evaluates the funding source of a project and the impact on the operating budget, and displays such sources on the project description form. In evaluating the value of construction or acquiring assets funded with debt, the Commission budgets to ensure that funding is available for debt service and the subsequent annual operation and maintenance costs of the asset.

CURRENT CIP FISCAL GUIDELINES (CONTINUED)

Guideline on New Development and Growth

WSSC funds capital facilities needed to accommodate growth with developer contributions and the System Development Charge (SDC). This charge is reviewed annually by the County Councils. SDC funds are used to pay for new treatment, transmissions and collection (storage) facilities.

The Maryland General Assembly, in 1993, first approved legislation authorizing the Montgomery and Prince George's County Councils to establish, and the WSSC to impose, a System Development Charge. This is a charge on new development to pay for that part of WSSC's CIP needed to accommodate growth in the WSSC's customer base.

During periods where SDC revenue was inadequate to fully fund growth projects, WSSC bonds were issued and related debt service expense paid through operating revenues. However, when sufficient SDC revenues exist, such SDC revenues are used to offset the debt service expense previously paid.

COMMISSION MANAGEMENT

Productivity

WSSC will seek continuous improvement in the productivity of programs in terms of quantity of services relative to resources expended, through all possible strategies.

Risk Management

WSSC will control its exposure to financial loss through a combination of commercial and self-insurance; self-insure against all but highest cost risks; and aggressively control its future exposure through a comprehensive risk management program.

Resource Management

WSSC will seek continued improvement in its budgetary and financial management capacity in order to reach the best possible decisions on resource allocation and the most effective use of rate-payer resources.

Employee Compensation

WSSC will act to contain the growth of compensation costs using various strategies including organizational efficiencies, management efficiencies within its operations and service delivery, and productivity improvements within its workforce.

Retirement Plan

WSSC will assure the security of benefits for employees, retirees and beneficiaries, as well as the solvency of the Employees' Retirement Plan (the "Plan") of WSSC by providing responsibility for investment management of the Plan's assets through the Board of Trustees (the "Board"). The Board is composed of two Commissioners, four employees who are participants of the Plan, two representatives of the public, two retirees who are participants in the Plan, and the Executive Director of the Plan. The administration of the Plan is managed by the Executive Director.

COMMISSION MANAGEMENT (CONTINUED)

Retiree Other Post-Employment Benefits Trust

The Retiree Other Post-Employment Benefits Trust (the “Trust”), a single employer contributory fund, was established to address the cost of life insurance and medical benefits for future retirees and beneficiaries. Through an IRC Section 115 Grantor Trust, annual contributions by WSSC are set aside and invested. The goal of the Trust is to set aside sufficient assets to meet the future costs of retiree benefits as they are earned by current employees.

The Commission appoints Trustees responsible for the investment management of the assets for the exclusive benefit of the retiree participants. Current Trustees are three employees in key positions that are appointed by the Commission. The administration of the Trust has been delegated to the Executive Director of the WSSC Employees’ Retirement Plan.

GUIDELINES FOR REVENUES AND PROGRAM FUNDING

Diversification of Revenues

WSSC will work in cooperation with the elected leadership in both Counties to implement a combination of a volumetric rate structure with dedicated fixed charges to provide a reliable and stable source of water and sewer revenues to fund operations and maintenance and responsible system reinvestment. Permit and inspection fees and other special service charges will be set in a manner to recover the related costs incurred so the general rate payer is not subsidizing private activity.

Revenue Projections

WSSC will estimate revenues in a realistic and conservative manner in order to minimize the risk of a funding shortfall.

One-Time Revenues

WSSC will, whenever possible, give highest priority for the use of one-time revenues from any source to the funding of capital assets or other nonrecurring expenditures so as not to incur ongoing expenditure obligations for which revenues may not be adequate in future years.

Intergovernmental Revenues

WSSC will seek a fair share of available state and federal financial support unless conditions attached to that assistance are contrary to WSSC's interest. WSSC may choose not to solicit grants or loans that will require an undeclared fiscal commitment beyond the term of the grant.

Miscellaneous Fees and Charges

WSSC will initiate certain fees and charges rather than fund them through general rate payer revenues. Such charges and fees are instituted for inspection services, permits and licenses, and other services. WSSC annually analyzes expenditures for services to ensure that related fees and charges defray the cost of providing these services.

GUIDELINES FOR REVENUES AND PROGRAM FUNDING (CONTINUED)

Fixed Fees/Ready to Serve Charges

WSSC's water and sewer rates produce only the revenues needed to support services and operations. Our rate structure is comprised of both variable rates and fixed fees and reflects the costs to provide services to different customers based on their usage characteristics. The Annotated Code of Maryland authorizes a fixed, Ready-To-Serve Charge that represents the fixed costs of delivery of service to customers, regardless of the volume of service used. The Ready-To Serve Charge is comprised of two components: the Account Maintenance Fee and the Infrastructure Investment Fee.

Account Maintenance Fee

The Account Maintenance Fee (AMF) is a fixed fee that recovers the cost of service associated with maintaining and servicing customer accounts. These expenses include the cost of purchasing, maintaining, reading and replacing meters; processing meter readings; generating and mailing customer bills; and providing customer services.

The AMF ensures that revenue will be received to cover the cost of providing customer services and meter maintenance. The fee increases as the meter size does because it is more costly to purchase and maintain larger meters.

Infrastructure Investment Fee

The Infrastructure Investment Fee (IIF) is a fixed fee that funds a portion of the debt service associated with the Commission's water and sewer pipe reconstruction programs from the approved CIP.

Cash Management and Investments

The objective of WSSC's cash management and investment program is to achieve maximum financial return on available funds while assuring a high level of safety. Cash will be pooled and invested on a daily basis reflecting the investment objective priorities of capital preservation, liquidity, and yield.

Reserves

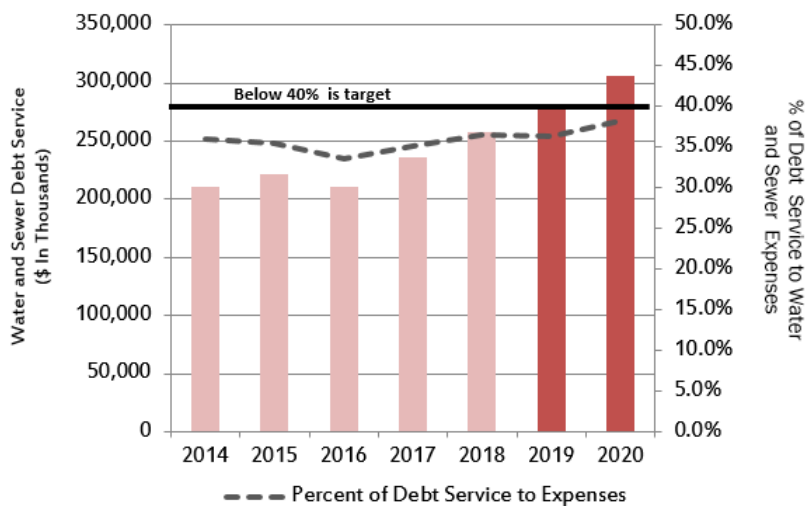
WSSC will maintain an unrestricted Fund balance (or, an "operating reserve") of at least 10% of water consumption and sewer usage fund operating revenues. In addition, WSSC will budget for 60-90 days of available operating reserves on-hand.

Because WSSC relies on volumetric pricing structures, revenues may not match utility expenditures within a given year. Virtually all industry associations recommend the establishment of a minimum reserve in order to ensure a level of resilience in response to the risks associated with volatility in revenues, economic downturn or unforeseen, extraordinary events.

WSSC's reserve fund guideline establishes the purposes for which such reserves will be used as follows:

- Planning for contingencies;
- Lowering borrowing costs by maintaining the highest credit rating possible;
- Earning investment income (particularly in times of rising interest rates); and
- Providing liquidity for operations in the event of a revenue shortfall.

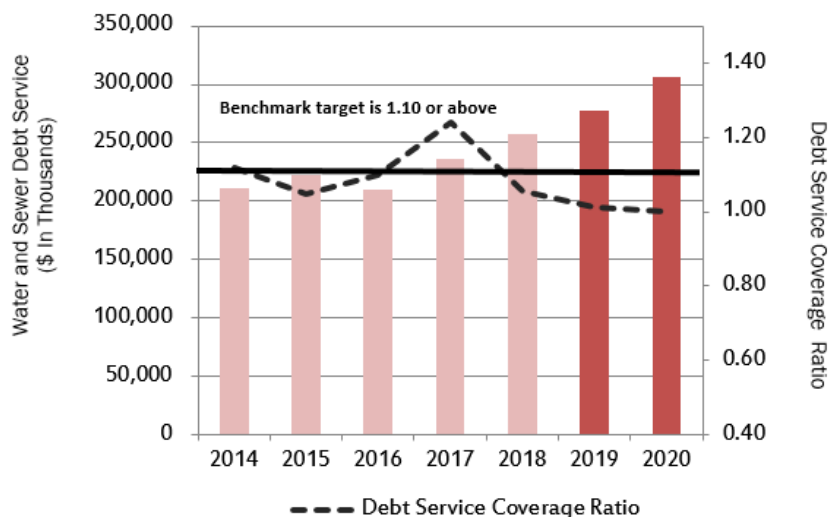
WATER AND SEWER DEBT SERVICE AND PERCENT OF DEBT SERVICE TO WATER AND SEWER EXPENSES



Water and sewer debt service as a percent of water and sewer expenses are increasing as a result of costs associated with the on-going large diameter and small diameter reconstruction programs and as a result of mandated costs related to the Sanitary Sewer Overflow (SSO) and Potomac Consent Decrees.

Percent of Debt Service = Water and Sewer Debt Service / Water and Sewer Expenditures
 Debt Service excludes General Bond Debt Service fund.

WATER AND SEWER DEBT SERVICE AND DEBT SERVICE COVERAGE RATIO



The debt service coverage ratio is decreasing due to flat or declining water consumption and increasing debt service costs. The ratio peaked in FY 2017, the first year the full infrastructure investment fees was collected. Debt service continues to increase to meet the needs of the large and small diameter reconstruction programs and as a result of mandated costs associated with the SSO and Potomac Consent Decrees.

Net Operating Revenues = Operating Revenue minus
 Operating Expenses (excluding Debt Service and PAYGO)
 Debt Service Coverage Ratio: Operating Revenues less Operating Expenses
 (excluding Debt Service) divided by the Debt Service.

SECTION 6

REVENUES

REVENUE

INTRODUCTION

This section provides assumptions, including discussions of the regional economy. Revenue sources used to fund WSSC's Proposed Budget FY 2020 incorporate policy recommendations. WSSC currently recovers necessary revenues through both fixed charges and volume charge components.

ECONOMIC OUTLOOK

Policy Assumptions

Revenue and resource estimates presented are the result of the recommended policies of the WSSC Proposed Budget FY 2020. Even though it is assumed that these policies will be effective during the budget period, subsequent Commission actions, state law and budgetary changes, actual economic conditions, and revised revenue projections may result in policy changes.

Demographic Assumptions

The revenue projections incorporate assumptions based on economic data and analyses used or prepared by the Finance Department. WSSC's population served is expected to increase an average of approximately 0.5% each year throughout the next five years (from FY 2020 to FY 2025) from 1,810,000 in FY 2020 to approximately 1,856,000 for FY 2025.

Using economic and demographic assumptions to develop fiscal projections does not mean that all possible factors have been considered. It is likely unanticipated events will affect long-term revenue or expenditure projections. Although the events cannot be quantified, such potential factors should not be ignored in considering possible future developments. These potential factors include the following changes: the level of local economic activity, federal economics, state tax and expenditure policies, federal and state mandates, and financial markets.

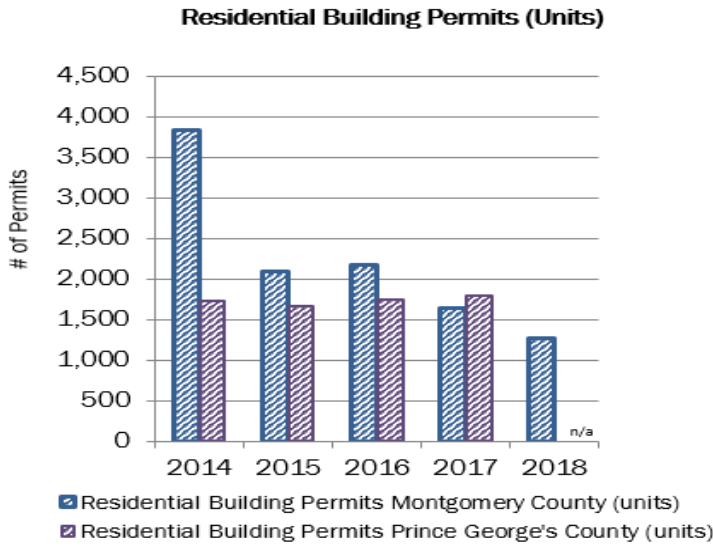
Population Served and Customer Accounts

Based on the Commission's research, WSSC's population served in FY 2019 increased by nearly 24,000 from FY 2018 (1.4%). WSSC assumes that the population will grow annually at 0.5% in FY 2020 and beyond.

As of June FY 2018, WSSC had approximately 456,100 active customer accounts, an increase of almost 4,200 from June FY 2017. The majority of accounts are residential at 94.4%, followed by commercial and industry at 4.8%, and government at 0.8%.

ECONOMIC OUTLOOK (CONTINUED)

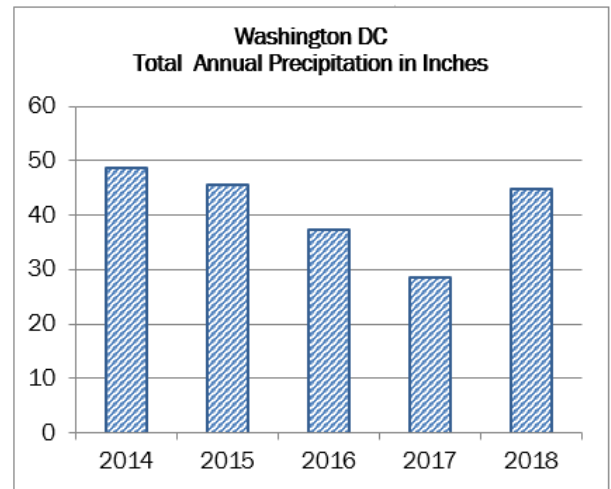
Residential Real Estate – Building Permit Activity



The construction of new residential units in Montgomery County declined 24.6% in 2017 and approximately 22% in 2018. Prince George's County residential construction increased 3.0% in 2017 and 2018 results are pending.

Weather Conditions

Weather influences both the supply of, and demand for water. Higher rainfall levels increase the operating costs of a water utility. When surface water is the source of drinking water, more chemicals may be needed to treat the drinking water. Heavy rain and wet conditions can cause infiltration and inflow into sanitary sewer systems meaning increased wastewater flows and chemical demands for treatment. Higher flow levels increase the amount of time sewer pumps must run to manage the additional flow, increasing utility costs. With extremely rapid or heavy rainfall, additional labor hours are needed to maintain equipment at sewer pump stations throughout the service area. While operating costs increase, demand for the water usually decreases. Demand for water used for irrigation is the most obvious reason that demand drops during periods of high rainfall. In addition, fewer showers are taken and less drinking water is consumed because less work is done outdoors and average temperatures are lower on rainy days.



Even though the Washington, DC area experienced a 56.8% increase in precipitation during FY 2018 compared to FY 2017, water production increased slightly due to record cold weather driven water main breaks.

ECONOMIC OUTLOOK (CONTINUED)

Economic Indicators

Revenue projections depend on the current and projected indicators of national, regional, and local economies, including short-term interest rates and the stock market. Local economic indicators include residential and non-residential construction and inflation. The assumptions for each indicator will affect the Commission’s revenue projections. Such projections are dependent on a number of factors - fiscal and monetary policy, real estate, employment, consumer and business confidence, the stock market, mortgage interest rates, and geo-political risks.

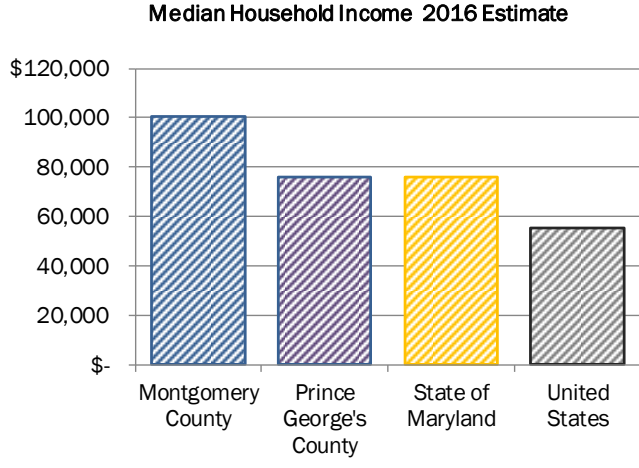
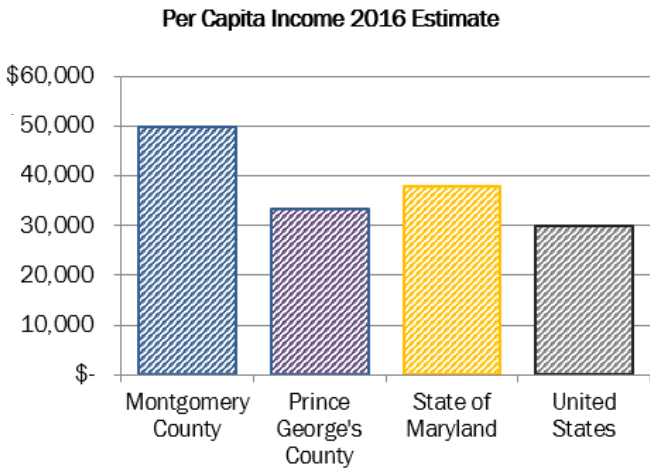
Montgomery and Prince George’s Counties’ economies experienced positive economic performance during calendar year 2017. Prince George’s County has 15,600 businesses employing 230,000 while Montgomery County has 32,700 businesses employing over 377,000, Prince George’s County 2017 unemployment was in sync with the Labor Market Area and Montgomery County was substantially below. Construction has started on a 16 mile light rail system between Montgomery and Prince George’s County, called the Purple Line.

An area of strength included an increase in the median sales price for an existing home. Offsetting those increases, Montgomery County experienced a decline in the construction of residential properties.

To determine the stability and strength of an organization’s revenue potential, the overall economic health of an area is assessed. Analysts look at income, inflation, and the general strength of the region.

Per Capita Income and Median Household Income Statistics

Per Capita Income (PCI) and Median Household Income (MHI) are indicators of how much money people have to spend. The higher the PCI and MHI, the more money people have to spend on discretionary items.

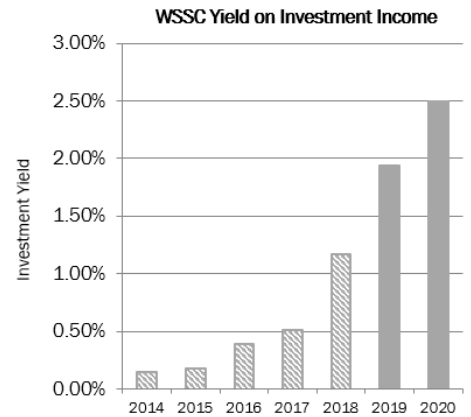


More information on Montgomery County and Prince George’s County are found in the Appendix A.

ECONOMIC OUTLOOK (CONTINUED)

Interest Rates

From September 2007 to December 2008, the Federal Reserve Board, through its Federal Open Market Committee (FOMC), aggressively cut the target rate on federal funds from 5.25% to a range of 0.00% - 0.25%. The targeted federal funds rate set by the FOMC remained at the 0.00% - 0.25% range until December 2015. At its December 2015 meeting, the FOMC increased the range to between 0.25% and 0.50% and in its December 2016 meeting to between 0.50% and 0.75%. Between December 2015 and December 2018, FOMC has raised the interest rate eight times. The Commission's short-term investments are highly correlated with the federal funds rate.



REVENUES – RATE PAYER, READY-TO-SERVE, AND MISCELLANEOUS FEES AND CHARGES

Revenues from the Water and Sewer Operating Funds are estimated at \$771.7 million in FY 2020. This is a \$36.5 million increase, or 5.0%, from the Approved Budget FY 2019, primarily attributed to an increase in water and sewer use charges (4.9%) and Miscellaneous Fees and Charges (2.8%).

Water and Sewer Usage Revenues

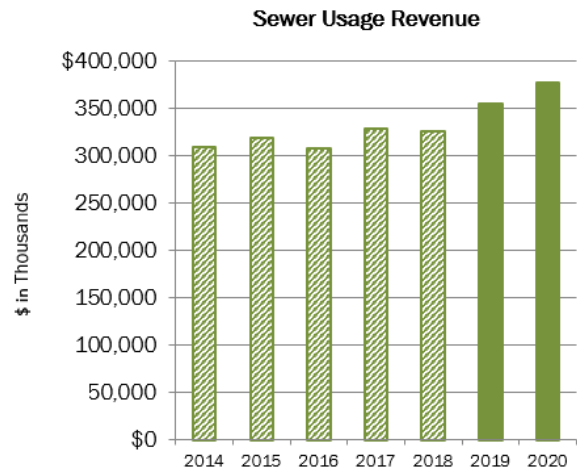
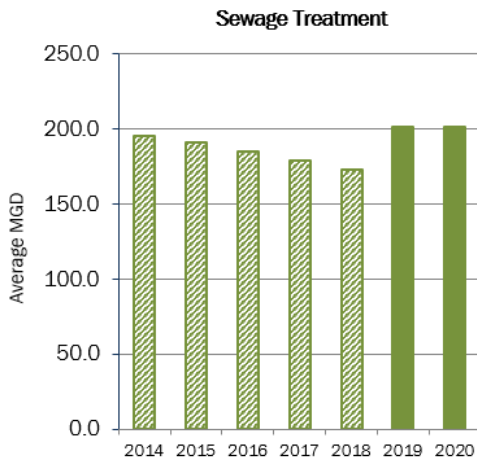
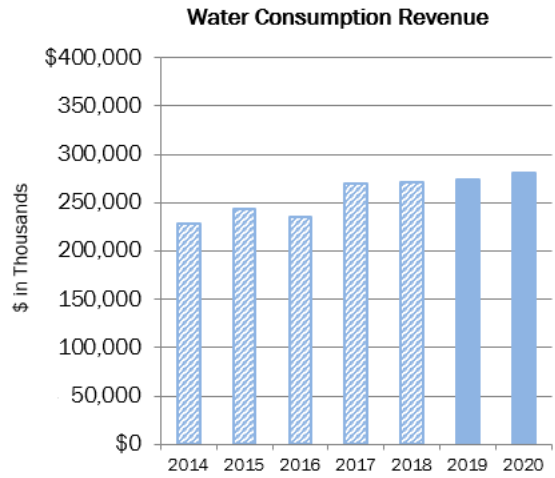
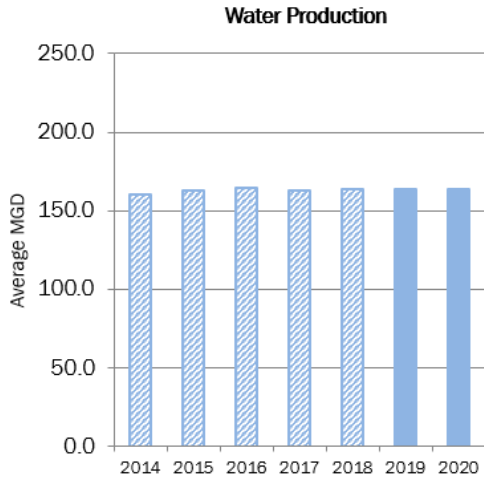
The purpose of the water and sewer usage charges is to recover those costs for maintenance and operation of pipes, pumping stations, filtration and treatment plants, reservoirs needed to supply water to the WSSD, and to pay the principal and interest on bonds.

WSSC pays the District of Columbia Water and Sewer Authority (DC Water) for the Commission's share of the Regional Sewage Disposal charges incurred by DC Water. Existing laws require the water consumption and sewer treatment rates be sufficient to meet all expense provisions.

For FY 2020, water production is assumed to remain at the FY 2019 level of 164.0 MGD, and sewer treatment is projected to remain at 201.4 MGD.

REVENUES – RATE PAYER, READY-TO-SERVE, AND MISCELLANEOUS FEES AND CHARGES (CONTINUED)

Water and Sewer Usage Revenues



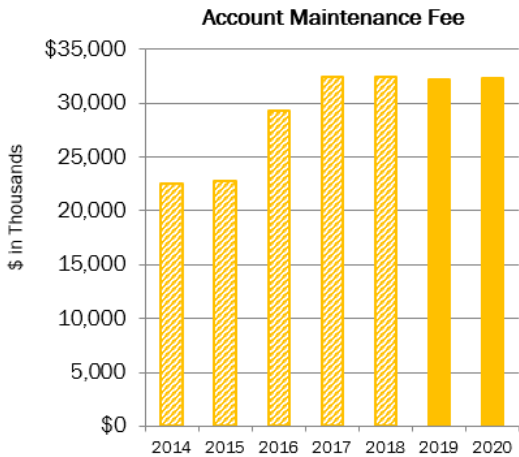
Water Consumption Charges – revenue derived from the sale of water by applying an increasing rate schedule per 1,000 gallons of use. The rate charged for each account is based upon the average daily consumption during each billing period. The range of currently approved rates is \$3.61 and \$8.34 per 1,000 gallons of water consumed.

Sewer Usage 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 \$4.70 and \$11.89 per 1,000 gallons of metered water. Customers who only receive sewage disposal services are charged at a flat rate of \$115.00 per quarter.

The estimated FY 2020 revenues from water consumption and sewer use charges are \$281.0 million and \$377.9 million, respectively. As indicated in the Rates, Fees and Charges section of this document, a new 4-Tier rate structure will be implemented effective July 1, 2019. While the change in rate structure is revenue neutral, a 5.0% revenue increase has been incorporated to help pay for maintenance and infrastructure renewal.

REVENUES – RATE PAYER, READY-TO-SERVE, AND MISCELLANEOUS FEES AND CHARGES (CONTINUED)

Account Maintenance Fee



The Account Maintenance Fee (AMF) is charged to all customers, based on meter size, to defray costs of providing and reading a meter and rendering a water and/or sewer bill. The Proposed Budget FY 2020 assumes a 0.4% increase over the Approved Budget FY 2019, and \$32.3 million in available resources in FY 2020.

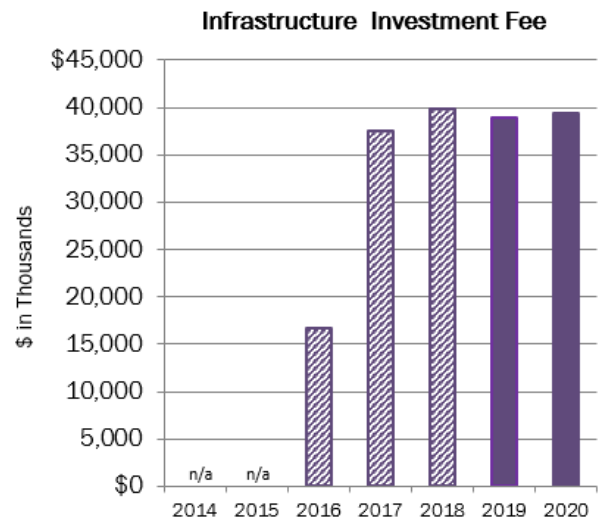
The AMF currently in place was developed in a 2014 study which resulted in a revised fee in FY 2016 based on meter size.

Infrastructure Investment Fee

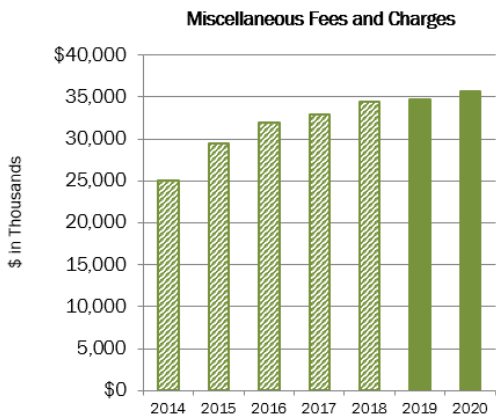
The Infrastructure Investment Fee (IIF) is a fixed fee that funds a portion of the debt service associated with the Commission’s water and sewer main reconstruction programs for the approved CIP.

The IIF was implemented in FY 2016 with the fee phased-in over two fiscal years. The Commission has held the fee at the FY 2017 level through FY 2020. The fee is based on meter size.

The Proposed Budget FY 2020 assumes a 1.1% increase over the Approved Budget FY 2019 due to population growth, resulting in \$39.3 million in available resources in FY 2020.



Miscellaneous Fees and Charges



Miscellaneous revenue derived from: plumbing and inspection fees; Rockville sewer use; late payment of bills; repair of Commission property (e.g., sewer mains) damaged by individuals; relocation of WSSC sewer lines and/or facilities for the benefit of other parties (e.g., state or county departments of transportation); and sewage haulers’ fees which are charged for discharging septic tank clean-out wastes into the WSSC’s sewerage system.

The Proposed Budget FY 2020 assumes Miscellaneous Fees and Charges will increase 2.8% from Approved Budget FY 2019, resulting in \$36.0 million in available resources in FY 2020.

REVENUES – RATE PAYER, READY-TO-SERVE, AND MISCELLANEOUS FEES AND CHARGES (CONTINUED)

Interest Income

Interest income includes pooled and non-pooled investment, plus interest income from other funds. WSSC operates an investment pool, directed by an investment manager, using an approved, prudent WSSC adopted investment policy. The Commission earned an average of 0.51% in interest income on its short-term portfolio for FY 2017 with estimated increases to 1.17% in FY 2018 and 1.94% to 2.94% from FY 2019 to FY 2021. This assumption is based on rate increases in the targeted federal funds rate by the FOMC each year between FY 2018 and FY 2021.

REVENUES AND TRANSFERS IMPACT ON DEBT SERVICE

Front Foot Benefit and House Connection Assessments

Front Foot Benefit (FFB) revenues are 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 a portion of General Construction Bonds.

Current Front Foot Benefit Assessment Rates

(\$ Per Foot)

	<u>Water</u>	<u>Sewer</u>
<u>Subdivision</u>		
First 150 Feet	\$4.00	\$6.00
Next 150 Feet	3.00	4.50
Over 300 Feet	2.00	3.00
<u>Business</u>		
All Footage	\$5.32	\$7.98

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

House Connections revenues are derived from deferred or amortized house connection payments to cover the cost of building lines from Commission 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.

The Proposed Budget FY 2020 assumes that Front Foot Benefit and House Connections revenue will decrease 19.2% from Approved Budget FY 2019.

REVENUES AND TRANSFERS IMPACT ON DEBT SERVICE (CONTINUED)

Use of Fund Balance

Using a portion of the fund balance is an essential tool for addressing an operating budget that may be impacted by short term revenue volatility, need for debt service relief, and/or extraordinary expense. The decision to use fund balance is at the discretion of WSSC management and may be done in conjunction with other actions to reduce costs or increase revenues. The minimum level of fund balance retained is governed under fiscal policy.

The Proposed Budget FY 2020 assumes that the Use of Fund Balance Transfer will decrease 2.1% from the Approved Budget FY 2019 of \$11.6 million to \$11.3 million.

Debt Service Offsets

Reconstruction Debt Service Offset (REDO) is supported through surplus funds from the refinancing of General Construction Bond debt. The offset is used to pay a portion of the debt service for the Systems Reconstruction Program.

The Proposed Budget FY 2020 assumes REDO will decrease from the Approved Budget FY 2019 of \$12.5 million balance to \$11.6 million.

The System Development Charge (SDC) Debt Service Offset is related to prior fiscal years when capital “growth” expenditures exceeded the available SDC account balance. When there is such an occurrence, WSSC issues new SDC supported debt to cover this temporary gap rather than increasing the SDC. The portion of debt is then repaid (offset) through future SDC collections, as allowed by state law.

The Proposed Budget FY 2020 assumes that the SDC offset will increase 38.5% from Approved Budget FY 2019.

REVENUE TRENDS

OPERATING BUDGET

WATER & SEWER - COMBINED OPERATING FUNDS

(\$ In Thousands)	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed
OPERATING REVENUES							
Water Consumption Charges	\$ 227,923	\$ 242,867	\$ 235,805	\$ 270,134	\$ 271,735	\$ 273,316	\$ 280,997
Sewer Use Charges	309,403	319,488	307,264	329,332	325,879	354,626	377,902
Account Maintenance Fee	22,582	22,753	29,247	32,508	32,473	32,182	32,296
Infrastructure Investment Fee	-	-	16,700	37,561	39,847	38,894	39,331
Interest Income	630	532	696	1,540	5,478	1,500	5,500
Miscellaneous	25,104	29,484	31,989	32,908	34,481	34,731	35,700
Total Operating Revenues	585,642	615,124	621,701	703,983	709,893	735,249	771,726
Other Credits and Transfers:							
SDC Debt Service Offset	1,428	1,167	728	2,609	2,396	3,364	4,658
Reconstruction Debt Service Offset	10,500	10,000	8,500	9,800	7,700	12,500	11,600
Premium Transfer	-	-	-	-	-	-	2,900
Miscellaneous Offset	-	-	-	-	-	-	395
Use of Fund Balance	27,481	30,193	20,721	24,450	227	11,580	11,341
Total Funds Available	\$ 625,051	\$ 656,484	\$ 651,650	\$ 740,842	\$ 720,216	\$ 762,693	\$ 802,620

Excludes General Bond Debt Service Fund revenues

GENERAL BOND DEBT SERVICE FUND

(\$ In Thousands)	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed
OPERATING REVENUES							
Front Foot Benefit & House Connection	\$ 38,016	\$ 29,971	\$ 24,925	\$ 22,039	\$ 19,191	\$ 15,473	\$ 12,507
Interest Income	63	62	87	383	865	75	500
Miscellaneous	505	384	312	294	285	240	260
Total Operating Revenues	38,584	30,417	25,324	22,716	20,341	15,788	13,267
Other Credits and Transfers:							
Reconstruction Debt Service Offset	10,500	10,000	8,500	9,800	7,700	12,500	11,600
Use of Fund Balance	(10,500)	(10,000)	(8,500)	(9,800)	(7,700)	(12,500)	(11,600)
Total Funds Available	\$ 38,584	\$ 30,417	\$ 25,324	\$ 22,716	\$ 20,341	\$ 15,788	\$ 13,267

Revenues

SECTION 7
CAPITAL BUDGET

CAPITAL BUDGET

INTRODUCTION

The WSSC Capital Budget is comprised of three main expenditure categories: the Capital Improvements Program, Information Only, and Other Capital Projects.

Capital Improvements Program (CIP)

The projects included in the CIP represent a multi-year plan to design and construct the capital facilities required to protect 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 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. The estimated total expenditures from the first year of the CIP - the budget year - are included in the Expenditure Summary at the end of this section. Detailed project information is provided in the CIP document available through our Communications & Community Relations Office and on our website at <https://www.wsscwater.com/fin>.

Information Only

The Information Only section of the CIP document contains projects that are not required to be in the CIP 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 responding to requests from county governments. The Water and Sewer System Reconstruction Programs for the systematic replacement and rehabilitation of small diameter water mains and sewer lines, and the Advanced Metering Infrastructure project, make up the largest expenditures in this section. Detailed project information is provided in the Information Only section of the CIP document. A list of Information Only projects and programs is shown in the summary at the end of this section.

Other Capital Projects

The Other Capital Projects section includes miscellaneous capital projects and expenditures for common operational activities such as Relocations, New House Connections, Water Meters, Paving and General Construction of Local Lines. A complete list of Other Capital Projects is shown in the summary at the end of this section.

PROGRAM OBJECTIVES

The principal objective of the Capital Budget is the programming of planning, design, and construction activities on a yearly basis for major water and sewerage infrastructure projects and programs. These projects and programs may be necessary for system improvements for service to existing customers, to comply with federal and/or state environmental mandates, or to support new development in accordance with the counties' approved plans and policies for orderly growth and development. The Capital Budget conforms to the Spending Affordability Guidelines (SAG) established by both county governments every year since 1994.

IMPACT OF CAPITAL PROGRAM ON THE OPERATING BUDGET

Capital projects generate future operating budget impacts for debt service, use of reserves, and changes in operating costs due to new or renovated facilities.

Debt Service

Capital projects are financed primarily with long-term, rate-supported debt through the sale of bonds. 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 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 the operation, 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 Program impacts the size of water and sewer bond issues, which in turn impacts customers' water and sewer bills.

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.

Estimating future 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 and incorporating an expected construction completion rate. Taking into account these adjustments results in an estimated new long-term Water and Sewer Debt requirement of \$384.9 million. The FY 2020 debt service payment, is shown in the Operating Budget Impacts section.

Revenue Reserves and Transfers

Further discussion on reserves and transfers can be found in the Revenue section.

Operating Budget Impacts

The construction of capital projects impacts 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.

The second impact from capital projects is less direct, and involves changes to operations, processes, or revenue streams when a 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 System Reconstruction Programs for infrastructure improvements are funded through the capital budget and are

IMPACT OF CAPITAL PROGRAM ON THE OPERATING BUDGET (CONTINUED)

Operating Budget Impacts (Continued)

focused on the aging portions of the Commission’s extensive network of water transmission mains and sewage collection lines. These efforts include water main rehabilitation, sewer reconstruction, and other non-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 new facilities that will require operation and maintenance funding in the 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, or encompass smaller infrastructure improvements, 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.

The following table summarizes the estimated impact on the Operating Budget based upon projects included in the Capital Budget:

OPERATING BUDGET IMPACTS

(\$ in Thousands)	FY 2019 Approved	FY 2020 Projected	FY 2020 Net Impact
Operating - Water and Sewer Program			
Debt Service Expense - Including New Issuance	\$ 277,061	\$ 306,307	\$ 29,246
Major Capital Projects Net Impact	-	853	853
TOTAL	\$ 277,061	\$ 307,160	\$ 30,099

Major capital projects which will impact the Operating Budget are summarized below:

- **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 ultraviolet 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; and, operation of the new residuals handling facility to reduce solids from impacting the downstream sewer system and Parkway WRRF. Portions of the project came online in FY 2016 and will continue into FY 2019. FY 2020 will be the first full year of operation of the expanded plant.

IMPACT OF CAPITAL PROGRAM ON THE OPERATING BUDGET (CONTINUED)

Operating Budget Impacts (Continued)

- **Potomac WFP Consent Decree Program:** 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 Plant to meet the new discharge limitations identified in the Consent Decree. The plant has experienced higher chemical and hauling costs due to higher levels of treatment and larger volumes of solids removed in response to the Consent Decree.

FUNDING SOURCES

The major funding sources for the Capital Budget are described in the Fiscal Policy section. There are three major types of funding sources for the capital budget: proceeds from bonds and other debt instruments; PAYGO; and grants, contributions, or other funds from intergovernmental and other sources.

The specific funding sources for all expenditures are identified on each individual capital project description form.

Bond Issues

WSSC Bonds – legally-binding general obligations constituting an irrevocable pledge of full faith and credit. The money to repay debt comes primarily from rate payer revenues.

Current Revenues

PAYGO – when budgeted, the practice of using current revenues to the extent practical to help fund the capital program, thereby reducing the need for debt financing

Intergovernmental Revenues

Federal Grants – Department of Energy grants related to WSSC's Energy Performance Program and Piscataway WRRF Bio-Energy projects to promote and develop green energy sources.

State Grants – a program for enhanced nutrient removal at existing water resource recovery facilities and for the rehabilitation of sewer mains as part of the Chesapeake Bay Program.

Local Government Contributions – payments to the WSSC for co-use of regional facilities, or funding provided by county governments for projects they are sponsoring.

Other Funding Sources

The use of other funding sources are normally conditioned upon specific legislative authority or project approval.

System Development Charge (SDC) – anticipated revenue from the charge levied on new development to pay for the construction of major water and sewerage facilities needed to accommodate growth.

FUNDING SOURCES (CONTINUED)

Contribution/Other – projects funded by Applicants for growth projects where the County Councils have directed that no WSSC rate supported debt be used to pay for the project.

CAPITAL BUDGET FUNDING SUMMARY

(\$ In Thousands)	FY 2019 Approved	FY 2020 Proposed
Water and Sewer CIP:		
WSSC Bonds	\$ 291,719	\$ 315,063
PAYGO	31,016	31,016
Federal Grants	-	-
State Grants	6,122	2,291
Local Government Contribution	2,894	2,835
System Development Charge (SDC)	53,647	21,716
Contribution/Other	16,057	10,399
Total Water and Sewer CIP	\$ 401,455	\$ 383,320
Information Only:		
WSSC Bonds	225,347	165,762
State Grants	-	20,000
Contribution/Other	789	582
Total Information Only	\$ 226,136	\$ 186,344
Other Capital Projects:		
WSSC Bonds	27,855	67,982
House Connection Revenue	880	880
Total Other Capital Projects	\$ 28,735	\$ 68,862
Total Capital Funding	\$ 656,326	\$ 638,526

CAPITAL BUDGET EXPENDITURE SUMMARY

(\$ In Thousands)	FY 2019 Approved	FY 2020 Proposed
Water and Sewer CIP:		
Montgomery County Water	\$ 13,869	\$ 7,295
Prince George's County Water	49,408	27,636
Bi-County Water	72,690	76,983
Montgomery County Sewer	12,537	7,881
Prince George's County Sewer	60,397	55,649
Bi-County Sewer	192,554	207,876
Total Water and Sewer CIP	\$ 401,455	\$ 383,320
Information Only:		
Water Reconstruction Program	99,925	75,784
Sewer Reconstruction Program	64,684	64,684
Engineering Support Program	14,000	18,000
Energy Performance Program	9,134	5,898
Water Storage Facility Rehabilitation Program	8,000	3,000
Specialty Valve Vault Rehabilitation Program	1,442	1,119
Advanced Metering Infrastructure	27,694	17,577
Brighton Dam Operations & Maintenance Facility	983	-
D'Arcy Park North Relief Sewer	274	282
Total Information Only	\$ 226,136	\$ 186,344
Other Capital Projects:		
New House Connections	3,100	4,900
Relocations	5,000	6,500
Purchase of Water Meters	2,824	2,824
Local Lines	690	600
Paving	-	22,200
Allocated & Other Costs	17,121	31,838
Total Other Capital Projects	\$ 28,735	\$ 68,862
Total Capital Expenditures	\$ 656,326	\$ 638,526

SECTION 8
DEBT SERVICE

DEBT SERVICE

INTRODUCTION

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.

BUDGET OVERVIEW

The proposed debt service expense is based upon paying the FY 2020 principal and interest payments on current outstanding debt, and issuing \$384.9 million in new Water Supply, Sewage Disposal, General Construction, and Maryland Department of the Environment loans. The new debt issues are necessary to implement the first year of the Commission's Proposed CIP FYs 2020-2025, as well as Engineering Support, Systems Reconstruction programs, local water and sewer mains, and other miscellaneous capital projects.

The Proposed Budget FY 2020 for debt service expense is \$319.9 million, an increase of \$25.5 million or 8.7% more than the Approved Budget FY 2019 of \$294.3 million. The increase is primarily due to greater bonding requirements in support of small and large diameter pipe reconstruction programs.

The Proposed Budget FY 2020 includes, in addition to debt service payments, all bond sales expenses, and bond coupon payment redemption expenses. The debt service budget is under the Finance Office Non-Departmental.

WATER SUPPLY AND SEWAGE DISPOSAL – GENERAL OBLIGATION BONDS

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 filtration plants (WFP) and water resource recovery facilities (WRRF), pumping stations and force mains, storage structures, water mains and sewer mains. The Commission's fiscal plan for these facilities is known as the CIP 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.

WATER SUPPLY AND SEWAGE DISPOSAL – GENERAL OBLIGATION BONDS (CONTINUED)

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.

GENERAL CONSTRUCTION – GENERAL OBLIGATION BOND

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.

MARYLAND WATER QUALITY LOAN FUND

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 WRRF, construction of sewers in areas with failing septic tanks, implementation of estuary conservation management plans, and the reduction of non-point-source pollution.

DEBT SERVICE PROGRAM

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 WSSD 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.

PRINCIPAL DEBT OUTSTANDING

The Commission's principal debt amounts outstanding are reflected in the table as shown.

June 30, 2017 to June 30, 2018	Outstanding 6/30/17	% of Total	Outstanding 6/30/18	% of Total
Water Supply Bonds	\$ 948,314,724	36.3%	\$ 1,153,563,855	38.3%
Sewage Disposal Bonds	1,256,495,635	48.1%	1,468,276,503	48.8%
General Construction Bonds	155,889,641	6.0%	142,209,641	4.7%
Maryland Water Quality Bonds ¹	250,069,313	9.6%	248,126,998	8.2%
TOTAL BONDS	\$ 2,610,769,313	100.0%	\$ 3,012,176,997	100.0%
Water, Sewer, and General Notes	202,600,000		190,200,000	
TOTAL	\$ 2,813,369,313		\$ 3,202,376,997	

1=Maryland Water Quality Bonds are issued for Water, Sewer, and General Construction projects.

ACTUAL AND ESTIMATED DEBT OUTSTANDING

The FY 2020 Debt Service budget is built upon a base of existing debt service requirements from past bond issues (through June 30, 2018) as shown in the following:

TOTAL FY 2018 PRINCIPAL DEBT OUTSTANDING	\$ 3,202,376,997
Less: Estimated Principal Payment From....	
FY 2019 for All Outstanding Bonds and Notes as of June 30, 2018	(175,769,222)
FY 2020 for All Outstanding Bonds and Notes as of June 30, 2018	(191,225,574)
	2,835,382,201
Plus: Amount Available From....	
FY 2019 Budgeted New Debt Issues:	
Water Supply Bonds	224,267,000
Sewage Disposal Bonds	262,581,000
General Construction Bonds	-
Maryland Department of Environment (MDE) Loans	-
FY 2020 Proposed New Debt Issues:	
Water Supply Bonds	161,305,000
Sewage Disposal Bonds	224,221,000
General Construction Bonds	-
Maryland Department of Environment (MDE) Loans	-
Less: Estimated Principal Payment From....	
FY 2019 for Budgeted New Issues as of June 30, 2019	(7,327,761)
FY 2019 for Budgeted and FY 2020 for Proposed New Issues as of June 30, 2020	(14,860,161)
TOTAL ESTIMATED DEBT OUTSTANDING	\$ 3,685,568,279
As of June 30, 2020	

ESTIMATED PRINCIPAL DEBT AMOUNTS OUTSTANDING (CONTINUED)

New and existing debt required to fund the capital program is reflected in the operating budget as debt service expense. A summary of debt service expense (principal payments plus interest) are provided in tables for Water Supply and Sewer Disposal Bonds, and General Construction Bond at the end of this section.

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 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 10.0% 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.

BORROWING LIMITATION

Bonds and notes issued by WSSC are limited under the Maryland's Public Utilities Article 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 property 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 table shows the Commission's legal debt limit and remaining debt margin.

TOTAL LEGAL DEBT MARGIN

DEBT LIMIT PER PUBLIC UTILITIES ARTICLE:

7.0% of total assessable personal property & operating real property	\$	169,761,708
3.8% of total assessable tax base of all real property		11,195,092,836
TOTAL DEBT LIMIT (June 30, 2018)	\$	11,364,854,544
TOTAL ESTIMATED PRINCIPAL DEBT AMOUNT OUTSTANDING	\$	3,685,568,279
As of June 30, 2020		
LEGAL DEBT MARGIN	\$	7,679,286,265

BORROWING LIMITATION (CONTINUED)

Shown below are the latest certified assessed valuations of those portions of the Counties that lie within the District, and the ratio of debt to permitted debt.

Ratio of Debt Outstanding to Debt Permitted by Debt Limit

(\$ In Thousands)

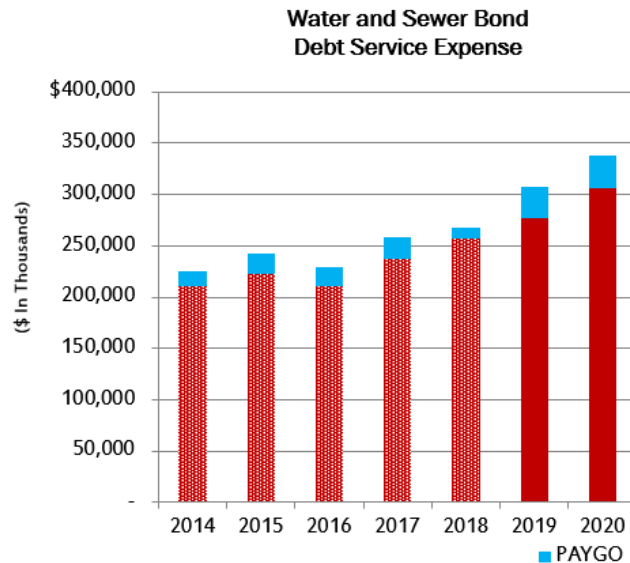
As of June 30	Total Assessed Valuation*	Total Debt Limit	Total Debt Outstanding	Ratio of Total Debt Outstanding to Total Debt Limit
2018	\$ 297,032,873	\$ 11,364,855	\$ 3,202,377	28.2%
2017	284,821,913	10,775,806	2,813,369	26.1%
2016	273,112,412	10,145,218	2,470,352	24.3%
2015	242,885,625	9,289,681	1,961,364	21.1%
2014	240,410,073	9,197,332	1,952,543	21.2%

*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.

DEBT SERVICE EXPENSE – WATER SUPPLY AND SEWER DISPOSAL

Per Fiscal Guidelines, WSSC will allocate at least \$31.0 million in PAYGO each fiscal year to reduce the amount of planned debt issued for capital projects.

Water and sewer debt service expense is funded by WSSC rate payers through usage charges and the Infrastructure Investment Fee, as provided on quarterly customer bills.



Note: MDE debt service expense included with Water and Sewer debt service figures. Debt service expense is net of interfund transfers.

(\$ In Thousands)

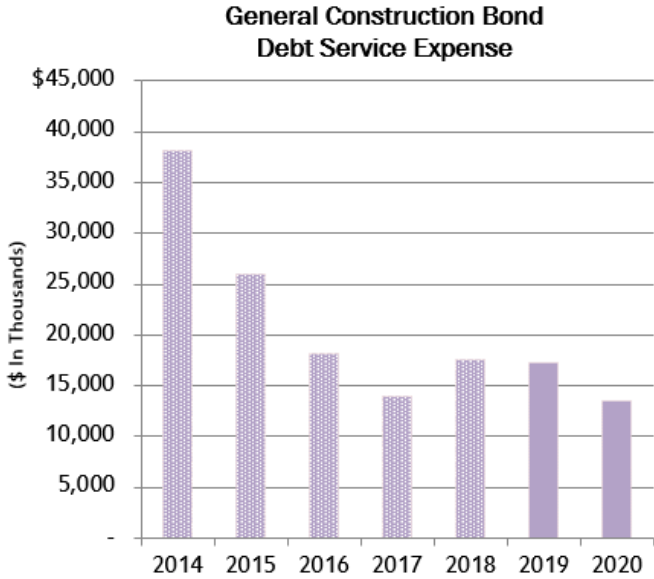
	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2018	Approved 2019	Proposed 2020
Debt Service Expense	210,841	221,981	210,361	236,735	257,502	277,061	306,307
PAYGO	13,782	19,996	18,821	21,495	10,065	31,016	31,016

DEBT SERVICE EXPENSE – GENERAL CONSTRUCTION BOND

The new issuance of General Construction Bonds has greatly decreased over the years as funding for construction is mostly paid for by developers.

The existing principal and interest expense on General Construction Bonds are partially paid through Front Foot Benefit Charges and other water and sewer revenues. These charges are assessed to owners of property abutting water and/or sewer mains who derive a benefit from the construction of these water mains and sewers.

Debt service expenses for these bonds are not supported by WSSC rate payers.



Note: Debt service expense is net of interfund transfers.

(\$ In Thousands)	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2018	Approved 2019	Proposed 2020	
Debt Service Expense	38,226	26,041	18,111	14,010	17,594	17,288	13,576	
% Change from Prior Yr	-	-11.9%	-31.9%	-30.5%	-22.6%	25.6%	-1.7%	-21.5%

SECTION 9
WATER QUALITY AND REGULATIONS

WATER QUALITY AND REGULATIONS

INTRODUCTION

Water and sewer utilities are heavily impacted by both current and emerging regulations. The Commission is committed to protecting the natural environment of Prince George's and Montgomery Counties as it carries out its mandate to provide sanitary sewer and drinking water services. This commitment focuses on those unique natural and manmade features (waterways, woodlands, and wetlands, as well as parklands, historical sites, and residential areas) that have been indicated by federal, state, and local environmental protection laws and regulations. Specific impact information is included in the evaluation of alternatives during the Commission's Asset Management Process, if the environment features will be affected by the proposed construction of a project.

A further extension of these protections has been funded by the approximately \$180.0 million included in the Proposed Budget FY 2020 which is attributable to meeting environmental regulations. These projects are mandated by the U.S. Environmental Protection Agency under the Clean Water Act through the State of Maryland Department of the Environment in response to pollution controls in the form of more stringent state discharge permit requirements and to meet the Commission's commitment to the environment. These capital projects are listed in the following table:

EXPENDITURE SUMMARY OF WATER QUALITY CAPITAL PROJECTS

				(\$ In Thousands)	
Project	Project Name	Phase	Proposed	FY 2020	
S-22.10	Blue Plains WWTP: ENR	Construction 96%	\$	1,507	
S-22.11	Blue Plains WWTP: Pipelines & Appurtenances	Ongoing		17,117	
S-170.09	Trunk Sewer Reconstruction Program	Ongoing		75,326	
S-1.01	Sewer Reconstruction Program	Ongoing		64,684	
W-73.33	Potomac WFP Consent Decree Program	Planning 95%		9,975	
W-139.02	Duckett & Brighton Dam Upgrades	Construction 37%		6,838	
S-43.02	Broad Creek WWPS Augmentation	Construction 85%		3,821	
S-131.10	Fort Washington Forest No. 1 WWPS Augmentation	Design 100%		707	
TOTAL WATER QUALITY PROJECTS			\$	179,975	

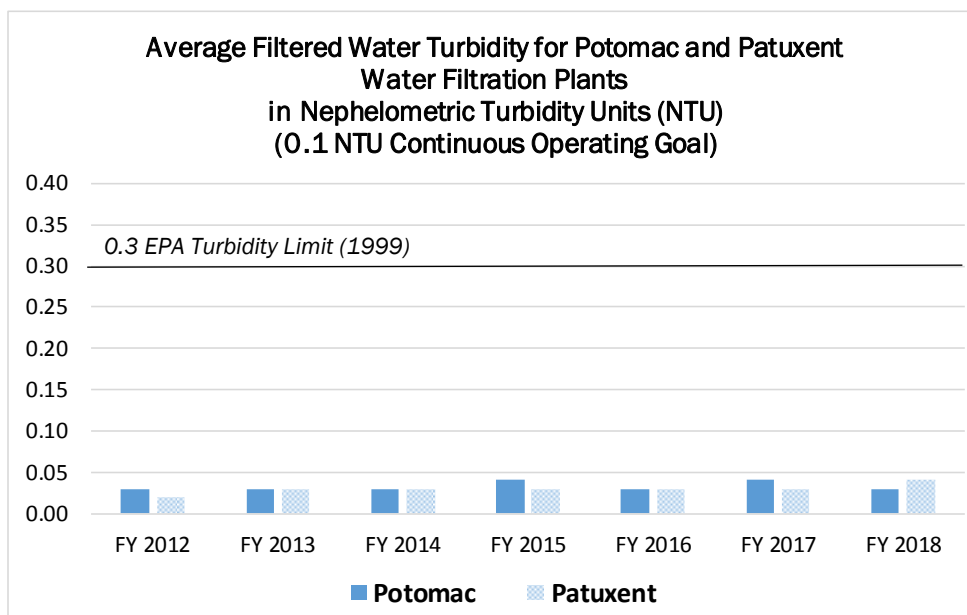
At WSSC, our top priority is to continuously provide the customers with water that meets strict federal Safe Drinking Water Act standards. WSSC provides updated information about water quality and other aspects of the service delivery system on our website <https://www.wsscwater.com/waterquality>.

PERFORMANCE OF KEY SERVICES

Water Filtration and Treatment - Turbidity

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 (TT) requirement established by the U.S. Environmental Protection Agency (EPA) in accordance with the Safe Drinking Water Act.

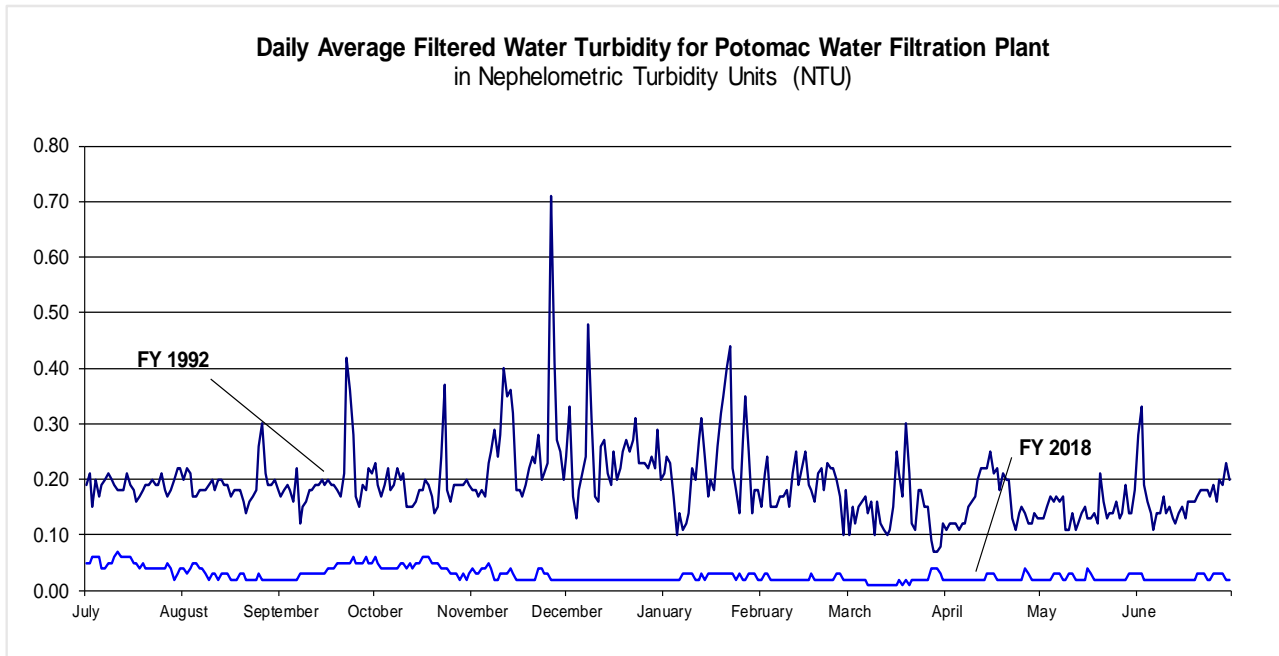
In addition to traditional approaches to ensuring drinking water quality, the WSSC continues to place particular emphasis on addressing low-level contaminants such as disinfection byproducts, and maintaining low levels of turbidity (suspended sediment) to ensure public health protection. The Commission 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 our 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 then newly-established maximum average monthly turbidity requirement of 0.5 NTU, a substantial effort was made in FY 1992 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 2012 through FY 2018. 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.

PERFORMANCE OF KEY SERVICES (CONTINUED)

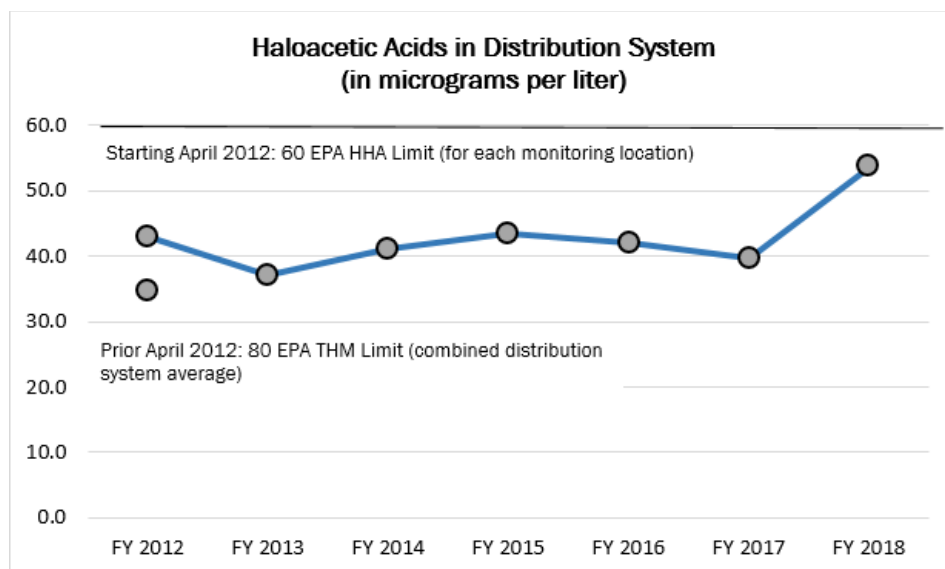
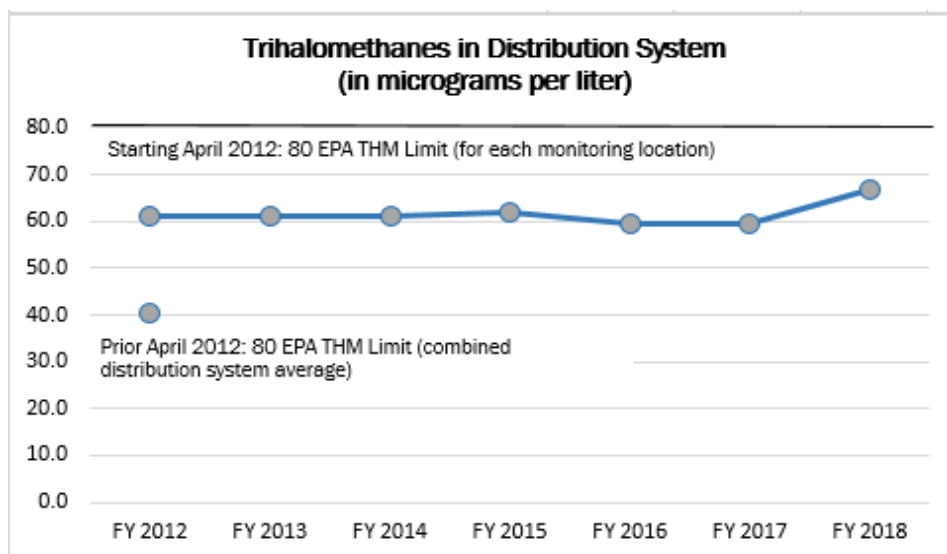
Not only has average turbidity been reduced, but also, as shown in the graph below for the Potomac Water Filtration Plant, the magnitudes of the daily peaks associated with variable raw water quality have been substantially reduced from FY 1992 peak levels. This latter measure is of particular importance in ensuring the reliability of the *Cryptosporidium* barrier. Finally, the UV systems incorporated in our treatment trains at both Potomac and Patuxent further increases reliability of this barrier.



PERFORMANCE OF KEY SERVICES (CONTINUED)

Water Filtration and Treatment – Trihalomethanes and Haloacetic

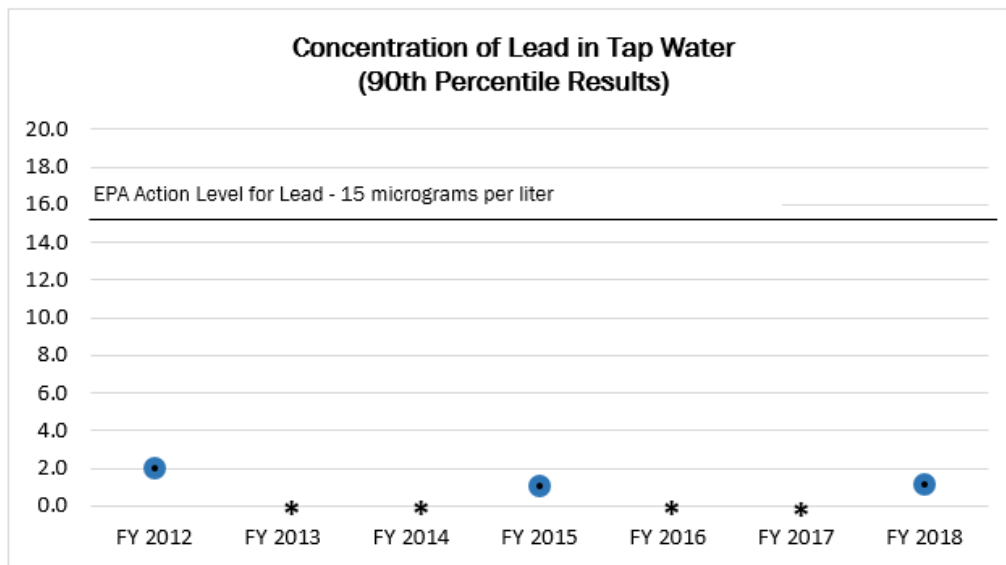
The WSSC has also been aggressively pursuing enhanced coagulation (optimization of coagulant doses and pH levels to improve total organic carbon removal) to enhance disinfection byproduct precursor removal, thereby lessening the formation of potential carcinogens in the finished water. Effective January 2001, the EPA reduced the standard for trihalomethanes (THMs) from 100 to 80 micrograms or lower of total THMs (TTHM) per liter in finished water. At the same time, the EPA also established a maximum contaminant level for haloacetic acids (HAAs) of 60 micrograms of five HAAs (HAA5) per liter in finished water. 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 near the end of FY 2012, 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.



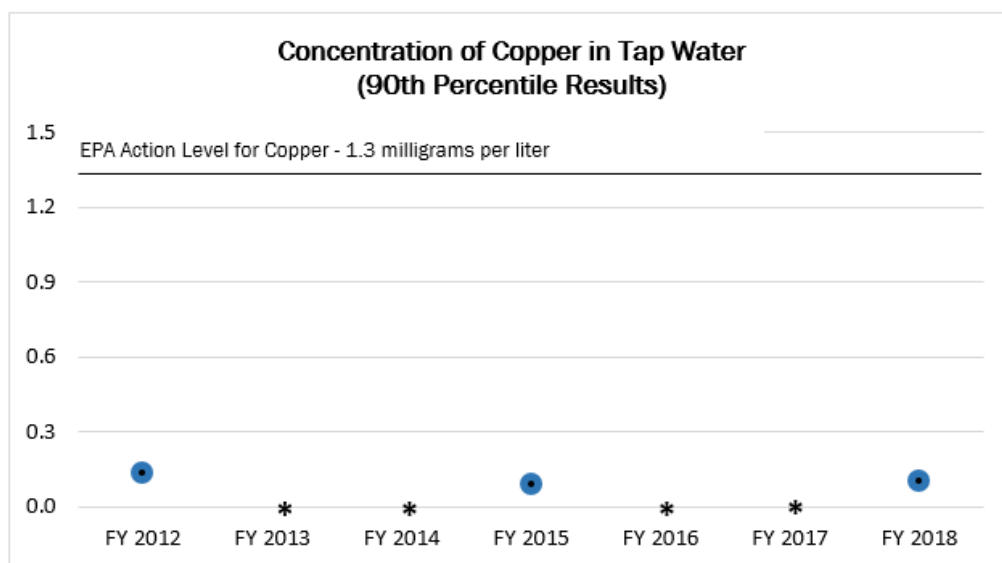
PERFORMANCE OF KEY SERVICES (CONTINUED)

Water Filtration and Treatment – Tap Water Lead and Copper

The Commission also continues its corrosion control program (using fine pH adjustment and the 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 of treatment optimization, 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 the implementation of orthophosphate addition. Results from the required triennial monitoring continue to indicate the 90th percentile lead and copper levels are well below the tap water action levels. The most recent round of monitoring was performed in FY 2018.



*No sampling required in these years.

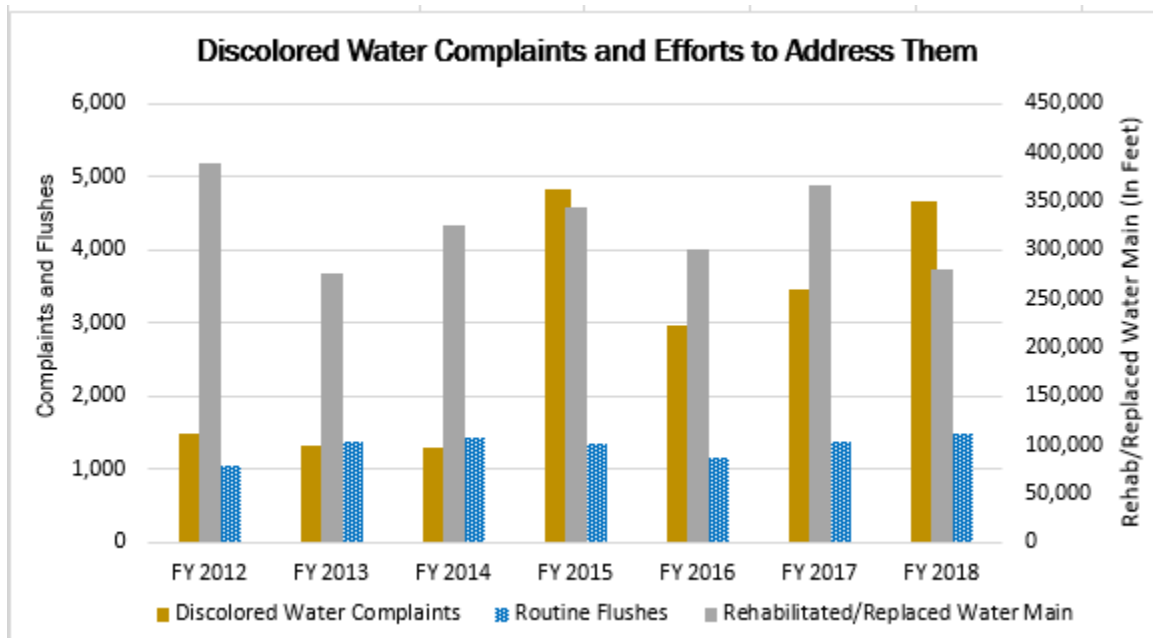


*No sampling required in these years.

PERFORMANCE OF KEY SERVICES (CONTINUED)

Discolored Water

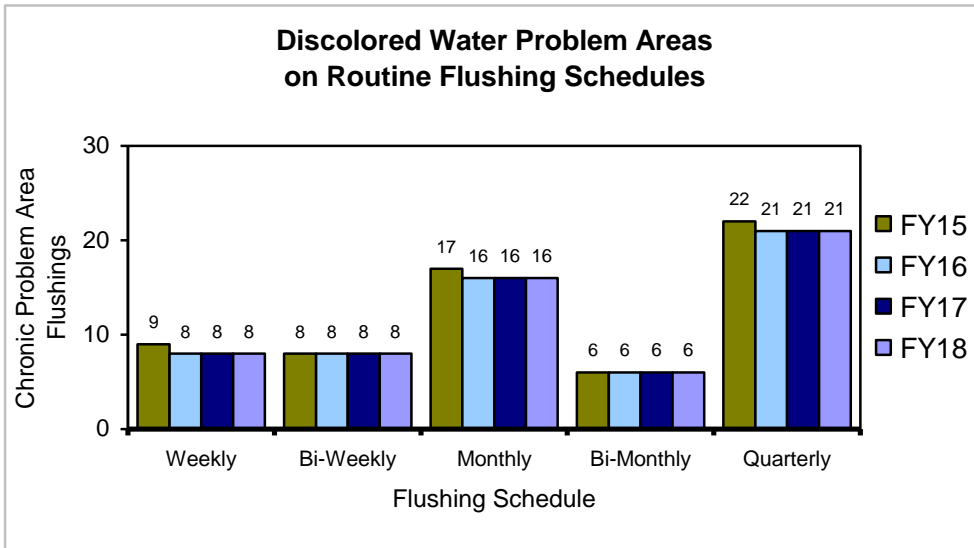
Unlined cast iron pipe eventually leads to discolored water in the distribution system as the water chemically reacts with the pipe to form iron oxides (rust) and accumulates deposits of iron and manganese that can become dislodged. This is a serious inconvenience for the affected customers, limiting and disrupting their normal water use. To combat this problem, an aggressive program was begun in FY 1996 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.



Beginning in FY 2001, 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 2004, 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. The Commission is now treating water for manganese reduction, which should reduce discolored water complaints in the future.

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 48.3 miles of distribution mains, and 5.0 miles of transmission mains during FY 2018.

PERFORMANCE OF KEY SERVICES (CONTINUED)



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 2015. 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 2018, 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.

Sewer House Connection Renewal

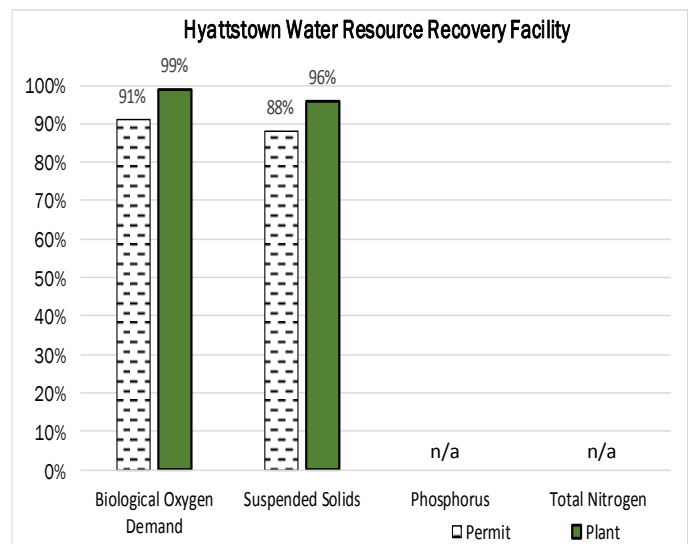
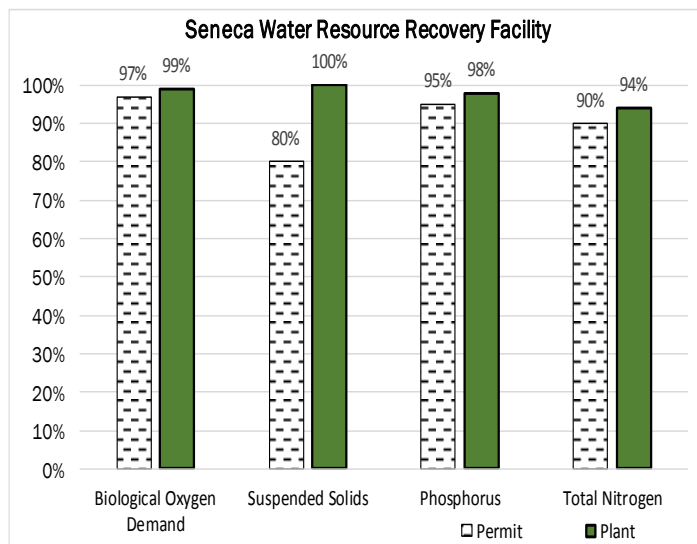
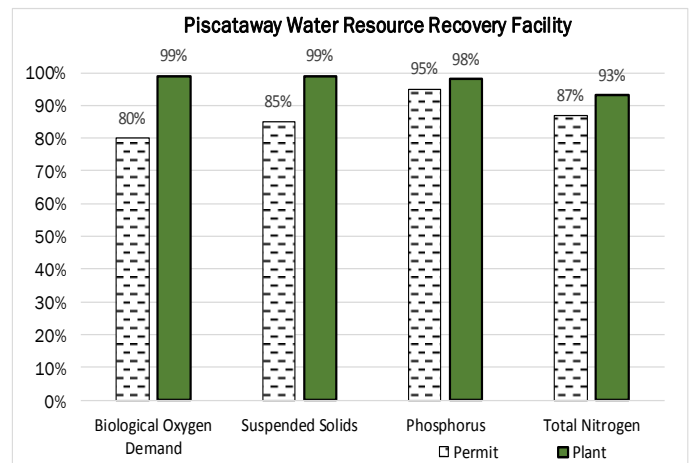
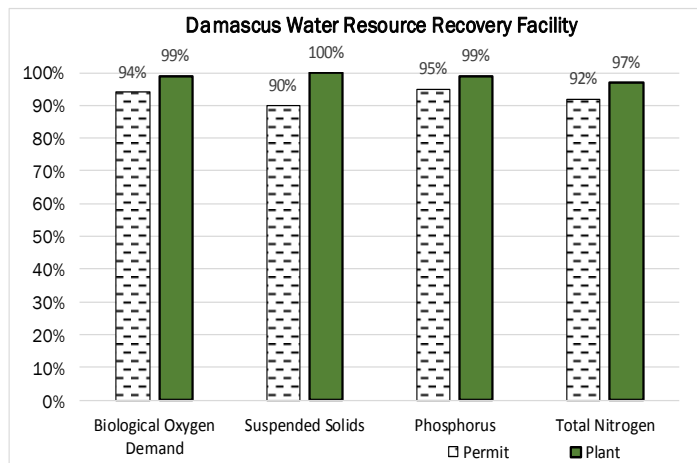
The sewer house connection renewal program replaces sewer house connections when structural problems have caused customer backups. Damaged or deteriorated sewer house connections are replaced as necessary to ensure that customers do not suffer repeated sewer backups into their homes. The program objective is to prevent a second backup after the WSSC has confirmed there is a problem with the service. During FY 2018, the Commission replaced 640 connections, versus 1,198 connections in FY 2017.

PERFORMANCE OF KEY SERVICES (CONTINUED)

Wastewater Treatment

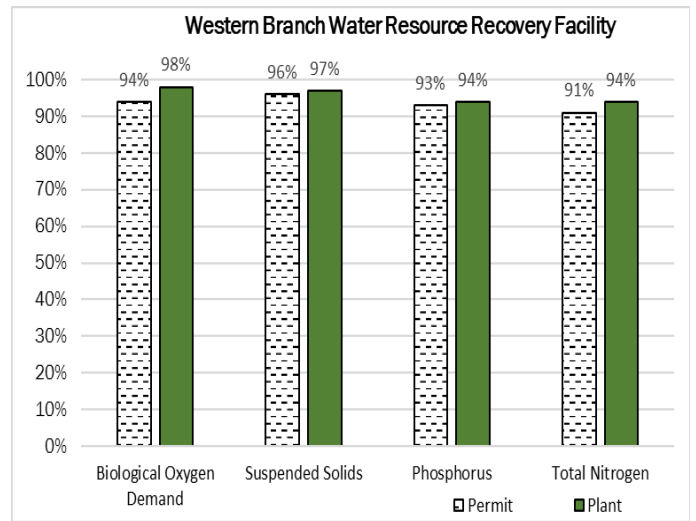
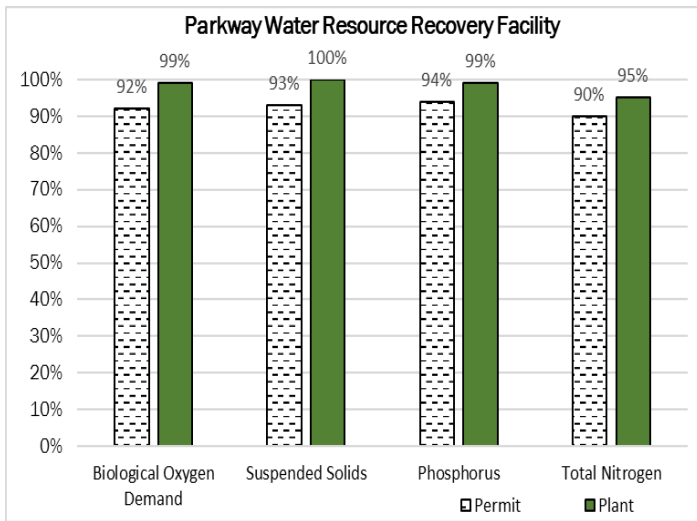
The following graphs present actual FY 2018 plant performance for the WSSC's Water Resource Recovery Facilities (WRRF), in terms of the percentage of specific substances removed compared to state/federal discharge permit requirements. The substances regulated differ from plant to plant, depending (in part) on the river or stream into which the treated water is discharged. For FY 2020, the Production Department will continue to pursue its goal of meeting or surpassing the permit requirements for each plant.

FY 2018 Percentage Removal of Substances Regulated by Discharge Permits



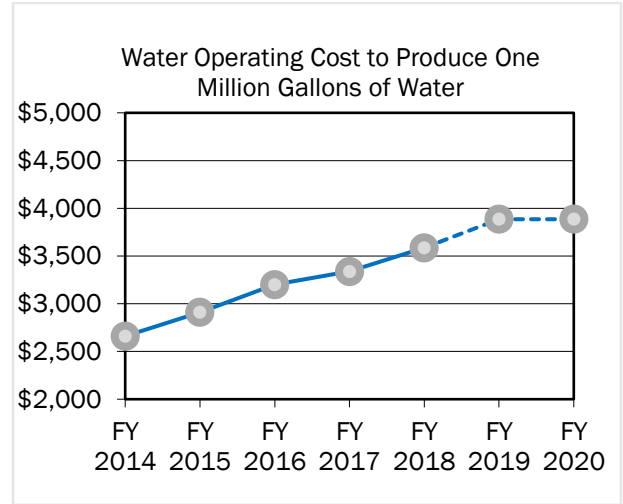
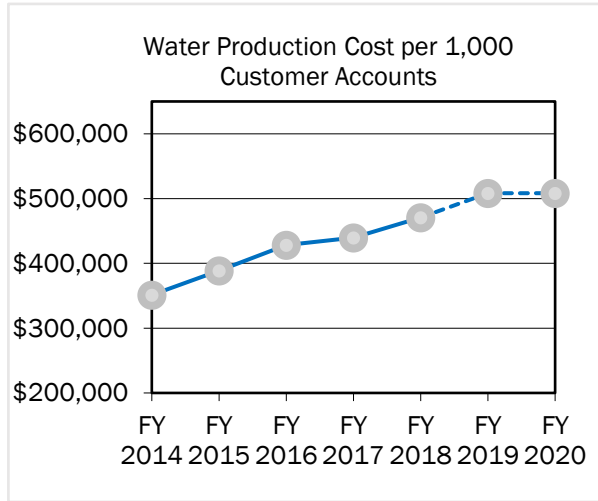
PERFORMANCE OF KEY SERVICES (CONTINUED)

FY 2018 Percentage Removal of Substances Regulated by Discharge Permits (Continued)

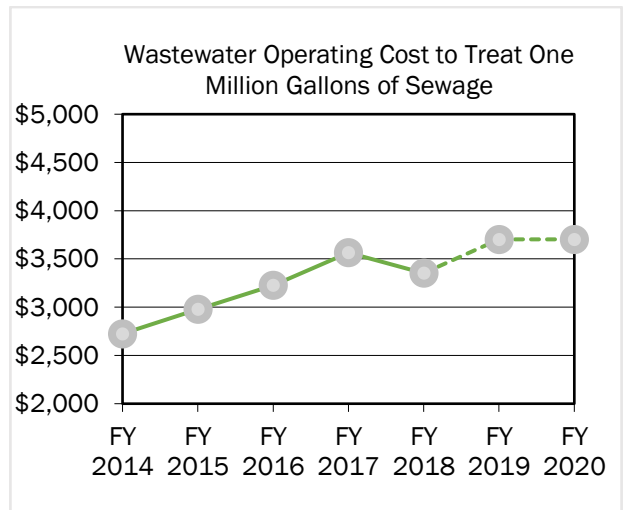
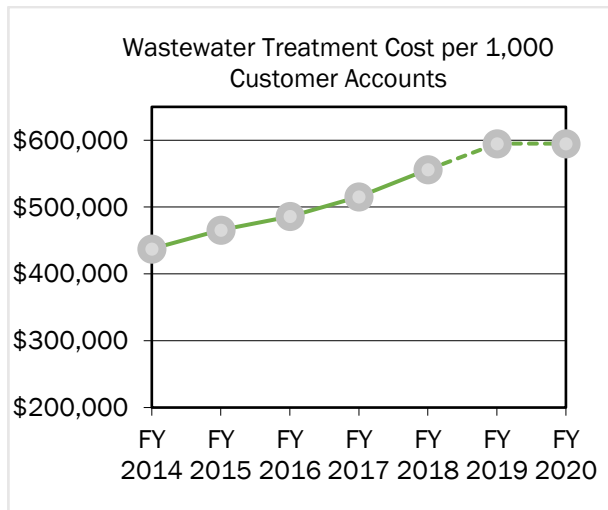


PERFORMANCE OF KEY SERVICES (CONTINUED)

Water & Wastewater Operations



The Commission’s top priority is to continuously provide a safe and reliable supply of drinking water that meets all strict federal Safe Drinking Water Act standards. At the same time the Commission works 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. The graphs above show the annual Water Production Cost per 1,000 Customer Accounts and the annual Water Operating Cost to Produce One Million Gallons of Water for the FYs 2014 to 2018 as well as the projected costs for FYs 2019 and 2020.



The graphs above show the annual Wastewater Treatment Cost per 1,000 Customer Accounts and the annual Wastewater Operating Cost to Treat One Million Gallons of Sewage for the FYs 2014 to 2018 as well as the projected costs for FYs 2019 and 2020.

WATER QUALITY CAMPAIGNS

Fats, Oils, & Grease



Sanitary sewers are designed and installed with sufficient diameter to carry the normal waste discharges from a residence or business. When cooking by-products - fats, oils, and/or grease (FOG) – are discharged to the sewer, the FOG can cool and accumulate on the interior of the sewer pipes. Over time, this accumulation of FOGs restricts the flow and causes blockages in the sewer which can result in overflowing manholes or basement backups. Sanitary Sewer Overflows (SSOs) can discharge to storm drains and creeks, which will ultimately flow to the Chesapeake Bay.

In addition to permitting and inspection efforts, WSSC has partnered with agencies such as the Restaurant Association of Maryland to help the food service industry understand the safest and best ways to dispose of FOG, and to train them in how to use Best Management Practices (BMPs) when dealing with FOG.

Keep The Wipes Out of The Pipes

Unfortunately, many wipes that are labeled “flushable” may go down the toilet, but they do not break apart in the system. The true test to determine if something is flushable: does it dissolve like toilet paper or organic waste? If the answer is no, then it is not flushable.

Literally tons of wipes, still intact, clog pumps at wastewater pumping stations across the nation or end up at wastewater treatment plants and then have to be hauled away. WSSC has spent over \$1 million to install grinders at a number of our wastewater pumping stations to deal with the growing problem of wipes in the pipe. WSSC reminds customers to use the trash can for trash.

Pharmaceuticals and Other Hazardous Wastes

The WSSC adopted the U.S. Food and Drug Administration recommendations to not dispose of unused or expired pharmaceutical drugs into the sanitary sewer. Any pharmaceutical flushed down the toilet or discharged to the sanitary sewer could potentially make its way into the drinking water source. Wastewater treatment plants do not treat for many pharmaceuticals. Properly disposing of these items may help prevent future contamination to the environment.

In support of the National Prescription Drug Take Back Days, WSSC led two Drug Take Back Days – an employee-only initiative on April 25, 2018 and the regularly scheduled public event held on April 28, 2018. WSSC Police collected some 29 pounds of pharmaceuticals.

WSSC advises to dispose of pharmaceutical drugs in the trash. Additional information on disposal can be found on WSSC’s website under Water Quality or by visiting <https://www.fda.gov> and search for “disposal by flushing.” You can also contact your local pharmacy.

As for other hazardous wastes such as household cleaners, pesticides, paints, motor oil and prescription drugs never pour them down the drain, in the toilet, on the ground or in storm drains. The best place to take these hazardous substances is to a recycling center. You can contact your County’s solid waste or waste management services for additional information.

SECTION 10
ORGANIZATIONAL BUDGETS AND MEASURES

WORKFORCE AND COMPENSATION

INTRODUCTION

This section provides assumptions, including discussions of WSSC's workforce and compensation, including retiree benefits. Workforce and compensation as proposed for FY 2020 incorporates policies and guideline recommendations.

SALARY AND WAGES SUMMARY

	FY 2019 Approved		FY 2020 Proposed	
	Workyears	Amount	Workyears	Amount
Base Positions Funded Full Year	1,776	\$ 154,930,072	1,776	\$ 156,709,569
Overtime		8,099,381		7,279,056
Subtotal		163,029,453		163,988,625
Lapse on Base Positions *		(9,440,601)		(11,934,319)
Subtotal		153,588,852		152,054,306
Salary Enhancements		5,445,188		5,155,023
Salary - 6 Commissioners		78,500		78,500
TOTAL	1,776	\$ 159,112,540	1,776	\$ 157,287,829

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

EMPLOYEE BENEFITS

The following employee benefits are funded in the two non-departmental accounts (NDA) – Human Resources and Finance.

FICA (Social Security & Medicare) – Contributions are collected each payday based on actual payroll. Since contribution rates and salary maximums change at the start of the calendar year, figures used in the budget represent an average of the rates set for 2019 and projected changes for 2020. The employer rates are 6.2% for social security and 1.45% for Medicare and are not expected to change.

Workers' Compensation – This is handled under the Office of Human Resources. Contributions are set each year based on an actuarial valuation of exposures, past and projected claims experience along with administrative expenses.

Group Insurance – The contributions for health insurance are actuarially determined, and the contribution for life insurance is based on fixed rates per coverage amounts based on an employee's salary. Contribution rates during this period will be set based on various factors, including the fund balance in the Retiree Other Post-Employment Benefit Trust and claims cost experience.

RETIREMENT PROGRAM

Retirement System – WSSC maintains a system of retirement for its employees which are intended to provide income during their retirement years. The Employees' Retirement Plan is administered by an Executive Director who is appointed by the WSSC General Manager.

Retiree Health Benefits Trust – A single employer contributory fund established to address the rising cost of life insurance and medical benefits for future retirees and beneficiaries. Through a trust vehicle, annual contributions by WSSC are set aside and actively invested. Over time, funding would be sufficient to pay for future retiree health benefits, as well as any accrued interest on unfunded liability.

COMPARATIVE EXPENDITURES BY ORGANIZATIONAL UNIT – ALL OPERATING AND CAPITAL FUNDS

	FY 2019 Approved		FY 2020 Proposed	
	Workyears	Budget	Workyears	Budget
Commissioners Office/Corporate Secretary's Office*	2	\$ 390,768	2	\$ 381,879
Office of the Inspector General	10	1,348,142	10	1,572,084
General Manager's Office	9	1,598,034	9	1,640,475
WSSC STAT Office	4	684,350	4	668,784
General Counsel's Office	25	10,392,624	28	10,498,597
Strategic Partnerships Branch				
Customer Service Department	102	11,883,866	87	11,661,762
Intergovernmental Relations Office	4	723,476	4	753,746
Communications & Community Relations Office	19	3,111,669	19	3,071,397
Human Resources Office	36	6,054,817	36	7,921,259
Equal Employment Opportunities Office	1	228,994	1	226,400
Operations Branch				
Asset Management Office	8	3,468,777	8	3,010,023
Engineering & Construction Department	378	578,731,541	378	589,038,593
Police & Homeland Security Office	41	5,557,088	41	6,136,099
Production Department	332	160,340,070	332	161,028,691
Utility Services Department	499	126,454,367	512	138,619,476
Administration Branch				
Finance Department	64	7,691,928	64	7,720,450
Information Technology Department	104	70,230,482	104	56,107,369
General Services Department	94	15,617,308	93	18,509,401
Procurement Department	35	3,677,370	35	3,552,532
Office of Supplier Diversity & Inclusion	9	1,414,076	9	1,461,900
Other				
Non-Departmental - Finance		53,825,526		51,056,376
Retirement Trust Charge Back		-		(756,355)
Non-Departmental - Human Resources		34,524,900		31,139,492
Debt Service		294,348,690		319,882,700
PAYGO		31,015,512		31,016,000
Depreciation Expense **		14,592,374		-
SUMMARY-TOTAL	1,776	\$ 1,437,906,749	1,776	\$ 1,455,919,130

*Commissioners (6) and Inspector General (1) not included in totals for workyears. However, funds shown in table do provide for associated workyear expenses.

**Beginning in FY 2020, movable assets are budgeted as a direct expense at the organization level in lieu of depreciation.

ORGANIZATIONAL UNIT AND FUND MATRIX – ALL OPERATING AND CAPITAL FUNDS

BUDGET: FUND TYPE:	OPERATING			CAPITAL		
	Water Operating	Sewer Operating	General Bond Debt Service	Water Supply	Sewer Disposal	General Construction
Commissioners Office/Corporate Secretary's Office	X	X	X	X	X	X
Office of the Inspector General	X	X	X	X	X	X
General Manager's Office	X	X	X	X	X	X
WSSC STAT Office	X	X	X	X	X	X
General Counsel's Office	X	X	X	X	X	X
Strategic Partnerships						
Customer Service Department	X	X				
Intergovernmental Relations Office	X	X	X	X	X	X
Communications & Community Relations Office	X	X	X	X	X	X
Human Resources Office	X	X	X	X	X	X
Equal Employment Opportunities Office	X	X	X	X	X	X
Operations						
Asset Management Office	X	X				
Engineering & Construction Department	X	X		X	X	X
Police & Homeland Security Office	X	X	X	X	X	X
Production Department	X	X	X	X	X	X
Utility Services Department	X	X		X	X	X
Administration						
Finance Department	X	X	X	X	X	X
Information Technology Department	X	X	X	X	X	X
General Services Department	X	X	X	X	X	X
Procurement Department	X	X	X	X	X	X
Office of Supplier Diversity & Inclusion	X	X	X	X	X	X
Non-Departmental - Finance	X	X	X	X	X	X
Non-Departmental - Human Resources	X	X	X	X	X	X
Debt Service	X	X	X			
PAYGO	X	X				

COMMISSIONERS/CORPORATE SECRETARY, GENERAL MANAGER & STAFF OFFICES

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

Budget Summary

Governance & General Manager's Office	FY 2018 Actual		FY 2019 Approved		FY 2020 Proposed		Increase/(Decrease)	
	Work years	Amount	Work years	Amount	Work years	Amount	Work years	Amount
Commissioners'/Corporate Secretary's Office	1.0	\$328,571	2.0	\$390,768	2.0	\$381,879	-	\$(8,889)
Office of the Inspector General	8.8	1,242,055	10.0	1,348,142	10.0	1,572,084	-	223,942
General Manager's Office	9.1	1,657,551	9.0	1,598,034	9.0	1,640,475	-	42,441
WSSC STAT Office	2.4	747,386	4.0	684,350	4.0	668,784	-	(15,566)
General Counsel's Office	22.4	10,366,586	25.0	10,392,624	28.0	10,498,597	3.0	105,973
Total	43.7	\$14,342,149	50.0	\$14,413,918	53.0	\$14,761,819	3.0	\$347,901

Explanation of Major Variances

The Proposed Budget FY 2020 reflects an increase of nearly \$348,000 from the Approved Budget FY 2019. The increase is primarily due to the addition of two workyears to the Office of the Inspector General to assist the Commission in meeting its objectives in a fiscally transparent, sustainable, and ethically responsible manner. Two workyears were also transferred from the Office of the Inspector General to the General Counsel's Office (GCO) to reflect a transition of the Ethics activity to the GCO.

COMMISSIONERS/CORPORATE SECRETARY'S OFFICE

Mission Statement

To function as the official governing body of WSSC responsible for setting general policy for WSSC's operation, while providing leadership, guidance, and oversight.

Office Description and Core Activities

WSSC is governed by a six-member Board of appointed Commissioners.

The Board of Commissioners provides oversight of the agency and establishes 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. Three Commissioners are appointed by the Prince George's County Executive and three by the Montgomery County Executive, subject to approval by the two respective County Councils.

The Commission's Corporate Secretary is a corporate officer of the agency responsible for overseeing the day-to-day operations of the Commissioners/Corporate Secretary's Office and managing WSSC's corporate functions, to include organizing and facilitating Commission meetings, drafting and posting official meeting agendas, preparing official meeting minutes, maintaining the agency's corporate seal and certifying documents on behalf of the Commission. The Corporate Secretary also serves as the agency's registered agent; official custodian of records and liaison to customers and other stakeholders on behalf of Commissioners.

Mission Statement

To help WSSC meet its objectives in a fiscally transparent, sustainable, and ethically responsible manner, by conducting independent audits, evaluations, and investigations; making evidence-based recommendations to promote economy, efficiency and effectiveness; and prevent and detect fraud, waste, abuse, mismanagement, and misconduct within WSSC programs and operations.

Office Description and Core Activities

The Office of the Inspector General (OIG) is an independent office of the WSSC. The WSSC OIG was established and is governed by the WSSC Inspector General Act, as promulgated under Maryland Public Code 17-601 et seq. (2018). The OIG reports to the WSSC Board of Commissioners.

The OIG assesses the effectiveness and efficiency of WSSC operations and programs and serves to promote transparency for WSSC stakeholders, as well as serving as the WSSC's safety net for compliance with rules, regulations, and overall best business practices. The OIG administers the Fraud, Waste, and Abuse Hotline and investigates reported allegations.

The OIG is responsible for providing independent and objective recommendations that add value to and improve WSSC's programs and operations. The OIG helps the Commission accomplish its mission by providing a systemic, objective, and disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes within WSSC. Examples of OIG core activities include:

Performance Audits – Are engagements that provide findings or conclusions based on an evaluation of sufficient, appropriate evidence against criteria. Performance audits provide objective analysis to assist management and those charged with governance and oversight in using the information to improve program performance and operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability.

Assurance Audits – Provide an objective examination of evidence for the purpose of providing an independent assessment on risk management, control, or governance processes for the organization. Examples may include financial, performance, compliance, system security, and due diligence engagements. Assurance audits add value by improving opportunities to achieve organizational objectives, identifying operational improvement, and/or reducing risk exposure.

Special Audits – The OIG periodically receives requests for audit work from Commissioners, the WSSC Board of Ethics, WSSC management, and other WSSC stakeholders. These are one-time audits of identified problem areas that are performed on a priority basis. All requests for special audits are carefully considered.

OFFICE OF THE INSPECTOR GENERAL (CONTINUED)

Fraud, Waste and Abuse Hotline – The Fraud, Waste and Abuse Hotline provides a centralized reporting vehicle for WSSC employees, customers, contractors, and other stakeholders of the Commission, to report suspected occurrences of fraud, waste, and abuse anonymously, without fear of retaliation. The OIG staff also serves as primary investigator of occurrences reported through the hotline.

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.

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.

General Management – This activity includes coordinating and supervising Commission-wide activities, 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.

Office Description and Core Activities

Management and Administration – 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.

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.

Effective FY 2020, the Ethics Office administratively reports to the GCO. The Ethics Office is managed by the Ethics Officer who administers the Code of Ethics, provides support to the Board of Ethics, and provides ethics training.

Legal Services – 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.

Claims – 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.

Ethics Office Administration – The Ethics Officer 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 and maintaining associated registration forms; and preparing quarterly and annual reports for the Montgomery and Prince George's County Councils. The Ethics Officer handles ethics inquiries, provides ethics training, and is responsible for monitoring the WSSC's standards, policies, and procedures to ensure compliance.

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

Strategic Partnerships	FY 2018 Actual		FY 2019 Approved		FY 2020 Proposed		Increase/(Decrease)	
	Work years	Amount	Work years	Amount	Work years	Amount	Work years	Amount
Customer Service Department	88.7	\$9,141,076	102.0	\$11,883,866	87.0	\$11,661,762	(15.0)	\$(222,104)
Intergovernmental Relations Office	3.4	610,303	4.0	723,476	4.0	753,746	-	30,270
Communications & Community Relations	18.6	3,026,191	19.0	3,111,669	19.0	3,071,397	-	(40,272)
Human Resources Office	35.0	4,721,004	36.0	6,054,817	36.0	7,921,259	-	1,866,442
Equal Employment Opportunities Office	1.0	191,345	1.0	228,994	1.0	226,400	-	(2,594)
Total	146.7	\$17,689,919	162.0	\$22,002,822	147.0	\$23,634,564	(15.0)	\$1,631,742

Explanation of Major Variances

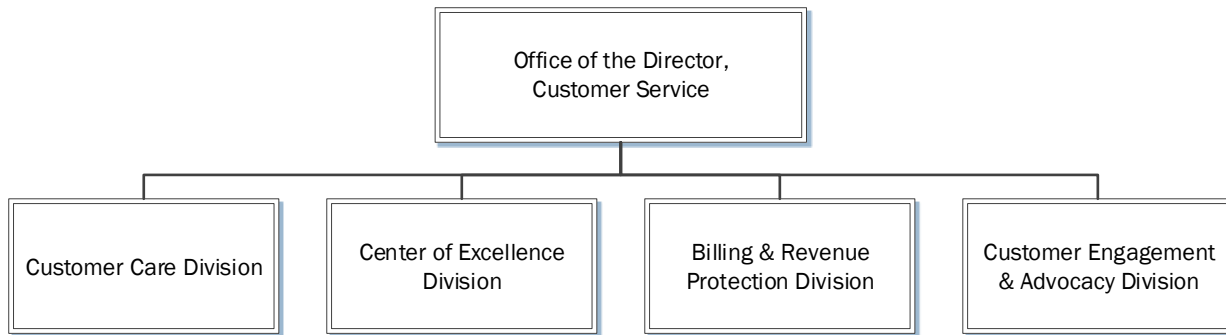
The Proposed Budget FY 2020 increased by approximately \$1.6 million from the Approved FY 2019. The increase is primarily due to the transfer of workers’ compensation functions from the HR Non-Departmental to the HR Office and has no impact on the overall Commission’s budget. There is also several organizational changes that occurred in the Customer Service Department which are explained in greater detail in the Customer Service Department section.

CUSTOMER SERVICE DEPARTMENT

The Customer Service Department is responsible for providing residential and commercial customers with timely, accurate, and responsive customer services. The Department helps customers understand their water and sewer services including rates, water consumption, starting or stopping service, and detecting household plumbing leaks. The Department provides account services, such as billing adjustments and corrections, billing and collections operations, and revenue analysis and management. The Department also provides a variety of payment options and customer assistance solutions to help pay the water/sewer bill. The Department supports the vision for customer service excellence through four divisions: Customer Care, the Center of Excellence, Billing & Revenue Protection, and Customer Engagement & Advocacy. Key priorities for the Department include improving the overall customer experience and streamlining operations to improve customer satisfaction.

CUSTOMER SERVICE DEPARTMENT (CONTINUED)

Organizational Structure



Mission Statement

To provide a world-class customer experience to every customer every time by treating all customers in a friendly, helpful and professional manner.

Budget Summary

Customer Service Department	FY 2018 Actual		FY 2019 Approved		FY 2020 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, Customer Service	2.0	\$282,753	3.0	\$387,018	4.0	\$624,121	1.0	\$237,103
Customer Care Division	54.8	5,485,351	66.0	7,209,900	50.0	5,005,431	(16.0)	(2,204,469)
Center of Excellence	3.3	522,932	6.0	1,108,516	6.0	670,427	-	(438,089)
Billing & Revenue Protection Division	24.6	2,334,451	20.0	2,347,929	21.0	4,686,958	1.0	2,339,029
Customer Engagement & Advocacy Division	4.0	515,589	7.0	830,503	6.0	674,825	(1.0)	(155,678)
Total	88.7	\$9,141,076	102.0	\$11,883,866	87.0	\$11,661,762	(15.0)	\$(222,104)

Explanation of Major Variances

The Proposed Budget FY 2020 reflects a decrease of approximately 2% from the Approved Budget FY 2019. This decrease is primarily due to bringing outsourced call center operations in-house, and the transfer of the Emergency Call Center to the Utility Services Department. This decrease in the Customer Care Division is partially offset by an increase in the Billing & Revenue Protection Division resulting from upgrading water and sewer bill design, composition, printing, and distribution with the goal of improving customer satisfaction.

Highlights

- Water and sewer bills design, composition, printing, and distribution activities were transferred from the General Services Department to the Customer Service Department with the focus on improving customer experience.
- Emergency Call Center staff was transferred from the Customer Care Division to the Utility Services Department to better assist customers with emergency inquiries.
- 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.

OFFICE OF THE DIRECTOR

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

Core Activities

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

CUSTOMER CARE DIVISION

The Customer Care Division serves as the voice of the Commission for customer oriented services and is comprised of the Customer Service Center (CSC), and Research & Investigations Section. The Division responds to general and complex customer requests such as customer assistance with billing matters, preparing written correspondence in response to customer inquiries and complaints, and processing bill payments.

Core Activities

Customer Correspondence – 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.

Dispute Resolution/Refund Hearings – 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.

Customer Account Inquiry (Non-Emergency) – 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 and customer assistance programs.

Goals, Objectives, and Outcome Measures

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

Strategic Priority:
Enhance Customer Experience and
Community Engagement

Objective	Outcome Measure	FY 2017 Actual / Targeted	FY 2018 Actual / Targeted	FY 2019 Targeted	FY 2020 Targeted
Respond to customers' telephone calls.	Percentage of customer calls answered - Non-emergency calls.	93.0% / 90.0%	93.0% / 95.0%	92.0%	95.0%

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.

Core Activities

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

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.

Core Activities

Billing & Revenue Protection – 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.

Water & Sewer Bill Composition and Printing – This activity comprises the design, composition, printing, and distribution of electronic and paper water and sewer bills to customers.

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

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

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.

Core Activities

Customer Engagement – 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.

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.

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.

Intergovernmental Relations – 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.

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.

COMMUNICATIONS & COMMUNITY RELATIONS OFFICE (CONTINUED)

Office Description and Core Activities (Continued)

Media and Public Relations – 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.

Publications – 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.

Community Outreach – 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.

Other Public Communications Projects – 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.

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

Web Content Administration – This activity includes overall management of content on the WSSC 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. This activity also includes overall management of content on the WSSC internal website (intranet), assisting other offices and divisions on their training and content needs or issues, and providing content for Commission-wide activities, need-to-know business and messages from senior leadership.

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.

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.

Talent Development – 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.

Benefits Administration – 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.

Employee and Labor Relations – 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.

Compensation & Human Resources Management System – 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.

HUMAN RESOURCES OFFICE (CONTINUED)

Talent Acquisition – 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.

Occupational Safety & Health – 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.

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.

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 uses best efforts 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. Related to complaint processing, the EEO Office is responsible for developing and implementing an Alternate Dispute Resolution (ADR) program intended to resolve complaints through mediation. The EEO Office also develops, conducts or oversees requisite training programs throughout WSSC related to EEO, Harassment, Diversity and ADR. The EEO Office is responsible for developing a Diversity Program that enhances diversity by adopting and implementing a Diversity Strategy for WSSC.

Equal Employment Opportunities – 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

Operations	FY 2018 Actual		FY 2019 Approved		FY 2020 Proposed		Increase/(Decrease)	
	Work years	Amount	Work years	Amount	Work years	Amount	Work years	Amount
Asset Management Office	7.4	\$2,373,732	8.0	\$3,468,777	8.0	\$3,010,023	-	\$(458,754)
Engineering & Construction Department	354.5	467,779,182	378.0	578,731,541	378.0	589,038,593	-	10,307,052
Police & Homeland Security Office	34.5	4,099,676	41.0	5,557,088	41.0	6,136,099	-	579,011
Production Department	317.7	156,382,580	332.0	160,340,070	332.0	161,028,691	-	688,621
Utility Services Department	457.2	89,742,652	499.0	126,454,367	512.0	138,619,476	13.0	12,165,109
Total	1,171.3	\$720,377,822	1,258.0	\$874,551,843	1,271.0	\$897,832,882	13.0	\$23,281,039

ASSET MANAGEMENT OFFICE

Mission Statement

To implement asset management strategies 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.

Office Description and Core Activities

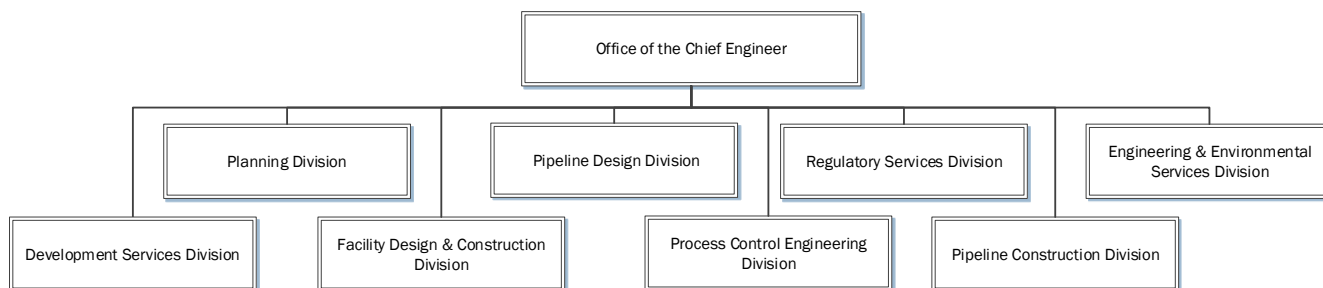
The Asset Management Office is responsible for the development and implementation of world class asset management strategies and practices in order to balance the competing goals of maximizing the level of service we deliver to our customers, while at the same time minimizing the lifecycle cost of the 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.

Asset Management Program – 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 WSSC’s Needs Validation process, which focuses in 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.

Organizational Structure



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.

Budget Summary

Engineering & Construction Department	FY 2018 Actual		FY 2019 Approved		FY 2020 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Engineer	2.0	\$297,109	2.0	\$3,775,782	2.0	\$3,780,315	-	\$4,533
Development Services Division	53.2	5,537,460	53.0	5,854,226	52.0	5,850,235	(1.0)	(3,991)
Planning Division	12.9	83,057,390	14.0	75,035,308	14.0	72,137,329	-	(2,897,979)
Facility Design & Construction Division	32.0	85,971,638	34.0	167,944,272	34.0	174,933,412	-	6,989,140
Pipeline Design Division	29.5	20,378,974	42.0	34,791,076	39.0	25,557,836	(3.0)	(9,233,240)
Process Control Engineering Division	13.1	2,270,653	14.0	2,658,736	14.0	2,712,489	-	53,753
Regulatory Services Division	71.6	6,730,105	74.0	6,873,022	76.0	7,237,096	2.0	364,074
Pipeline Construction Division	80.6	251,898,725	83.0	267,338,446	81.0	282,038,113	(2.0)	14,699,667
Engineering & Environmental Svcs. Division	59.6	11,637,128	62.0	14,460,673	66.0	14,791,768	4.0	331,095
Total	354.5	\$467,779,182	378.0	\$578,731,541	378.0	\$589,038,593	-	\$10,307,052

Explanation of Major Variances

The E&C Proposed Budget FY 2020 variances and overall increase from the Approved FY 2019 are primarily driven by the annual update to the CIP. This includes programmed increases in the Piscataway Bio-Energy and Septage Facility projects, partially offset by a decrease in the design and construction mileage for the Water Reconstruction Program, and the continued wind down of the Clinton Zone water main projects.

ENGINEERING & CONSTRUCTION DEPARTMENT (CONTINUED)

Highlights

- The Commission continues to comply with all aspects of the Sanitary Sewer Consent Decree. The Broad Creek Waste Water Pump Station Augmentation Project is an important component and will be substantially complete in FY 2020.
- The Systems Reconstruction program completed 49 miles of water main rehabilitation in FY 2018.
- The Patuxent Water Filtration Plant (WFP) Expansion project is substantially complete.
- The Collington water storage tank construction is complete. Additional tanks in Olney, Shady Grove and St. Barnabas will be completed in FY 2019.

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.

Core Activities

Management and Administration – 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.

Unsigned System Extension Permit (SEP) – 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 all plan submittals associated with private development, service connection submittals and applicant built construction packages.

Core Activities

Development Design – 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.

DEVELOPMENT SERVICES DIVISION (CONTINUED)

Permits – 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.

PLANNING DIVISION

The Planning Division is responsible for: ensuring adequate capacity of the water treatment, transmission, distribution, and storage systems as well as wastewater treatment, collection, and conveyance systems for both existing and future customers; for developing projects and performing preliminary engineering, including water main, sewer main, force main, and PCCP infrastructure replacement programs in order to expedite project delivery before transfer to the design teams; for developing new and managing existing regional cooperative agreements with adjoining jurisdictions and other agencies with whom WSSC shares resources; for providing technical advice to the Commission concerning proposed state and federal policy initiatives, laws, and regulations that may impact activities of the agency; and for reviewing and approving all invoices related to WSSC's relevant share of the wastewater capital improvement programs for DCWater and Charles County.

Core Activities

Need Analysis & Facility Planning – This activity identifies and develops water and sewer system capacities through hydraulic modelling, and identifies deficiencies and solutions to mitigate them. The Division also develops long range flow projections provides technical support for county ten-year water and sewer plan revisions, and prepares reports for internal wastewater capacity and external capacity management plans for MDE.

Special Investigations and Technical Support – This activity provides operational support for planned and emergency shut-downs, and analysis for PCCP and transmission system inspections and rehabilitation. This work also includes preparing and submitting the annual water audit and water loss reduction plan required by MDE.

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

Regulatory Permitting & Compliance – This activity includes the analysis of and response to proposed regulatory initiatives, coordination of comments on proposed legislation, and evaluation of environmental legislation that may impact WSSC.

Regional Water & Wastewater Management – This activity oversees payments to DCWater for WSSC's share of construction at the Blue Plains Wastewater Treatment Plant (WWTP) located in Washington, DC. The Division also oversees capital billing and reviews the preparation of Blue Plains WWTP and Mattawoman WRRF (located in Charles County) Capital Improvements Programs. This activity also includes developing new and managing existing agreements with adjoining jurisdictions such as Howard County, the City of Bowie, the City of Rockville, as well as the Interstate Commission on the Potomac River Basin (ICPRB).

PLANNING DIVISION (CONTINUED)

Replacement Planning – This activity pertains to planning activities associated with the water main, sewer main, trunk sewer, force main, valve replacement and facility replacement programs.

PCCP Investigations and Analysis – This activity represents all work associated with the planning efforts on the PCCP pipe replacement program.

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.

Core Activities

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

Facility Construction – This activity funds and manages facility construction projects, including ensuring contract items, general conditions and specifications 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 water and sewer main reconstruction programs, as well as designs for water and sewer relocations associated with road improvement projects for the state, counties and municipalities, and reviewing water and sewer relocations to ensure compliance with WSSC guidelines.

Core Activities

Pipeline Design – This activity prepares and manages contract design documents for CIP water and sewer main projects, water and sewer reconstruction, large meter, large vault, manhole, and large valve programs, including project scope preparation and design, overseeing consultants, performing technical reviews, coordinating community outreach, and acquiring rights-of entry, state, county and environmental permits.

Water and Sewer Relocations – This activity reviews and approves construction plans for road and streetscape improvements; 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 and manages contract designs documents for relocating existing water and sanitary sewer systems.

PIPELINE DESIGN DIVISION (CONTINUED)

Goals, Objectives, and Outcome Measures

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

Strategic Priority:
Improve Infrastructure

Objective	Outcome Measure	FY 2017 Actual / Targeted	FY 2018 Actual / Targeted	FY 2019 Targeted	FY 2020 Targeted
Design the number of miles for the Water Reconstruction Program as planned.	Miles of water mains designed vs. planned.	57.2 / 69.0	58.2 / 67.0	57.0	27.0
Design the number of miles for the Sewer Reconstruction Program as planned.	Miles of sewer mains designed vs. planned.	31.5 / 20.0	21.2 / 20.0	20.0	25.0

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 automation and SCADA systems.

Core Activities

Corrective Maintenance – This activity provides corrective maintenance of all process control systems in the Commission’s facilities.

Enhancement and Upgrade Maintenance – 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.

New Facility Support – 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.

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.

REGULATORY SERVICES DIVISION (CONTINUED)

Core Activities

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

Plumbing Inspections – 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.

Industrial Discharge Control Program – 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.

Fats, Oils, and Grease (FOG) Program – 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.

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.

Core Activities

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

Construction Management – 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.

Street Repair and Restoration – 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.

Electronic As-Built Prep – 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).

PIPELINE CONSTRUCTION DIVISION (CONTINUED)

Goals, Objectives, and Outcome Measures

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

Strategic Priority:
Improve Infrastructure

Objective	Outcome Measure	FY 2017 Actual / Targeted	FY 2018 Actual / Targeted	FY 2019 Targeted	FY 2020 Targeted
Replace the number of miles for the Water Reconstruction Program as planned.	Miles of water mains replaced vs. planned.	60.5 / 43.0	44.3 / 43.0	43.0	23.0
Rehabilitate the number of miles of sewer mains and lateral lines for the Sewer and Trunk Sewer Reconstruction Programs as planned.	Miles of sewer mains and lateral lines rehabilitated vs. planned.	44.8 / 55.0	20.7 / 55.0	35.0	38.0

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).

Core Activities

Construction Contract Services – 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.

Geographic Information System (GIS) Services – 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.

Electrical / Mechanical Support – 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.

Civil Engineering Support – 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.

ENGINEERING & ENVIRONMENTAL SERVICES DIVISION (CONTINUED)

Infrastructure Management – 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.

Property and Rights-of-Way Acquisition – 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.

Surveys – 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.

Engineering Records – This activity supports quality control and tracking of engineering plans and as-built drawings, including scanning, indexing and uploading record drawings into WSSC’s FileNet.

Process Engineering and Water Quality Studies – 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.

Water Resources Protection – 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.

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

Environmental Assessment, Permitting and Enforcement – 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.

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

Electronic As-Built Prep – 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).

POLICE & HOMELAND SECURITY OFFICE

Mission Statement

To provide the highest quality critical infrastructure security, police and emergency management services to WSSC to protect the people, resources, and infrastructure operated by the Commission.

Office Description and Core Activities

The Police & Homeland Security Office is responsible for safeguarding the 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 the Commission property.

Security Services – This activity provides security for employees and visitors to the Commission-owned property and facilities. This involves conducting proactive patrols of all WSSC properties and facilities; implementing and proactively monitoring centralized physical and electronic security systems; expanding and improving the performance of electronic security systems; enforcing all rules, regulations, and laws regarding forestry, the environment, and protection of natural resources; and providing proprietary guard services to WSSC facilities.

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

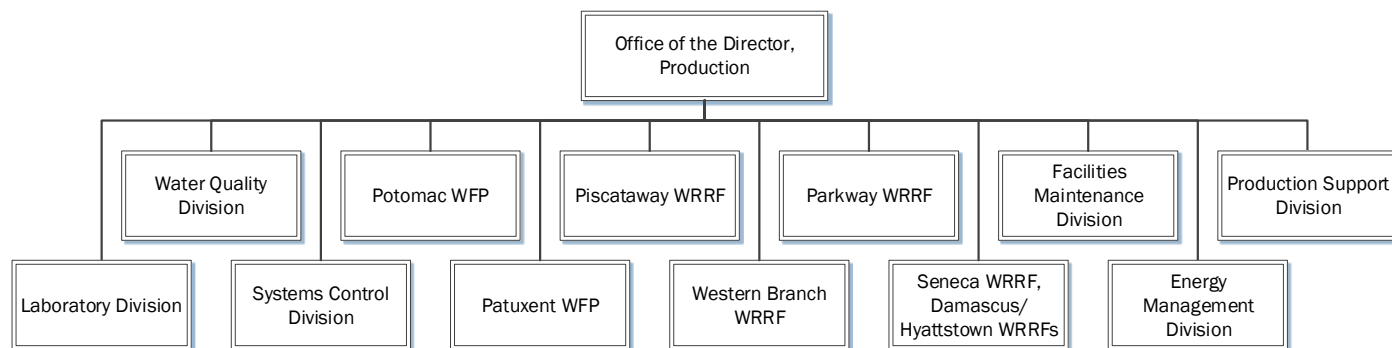
Emergency Management – This activity includes coordination of the entire preparedness cycle - planning, training, and exercising, for emergency situations and disasters. This activity is also responsible for assisting in the enterprise-wide coordination of response to large-scale emergency incidents and disasters and coordinating with state and local government public safety during those incidents. Emergency management includes updating of emergency response, operations, and continuity plans (COOP). In particular, COOP is an effort within individual executive departments and agencies to ensure continued performance of essential functions during all-hazards – both natural and man-made. Updating COOP will bring the Commission in line with other utilities and supplement emergency management functions. Emergency management also includes management of and improving follow-through on improvement planning processes and after-action reports following emergency exercises and real-world incidents.

Risk and Threat Assessment and Mitigation – This activity involves conducting risk and resiliency assessments and revision of emergency response plans (ERPs) under the newly enacted America's Water Infrastructure Act (S. 3021; Public Law 115-270, enacted October 23, 2018.) Utilities must also review and, if necessary, revise these documents at least every five years. The new law requires community water systems to complete risk and resiliency assessments that have considered physical risks posed by malicious actors and natural disasters, as well as risks from cyber threats. The assessments must consider possible impacts to treatment and distribution infrastructure, as well as intakes and source water. Systems are also required to assess their computer and automated systems, chemical use and storage, operations and maintenance, monitoring practices, and financial infrastructure.

PRODUCTION DEPARTMENT

The Production Department is committed to meeting two primary objectives: to provide our customers with a safe and reliable supply of drinking water that meets or exceeds all Federal and State standards and regulations; and protect public health and the environment by returning a clean wastewater effluent back to the environment. WSSC's yearly recognition by the Partnership for Safe Water and Peak Performance Award Programs is indicative of our commitment to provide our customers with the best water and wastewater services possible. Led by the Production Director, the Department operates two Water Filtration Plants (Potomac and Patuxent), six Water Resource Recovery Facilities (Piscataway, Western Branch, Parkway, Seneca, Damascus, and Hyattstown), and Laboratory, Water Quality, Systems Control, Facilities Maintenance, Energy Management, and Production Support Divisions.

Organizational Structure



Mission Statement

To provide a safe and reliable supply of drinking water, and to produce a high quality wastewater effluent that provide 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, water resource recovery facilities, bio-solids management programs, and laboratories.

Budget Summary

Production Department	FY 2018 Actual		FY 2019 Approved		FY 2020 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, Production	3.5	\$540,924	3.0	\$485,014	3.0	\$500,186	-	\$15,172
Laboratory Division	35.4	4,908,003	29.0	3,453,412	29.0	4,331,170	-	877,758
Water Quality Division	-	-	7.0	1,214,834	8.0	1,804,249	1.0	589,415
Systems Control Division	31.6	6,696,227	34.0	4,750,285	32.0	4,786,272	(2.0)	35,987
Potomac WFP	33.6	12,158,360	35.0	9,739,084	35.0	10,591,464	-	852,380
Patuxent WFP	23.6	3,242,361	24.0	3,834,036	24.0	4,298,998	-	464,962
Piscataway WRRF	26.0	6,006,970	26.0	7,866,938	26.0	7,449,496	-	(417,442)
Western Branch WRRF	31.2	6,634,703	32.0	6,851,470	32.0	7,039,887	-	188,417
Parkway WRRF	22.3	4,157,408	23.0	4,125,664	23.0	4,390,023	-	264,359
Seneca/Damascus/Hyattstown WRRFs	32.7	5,737,211	33.0	6,412,456	33.0	6,429,861	-	17,405
Facilities Maintenance Division	60.9	15,144,804	68.0	16,756,480	68.0	17,483,847	-	727,367
Energy Management Division	-	20,302,204	-	20,576,949	-	19,784,417	-	(792,532)
Production Support Division	16.9	70,853,405	18.0	74,273,448	19.0	72,138,821	1.0	(2,134,627)
Total	317.7	\$156,382,580	332.0	\$160,340,070	332.0	\$161,028,691	-	\$688,621

*As of FY 2019, the Water Quality Section of the Laboratory Service Division was established as a separate division.

PRODUCTION DEPARTMENT (CONTINUED)

Explanation of Major Variances

The Production Department Proposed Budget FY 2020 reflects a slight increase from the Approved Budget FY 2019. The increase is primarily due to a reduction in size and scope of a multi-site lighting project which is offset by an increase in regional sewage disposal costs.

Highlights

- Our wastewater treatment plants (WWTPs) are now recognized as water resource recovery facilities (WRRFs).
- FY 2018 marked 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 water resource recovery facilities had zero permit non-compliances earning them NACWA's Peak Performance Awards, five earned Platinum and one earned Gold.
- WSSC has entered into an agreement with the University of Maryland to support a research program titled "Using Vegetated Compost Blankets to Achieve Highway Runoff Volume and Pollutant Reduction". This program will research compost application as an effective erosion control method in steep areas prone to storm water erosion, increasing water retention and thus decreasing storm water runoff. Program benefits include a greater understanding of the impact of runoffs to our water filtration plants, reservoirs, and the Potomac River, which will assist in improving operations and sustainability.

OFFICE OF THE DIRECTOR, PRODUCTION

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

Core Activities

Management & Administration Activities – 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.

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.

LABORATORY DIVISION (CONTINUED)

Core Activities

Laboratory Services – 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.

The Commissions' consolidated laboratory facility also provides water-testing services to both internal and external customers and, in some cases; a fee is applied for these services. During FY 2018, \$83,445 in lab fees were collected.

WATER QUALITY DIVISION

Water Quality Division establishes a unified, central structure in which all water quality issues are managed, so that WSSC's water quality goals are met consistently and reliably. This division is responsible for management and coordination of drinking water regulatory compliance activities, implementation and operation of water quality surveillance and response programs, response to stakeholder and customer inquiries on water quality, and proactive planning on water quality.

Core Activities

Water Quality Program – The program's core functions include compliance with drinking water regulations, drinking water contamination monitoring and response, as well as customer and stakeholder support on water quality issues. Specifically, the division performs planning, management, and operation of all SDWA compliance activities including monitoring and reporting, identification and resolution of current and upcoming water quality problems, implementation of surveillance and response programs to better detect contamination events, and communicating with customers and stakeholders to address their water quality concerns.

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.

Core Activities

Operations – 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.

SYSTEMS CONTROL DIVISION (CONTINUED)

Maintenance – 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.

Maintenance Support Services – 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.

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.

Core Activities

Operations – 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.

Maintenance – 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.

Activity Indicators

WORKLOAD DATA	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed
Average daily filtered water to the distribution system (MGD)	163.1	163.9	164.0	164.0

PISCATAWAY, WESTERN BRANCH, PARKWAY, AND SENECA/DAMASCUS/HYATTSTOWN WRRFs

These Water Resource Recovery Facilities are responsible for the operation and maintenance of their respective facilities, providing high quality, cost effective maintenance and continual operation of the Commission’s wastewater collection facilities and water resource recovery facilities. The facilities 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.

Core Activities

Operations – This activity is associated with monitoring, controlling, and enhancing process systems associated with wastewater collection and water resource recovery. The process systems include controlling and monitoring processes with wastewater in its fluid stage and controlling and monitoring solids processing as well.

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

Activity Indicators

WORKLOAD DATA	Wastewater Treated Flow (MGD)			
	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed
Piscataway WRRF	23.9	23.9	26.7	26.2
Western Branch WRRF	20.1	20.7	22.0	22.2
Parkway WRRF	6.0	6.3	6.8	6.5
Seneca/Damascus/Hyattstown WRRFs	14.6	15.9	17.5	17.8

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.

Core Activities

Maintenance Support Services – 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, asset management competitive action efforts, safety, training and security. They also support other miscellaneous initiatives such as Project Cornerstone implementation, greenhouse gas planning, aerobic digester feasibility studies, and renewable energy programs.

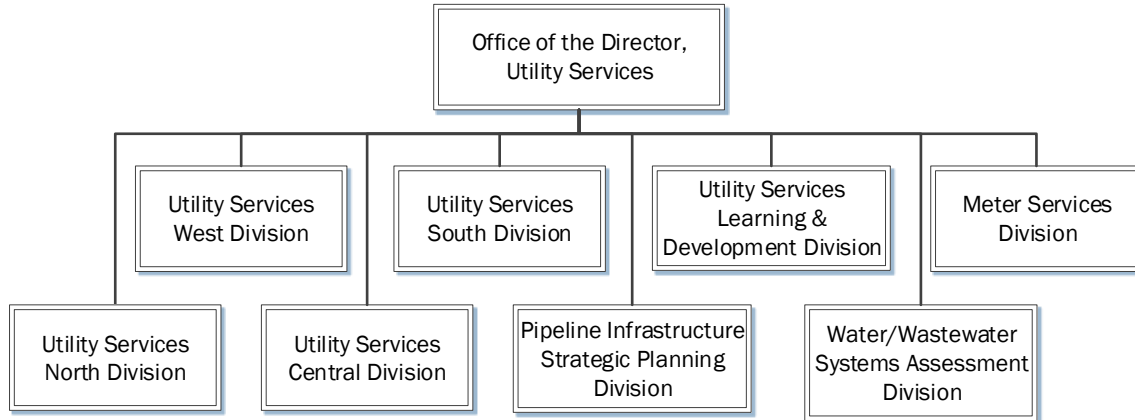
Core Activities

Operations Support – This activity involves energy project management 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, water system emergencies, and biosolids management. 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.

Organizational Structure



Mission Statement

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

Budget Summary

Utility Services Department	FY 2018 Actual		FY 2019 Approved		FY 2020 Proposed		Increase/(Decrease)	
	Work years	Amount	Work years	Amount	Work years	Amount	Work years	Amount
Office of the Director, Utility Services	8.9	\$5,850,323	9.0	\$20,358,848	26.0	\$22,261,277	17.0	\$1,902,429
Utility Services North Division	54.2	7,052,982	61.0	8,981,566	60.0	9,474,526	(1.0)	492,960
Utility Services West Division	51.1	7,934,758	61.0	9,570,946	61.0	10,338,395	-	767,449
Utility Services Central Division	54.1	13,050,583	63.0	11,776,619	62.0	11,755,870	(1.0)	(20,749)
Utility Services South Division	54.3	10,524,602	62.0	10,732,796	58.0	11,599,272	(4.0)	866,476
Pipeline Infra. Strategic Planning Division	44.4	5,057,223	38.0	6,145,465	39.0	5,482,186	1.0	(663,279)
Utility Services Learning & Dev. Division	7.8	747,076	8.0	780,414	8.0	820,222	-	39,808
Water/Wastewater Systems Assess. Division	75.9	32,115,374	81.0	36,265,044	82.0	39,408,016	1.0	3,142,972
Meter Services Division	106.5	7,409,731	116.0	21,842,669	116.0	27,479,712	-	5,637,043
Total	457.2	\$89,742,652	499.0	\$126,454,367	512.0	\$138,619,476	13.0	\$12,165,109

Explanation of Major Variances

The Utility Services Proposed Budget FY 2020 is approximately 10% greater than the Approved Budget FY 2019. This increase is due to several factors including the implementation of an Advanced Metering Infrastructure (AMI) project which will provide comprehensive real-time information to both the customer and the Commission; the transfer of 16 workyears from the WSSC Emergency Call Center to the Utility Services Office of the Director; and increased large diameter inspections and consent decree performance assessments performed in the Water/Wastewater Systems Assessment Division.

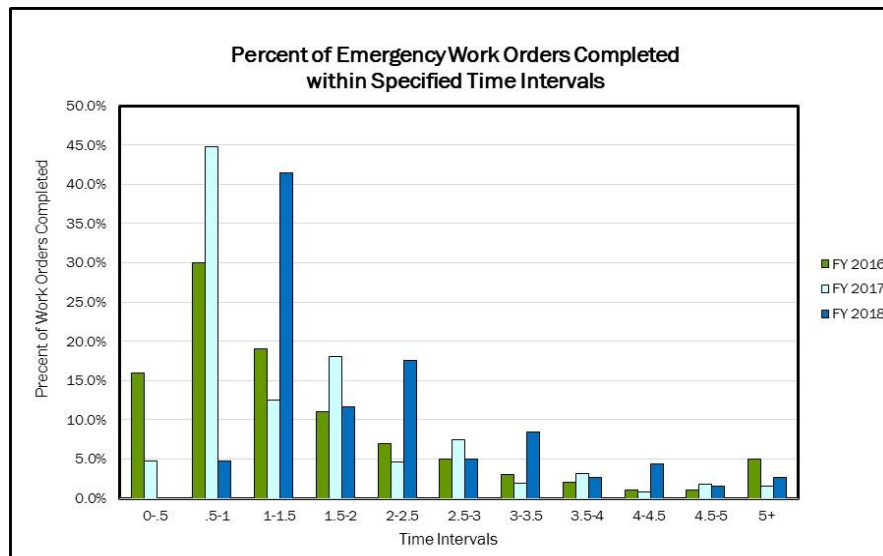
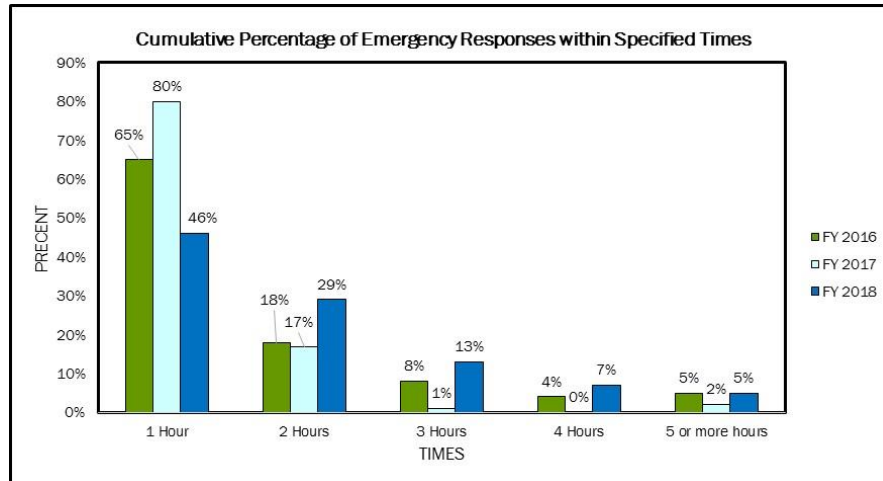
UTILITY SERVICES DEPARTMENT (CONTINUED)

Highlights

The Utility Services Department underwent a realignment of responsibilities to better meet customer needs and expectations. The WSSC Emergency Call Center was transferred to the Utility Services Department from the Customer Service Department to improve response to emergencies.

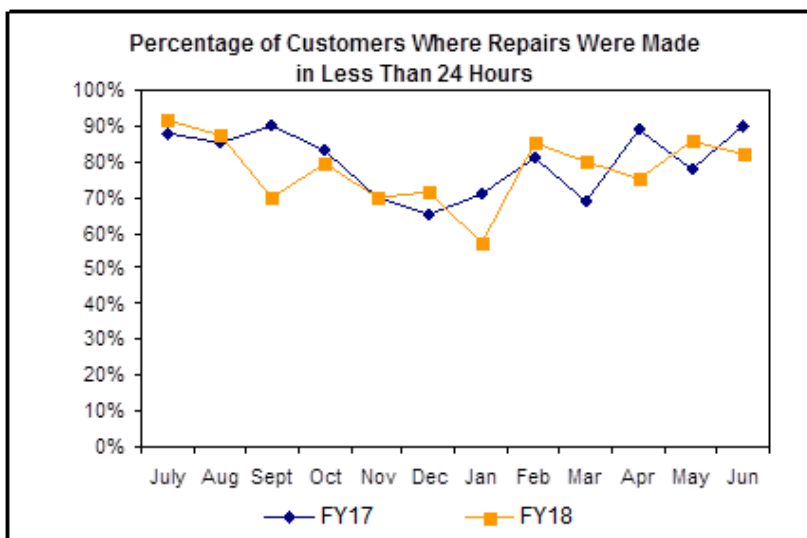
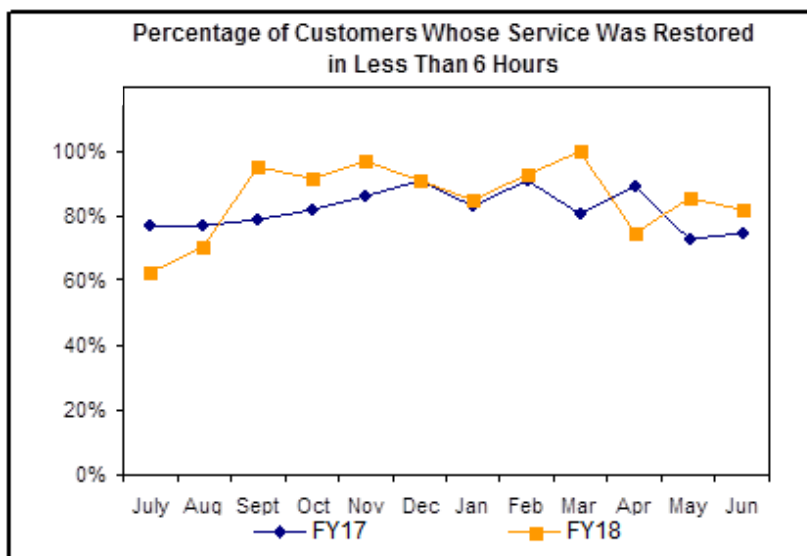
Accomplishments

Emergency Response: During FY 2018, 41,702 emergency work orders were initiated in response to customer or system emergencies, a 30.7% increase from FY 2017. WSSC's objective is to provide a first response to these emergencies in less than 2 hours, a reasonable and necessary response time based upon feedback from customers. As illustrated in the top graph, WSSC responded to approximately 46.2% of emergency calls in less than 1 hour and to 75.4% in less than 2 hours with an average response time of 1.4 hours. The bottom graph shows the distribution of emergency work order completion times in FY 2018. Most emergency work orders required less than 2 hours to complete. The percentage of calls responded to within the 2-hour goal declined primarily due to the increased number of emergency work orders in FY 2018 over FY 2017.



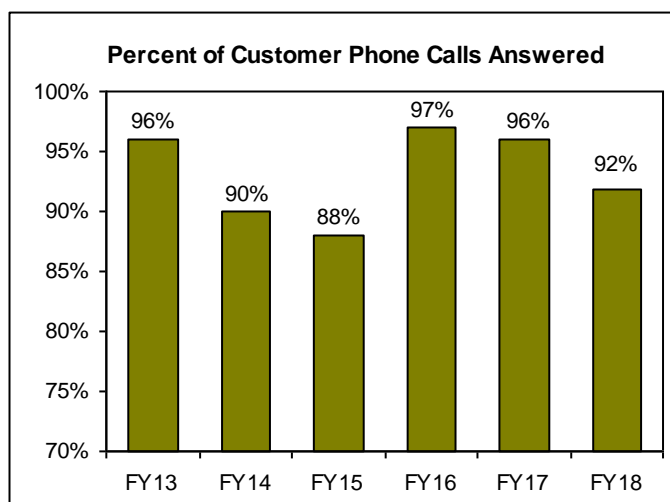
UTILITY SERVICES DEPARTMENT (CONTINUED)

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 2018, 6,380 customers, or approximately 3% 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 top graph below 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 2018, the average time customers were without water service was 3.7 hours, with 86% having water service restored within the targeted 6-hour goal. The second graph below 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 15.4 hours for FY 2018, with 77.8% of customers having normal water service restored in less than the 24-hour goal.



UTILITY SERVICES DEPARTMENT (CONTINUED)

Customer Calls for Maintenance Assistance: During FY 2018, the Commission answered 91.8% of customer calls for maintenance assistance, as shown in the graph below. The unusually cold weather during this past winter resulted in a record number of calls into the Emergency Service Center, impacting the percentage of calls answered. 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.



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.

Core Activities

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

Customer Account Inquiry (Emergency) – 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.

Radio Dispatching – 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.

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.

Core Activities

Maintenance - 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.

Inspection Maintenance - 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)

Capital Project Support – 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.

Activity Indicators

WORKLOAD DATA	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed
Emergency clean sewer service	76	63	148	148
Emergency clean sewer main	507	720	586	584
Emergency flush for discolored water	2,850	4,206	2,325	2,324
Water main repairs performed	1,672	2,226	1,677	1,676
Emergency sewer inspections performed	3,412	3,600	3,213	3,212
Emergency water inspections performed	13,437	16,167	12,926	12,928
Emergency water main shutdowns performed	162	191	188	188
Routine flush for discolored water	1,329	1,419	1,120	1,040

Goals, Objectives, and Outcome Measures

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

Strategic Priority: Improve Infrastructure

Objective	Outcome Measure	FY 2017 Actual / Targeted	FY 2018 Actual / Targeted	FY 2019 Targeted	FY 2020 Targeted
Reduce service interruptions due to water main breaks.	Number of breaks per 100 miles of water main.	57.0 / 50.0	39.0 / 35.0	33.0	34.0

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

Strategic Priority: Enhance Customer Experience and Community Engagement

Objective	Outcome Measure	FY 2017 Actual / Targeted	FY 2018 Actual / Targeted	FY 2019 Targeted	FY 2020 Targeted
Respond to customers' telephone calls.	Percentage of emergency customer calls answered.	97.0% / 85.0%	92.0% / 95.0%	93.0%	95.0%
	Average response time to emergency calls (in hours).	1.3 / 1.2	1.4 / 1.2	1.5	1.5

UTILITY SERVICES NORTH, WEST, CENTRAL, AND SOUTH DIVISIONS (CONTINUED)

Goals, Objectives, and Outcome Measures (Continued)

Goal: Minimize inconvenience caused by disruptions in service.

Strategic Priority:

Enhance Customer Experience and
Community Engagement

Objective	Outcome Measure	FY 2017 Actual / Targeted	FY 2018 Actual / Targeted	FY 2019 Targeted	FY 2020 Targeted
Restore normal water service within 24 hours.	Percentage of customers whose water service was restored within 24 hours.	79.0% / 75.0%	78.0% / 75.0%	80.0%	80.0%
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.	80.0% / 90.0%	86.0% / 90.0%	90.0%	90.0%
Reduce the number of discolored water complaints.	Number of discolored water complaints.	2,245 / 2,500	4,664* / 2,500	2,400	2,000

*Discolored water complaints spiked in FY2018 following several severe storms that required high amounts of road treatment chemicals, including manganese, and the subsequent run-off into the source water for our Potomac WFP.

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.

Core Activities

Planning – 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.

Water Main Replacement – 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.

PIPELINE INFRASTRUCTURE STRATEGIC PLANNING DIVISION (CONTINUED)

Goals, Objectives, and Outcome Measures

Goal: Complete planned water main replacement miles.

Strategic Priority:
Improve Infrastructure

Objective	Outcome Measure	FY 2017 Actual / Targeted	FY 2018 Actual / Targeted	FY 2019 Targeted	FY 2020 Targeted
Replace the number of miles of water main by in-house staff as planned.	Miles of water main replaced by in-house crews vs. planned.	8.7 / 12.0	3.9 / 12.0	2.0	2.0

Effective FY 2019, the Commission focused on using new methodologies and technologies to strategically identify mains in need of rehabilitation. This shifted one of Utility Services primary activities from water main replacements to repairs, decreasing its prior target of replacing 12 miles per year to 2 miles per year.

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.

Core Activities

Research and Development – 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.

Design/Deliver/Evaluate Courses – 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.

Core Activities

Planning – 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.

Field Maintenance – 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.

Condition Assessment – 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)

Goals, Objectives, and Outcome Measures

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

Strategic Priority:
Improve Infrastructure

Objective	Outcome Measure	FY 2017 Actual / Targeted	FY 2018 Actual / Targeted	FY 2019 Targeted	FY 2020 Targeted
Inspect, via smoke test, the number of miles of sewer main planned.	Miles of sewer main inspected via smoke test vs. planned.	2.0 / 5.0	0.6 / 2.0	1.0	1.0

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

Strategic Priority:
Improve Infrastructure

Objective	Outcome Measure	FY 2017 Actual / Targeted	FY 2018 Actual / Targeted	FY 2019 Targeted	FY 2020 Targeted
Inspect the number of Prestressed Concrete Cylinder Pipe (PCCP) miles as planned.	Miles of PCCP inspection performed vs. planned.	20.5 / 18.0	21.2 / 18.0	19.1	18.0
Install acoustical fiber optic line to monitor PCCP water transmission mains as planned.	Miles of acoustical fiber optic line installed vs. planned.	6.5 / 6.0	13.4 / 6.0	3.4	3.5

Activity Indicators

WORKLOAD DATA	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed
Miles of sewer mains cleaned for preventive maintenance	552	609	650	650
Miles of sewer mains cleaned on emergency basis	10	9	10	10
Emergency clear sewer services performed	764	782	800	788
Miles of mainline sewer televised for preventative maintenance program (WSSC Crews)	48	56	60	60
Miles of mainline sewer televised for proactive maintenance program (by contract)	181	213	225	225
Number of line blockage analysis reviews completed after CCTV inspection	1,042	189	940	916
Manholes inspected (by contract)	5,322	9,931	5,000	6,000
Telemetered gauges operated	225	237	245	245
Calibrations performed	870	936	940	940
Chemical root control (work order count)	32	1,012	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.

Core Activities

Temporary Fire Hydrant Meter Leasing and Maintenance – 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.

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

Large Meter Testing, Repair & Replacement – 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.

Small Meter Testing, Repair & Replacement – 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.

New Meters – 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.

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

Activity Indicators

WORKLOAD DATA	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed
Small meters replaced	13,781	11,303	13,500	13,500
Small meters installed (new connections)	3,585	2,239	3,500	3,500
Regular meter readings completed	1,827,714	1,768,199	1,900,000	1,900,000
Percentage of meter readings secured on first visit	99%	99%	95%	95%
Special meter readings completed	39,918	39,585	40,000	40,000
Collection turn-offs performed	30,041	48,436	8,890	8,890
Fire hydrant meters issued	1,650	1,745	1,670	1,650

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.

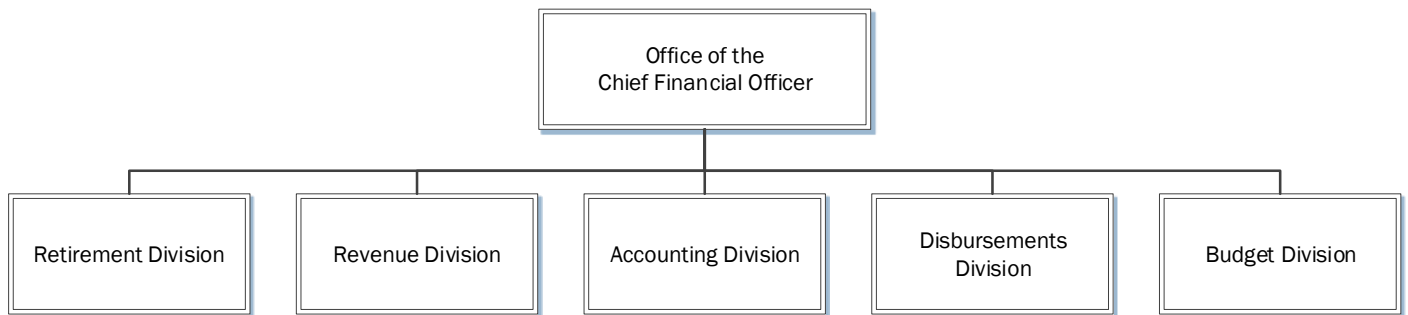
Budget Summary

Administration	FY 2018 Actual		FY 2019 Approved		FY 2020 Proposed		Increase/(Decrease)	
	Work years	Amount	Work years	Amount	Work years	Amount	Work years	Amount
Finance Department	61.5	\$7,119,398	64.0	\$7,691,928	64.0	\$6,964,095	-	\$(727,833)
Information Technology Department	85.9	54,859,843	104.0	70,230,482	104.0	56,107,369	-	(14,123,113)
General Services Department	84.3	18,653,628	94.0	15,617,308	93.0	18,509,401	(1.0)	2,892,093
Procurement Office	28.4	2,751,301	35.0	3,677,370	35.0	3,552,532	-	(124,838)
Office of Supplier Diversity & Inclusion	7.1	1,175,287	9.0	1,414,076	9.0	1,461,900	-	47,824
Total	267.2	\$84,559,457	306.0	\$98,631,164	305.0	\$86,595,297	(1.0)	\$(12,035,868)

FINANCE DEPARTMENT

The Finance Department maintains the fiscal integrity of WSSC 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.

Organizational Structure



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.

FINANCE DEPARTMENT (CONTINUED)

Budget Summary

Finance Department	FY 2018 Actual		FY 2019 Approved		FY 2020 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Financial Officer	3.0	\$682,567	4.0	\$1,246,298	3.0	\$1,146,554	(1.0)	\$(99,744)
Retirement Division	5.9	924,424	6.0	906,998	6.0	922,989	-	15,991
Revenue Division	13.2	1,410,679	14.0	1,514,526	15.0	1,490,551	1.0	(23,975)
Accounting Division	16.2	1,633,247	17.0	1,634,416	17.0	1,735,580	-	101,164
Disbursements Division	14.6	1,382,191	14.0	1,286,818	14.0	1,301,714	-	14,896
Budget Division	8.6	1,086,290	9.0	1,102,872	9.0	1,123,062	-	20,190
Subtotal	61.5	\$7,119,398	64.0	\$7,691,928	64.0	\$7,720,450	-	\$28,522
Retirement Trust Charge Back	-	-	-	-	-	(756,355)	-	(756,355)
Total	61.5	\$7,119,398	64.0	\$7,691,928	64.0	\$6,964,095	-	\$(727,833)

Explanation of Major Variances

Commencing in FY 2020, subject to Commission amendments and approvals, Retirement Division expenses related to Retirement Trust operations will be paid by the Trust.

Highlights

- WSSC successfully retained its AAA bond rating from all three major credit rating agencies in the fall of 2018.
- The Commission successfully issued \$459.25 million in GO Bonds in FY 2018 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.
- WSSC was presented with the GFOA Distinguished Budget Presentation award for the 24th consecutive year.
- Strong investment performance throughout FY 2018 resulted in asset increases totaling \$38 million for the Pension fund and \$17 million for the other post-employment benefits (OPEB) fund.
- The Revenue Division received a perfect associate interaction score of 100 in an independent evaluation.

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.

Core Activities

Grants Administration & Capital Funding – 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 Retirement and Other Post Employment Benefits (OPEB) Plan's Board of Trustees in managing and investing Plan assets. The Division is also responsible for investing the Commission's available funds in accordance with the Commission's Investment Policy and applicable State laws.

Core Activities

Retirement Administration – 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.

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.

Core Activities

Revenue Operations – 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.

Assessments Preparation and Services – 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.

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.

Core Activities

General Ledger – 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).

ACCOUNTING DIVISION (CONTINUED)

Research, Special Handling, and Special Studies – 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.

Capital Assets – 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.

Invoicing and Delinquent Accounts – 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.

DISBURSEMENTS DIVISION

The Disbursements Division processes all disbursements, including payroll, maintains the Commission's debt service records and schedules, manages employee benefit plans' financial records, and reconciles the Commission's bank accounts.

Core Activities

Accounts Payable – This activity processes supplier and P-Card invoices, customer refunds and claims, travel advances, and employee reimbursements; generates disbursement checks; makes electronic payments; and makes note, bond principal, and interest expense payments. This activity includes verification of Payment Request and P-Card policy compliance, Travel Regulations, and 1099-Miscellaneous Reporting.

Maintenance of Debt Service Records – This activity prepares, maintains and reconciles the Commission's notes program and debt service schedules and tables, and prepares debt service information booklets.

Health, Dental and Other Benefits Accounting – This activity maintains and reconciles the financial records for the Commission's benefit plans, including health care, dental, and life insurance.

Bank Account Reconciliations – This activity prepares timely reconciliations of all Commission bank accounts, including checking, collection, general receiving, disbursing, investment, payroll, and restoration bank accounts.

Payroll Processing – This activity is responsible for the accurate and timely preparation, control and distribution of the bi-weekly payroll; complying with all federal and state regulations and reporting; and preparation and distribution of employee W-2 statements.

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 Commission’s budget performance Monthly Status Report.

Core Activities

Budget and CIP Preparation and Administration – This activity prepares and transmits a proposed capital budget by October 1st and an operating budget by March 1st of each year to both counties. Preparation includes developing assumptions, workload projections, guidance policies, project costs, 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 and can be found by following: <https://www.wsscwater.com/fin>

Financial Planning and Studies – 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.

Goals, Objectives, and Outcome Measures

Goal: Produce a sound, affordable capital spending program.

Strategic Priority:

Achieve Business Process Excellence and Maintain Financial Stability

Objective	Outcome Measure	FY 2017 Actual / Targeted	FY 2018 Actual / Targeted	FY 2019 Targeted	FY 2020 Targeted
Maintain the amount of rate-supported water and sewer debt below 40% of total water and sewer operating expenditures.	Ratio of water and sewer debt service to total water and sewer operating expenditures.	35.4% / 34.0%	36.5% / 34.0%	36.3%	38.2%

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

Strategic Priority:

Achieve Business Process Excellence and Maintain Financial Stability

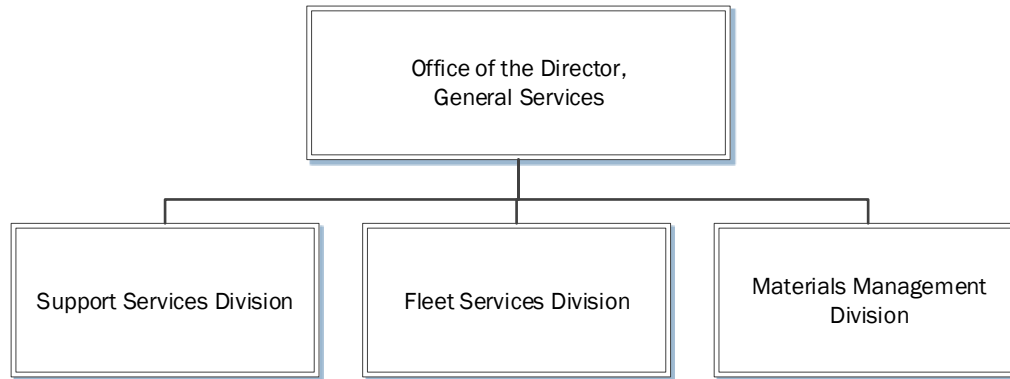
Objective	Outcome Measure	FY 2017 Actual / Targeted	FY 2018 Actual / Targeted	FY 2019 Targeted	FY 2020 Targeted
Maintain a debt service coverage ratio greater than 110%.	Ratio of debt service coverage.	121% / na*	106% / na*	101.0%	100.0%

* New measure effective FY 2019.

GENERAL SERVICES DEPARTMENT

The General Services Department, led by the Office of the Director, General Services, is comprised of the Support Services, Fleet Services, and Materials Management Divisions. The Department is responsible for fleet and fuel services; acquisition, warehousing and distribution of materials and supplies; office services; records management; business development; sustainability services; and space planning.

Organizational Structure



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, real estate and space planning, records management and business development.

Budget Summary

General Services Department	FY 2018 Actual		FY 2019 Approved		FY 2020 Proposed		Increase/(Decrease)	
	Work years	Amount	Work years	Amount	Work years	Amount	Work years	Amount
Office of the Director, General Services	4.1	\$704,539	6.0	\$963,242	6.0	\$862,907	-	\$(100,335)
Support Services Division	10.7	5,835,664	14.0	3,821,274	11.0	3,311,707	(3.0)	(509,567)
Fleet Services Division	42.6	7,611,660	47.0	7,214,116	47.0	10,783,451	-	3,569,335
Materials Management Division	26.9	4,501,765	27.0	3,618,676	29.0	3,551,336	2.0	(67,340)
Total	84.3	\$18,653,628	94.0	\$15,617,308	93.0	\$18,509,401	(1.0)	\$2,892,093

Explanation of Major Variances

The Proposed Budget FY 2020 reflects an increase of approximately 19% over the Approved Budget FY 2019. This increase is primarily attributable to the inclusion of the moveable assets in the Fleet Services Division, offset by the reduced postage budget in the Support Services Division.

Highlights

- Bar coding technology is being implemented at WSSC warehouses in conjunction with new Work Order Management software to increase the efficiency and accuracy of inventory.
- Automated Vehicle Location Services (AVL) technology was added to all vehicles, and is being used to enhance safety, drive efficiencies and reduce costs.
- A new Bill Printing solution is being implemented to assist with rate restructure initiatives.

GENERAL SERVICES 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.
- Records management policies and procedures are being reviewed and updated, in conjunction with the implementation of a new enterprise content management solution.
- A new Business Development Manager was hired to review and implement opportunities to generate non-rate related revenues across the Commission.
- The Fleet budget is impacted by a revised methodology of budgeting for moveable assets as a direct expense to the organization rather than at the Commission-wide level.

OFFICE OF THE DIRECTOR, GENERAL SERVICES

The General Services Director oversees the Fleet Services, Support Services, and Materials Management Divisions.

Core Activities

Management & Administration Activities – This activity manages and supervises the three Divisions in this Department.

General & Administrative Activities – This activity ensures WSSC can successfully execute 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, providing printing, mailing, vending and cafeteria services, as well as real estate, sustainability, space planning and business development initiatives across the Commission.

Business Development Activities – This activity involves the development, review and implementation of opportunities to generate non-rate related revenues through the sale of services or products, including surplus property.

SUPPORT SERVICES DIVISION

The Support Services Division manages real estate, sustainability services, space planning and records management for the Commission.

Core Activities

Real Estate and Interior Sustainable Planning Services – 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.

Office Services – This activity provides printing and reprographic services, mail services and distribution, asset management of furniture and office equipment, and the disposal of surplus property.

SUPPORT SERVICES DIVISION (CONTINUED)

Records Management – This activity provides records management for the Commission, including maintaining a current records inventory and moving towards electronic content management, as well as developing, sharing and maintaining records management policies and procedures across the Commission.

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.

Core Activities

Fuel Services – 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.

Management of Fleet Parts and Supplies – 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.

Fleet Systems and Data Management – 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 – This activity manages and coordinates services for a 1,685 vehicle and equipment fleet at six 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.

Activity Indicators

WORKLOAD DATA	FY 2017 Actual	FY 2018 Actual	FY 2019 Approved	FY 2020 Proposed
Equipment fleet managed (pieces of equipment)	770	724	770	724
Vehicle fleet managed (number of vehicles)	974	961	970	961
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	3,231	3,852	3,000	3,756
Other (non-preventative maintenance) vehicle and equipment repairs	4,562	5,761	4,500	4,877

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, and provides support services to all Commission organizational units.

Core Activities

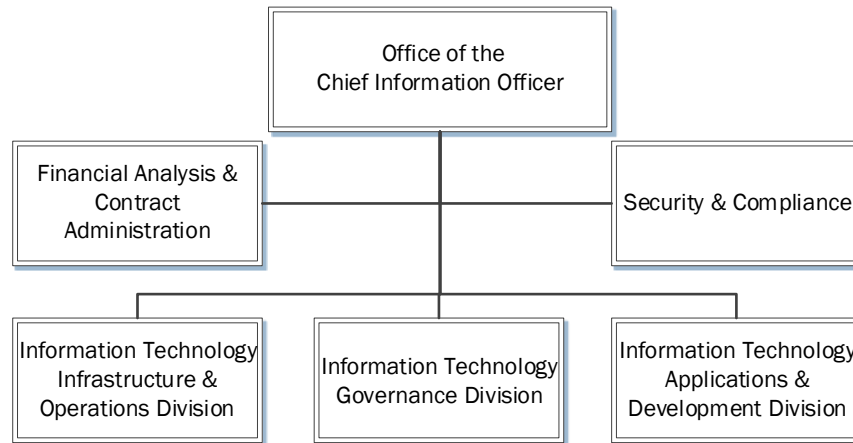
Warehousing – This activity involves administrative and physical functions associated with the storage and distribution of goods and materials required to support construction, maintenance, and repair operations. These functions include receipt, identification, inspection, cycle counting, storage, and 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.

Materials Management – 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.

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.

Organizational Structure



Mission Statement

The WSSC IT Department focus is to lead technology efforts to support the strategic goals of WSSC. The IT Department will provide leadership, expertise, and resources in the ideation, development, and deployment of innovative technologies and streamlined processes to improve efficiency, business interaction and customer access to WSSC information and services.

Budget Summary

Information Technology Department	FY 2018 Actual		FY 2019 Approved		FY 2020 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Information Officer	10.3	\$19,798,702	12.0	\$6,947,060	12.0	\$3,962,593	-	\$(2,984,467)
IT Infrastructure & Operations Division	42.7	11,977,767	42.0	15,520,472	41.0	17,006,533	(1.0)	1,486,061
IT Governance Division	5.4	16,010,740	12.0	21,985,592	13.0	14,206,473	1.0	(7,779,119)
IT Applications & Development Division	27.5	7,072,634	38.0	25,777,358	38.0	20,931,770	-	(4,845,588)
Total	85.9	\$54,859,843	104.0	\$70,230,482	104.0	\$56,107,369	-	\$(14,123,113)

Explanation of Major Variances

The Proposed FY 2020 IT Budget is approximately a 20% decrease from the Approved FY 2019 IT Budget. This decrease is due to the expected implementation of Project Cornerstone Release 1 by the end of FY 2019. In addition, IT has focused on reducing costs by working more closely with the Procurement Office and by more closely scrutinizing purchases.

INFORMATION TECHNOLOGY DEPARTMENT (CONTINUED)

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.
- The Project Cornerstone initiative also includes a WAM application which replaces multiple existing applications for tracking assets, service requests, work orders, inspections and patch tickets.
- The website update initiative will produce a highly visual website with interactive components to maximize user experience for various target audiences. The look shall be modern and fresh utilizing the latest technologies including social media integration.

Accomplishments

- Facilitated the development of an online dashboard which provides WSSC senior leaders with project status in the areas of overall performance, budget, schedule, resources, risks and percent complete.
- Deployed project management best practices throughout the Information Technology Department and the Commission through implementation of the standard project management methodology and through use of a Commission-wide new project and portfolio management tool.
- Established Information Technology/Contracting Officer Representative (COR) Working Group to improve planning of procurements, reduce emergency procurements, and bring more scrutiny to each purchase. As a result, IT was able to recognize increased savings, lessen ratifications and ensure Commission assets remain compliant.

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 managing the IT budget and the procurement of IT products and services.

Core Activities

IT Security – 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.

IT Finance and Contract Administration – To provide accurate, timely, and meaningful budget and financial information to support decision-making and effective and efficient management of resources for the successful operation of the IT applications and services provided to the Commission and its stakeholders, and to support the procurement – convenient, timely and cost-effective acquisition – of goods and services in order to provide readily accessible IT services to the Commission.

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.

Core Activities

IT Customer Support Operations – 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.

Network Operations Center – This area 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 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.

Core Activities

Project Management – The Project Management Office (PMO) promotes the adoption of project management best practices to support the successful and timely implementation of projects. Using standard methodology, tools and templates, the PMO team provides core services of managing and monitoring projects and mentoring functional project managers.

Portfolio Management – The Enterprise Program Management Office (EPMO) assists the senior leadership team in the prioritization of project proposals which strongly support the realization of the Commission's Strategic Priorities.

Business Analysis – The core activities of the team include analyzing and documenting current business processes and workflows in 'AS-IS' diagrams; outlining process improvements and making recommendations to streamline business processes and workflows documenting future state in 'TO-BE' diagrams. The core activities of business analysis include elicitation, facilitation, requirements development, business process analysis and business process re-engineering.

GOVERNANCE DIVISION (CONTINUED)

Technical Writing – The core activities of the team include gathering, developing and publishing clear, high-quality documentation for business partners across WSSC. The team creates templates, maintains and updates documentation, edits material, formats content, and sets standards for conciseness, clarity and consistency.

IT Quality Assurance – This activity concentrates on the software testing and software quality assurance processes across the Software Development Life Cycle (SDLC). Working in conjunction with 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.

Organizational Readiness – The core activities of organizational readiness are to ensure that the new processes, procedures and policies introduced with the implementation of a project are fully socialized, accepted, adopted and reinforced by impacted WSSC staff.

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.

Core Activities

Customer Care Information Systems – 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.

Innovation & Advanced Analytics – 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.

Application & Database Services (ADS) – 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.

APPLICATIONS & DEVELOPMENT DIVISION (CONTINUED)

Geographic Information Systems (GIS) – 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.

Procurement & Logistics – This activity maintains all the Procure-to-Pay modules, retirement systems and several other applications used throughout the Commission. The Oracle EBS Procure-to-Pay application encompasses several modules including but not limited to Purchasing, iProcurement, Accounts Payable and Inventory along with several interfaces between these modules and other applications. In addition, this team holds responsibility for e-Permitting, Project Dox, P6, RIVA, Hyperion and Questica applications.

Human Resource Management System (HRMS) – This activity supports the General Ledger, Human Resources, Payroll, Time and Labor, Advanced Benefits and Self Service. These are on-premise servers and network implementation. All WSSC business units access this system through the intranet network to accomplish WSSC business functions.

Database Administration (DBA) – This activity supports hundreds of applications in variety of databases ranging from Mainframe, Oracle and SQL server. The DBA Team provides support for Oracle ERP, EBS, ePermitting, GIS, SCADA, as well as in-house custom developed applications in various platforms. The DBA Team supports various departments throughout WSSC and outside vendors.

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.

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 the Commission's operations and functions, and to oversee the bid and award process for all construction contracts.

Procurement Services – 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.

Operations and Administration – 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.

Contracting Officer Representatives (CORs) – This activity involves CORs who are responsible for managing all pre-award and post-award 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.

Strategic Sourcing – 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.

OFFICE OF SUPPLIER DIVERSITY & INCLUSION

Mission Statement

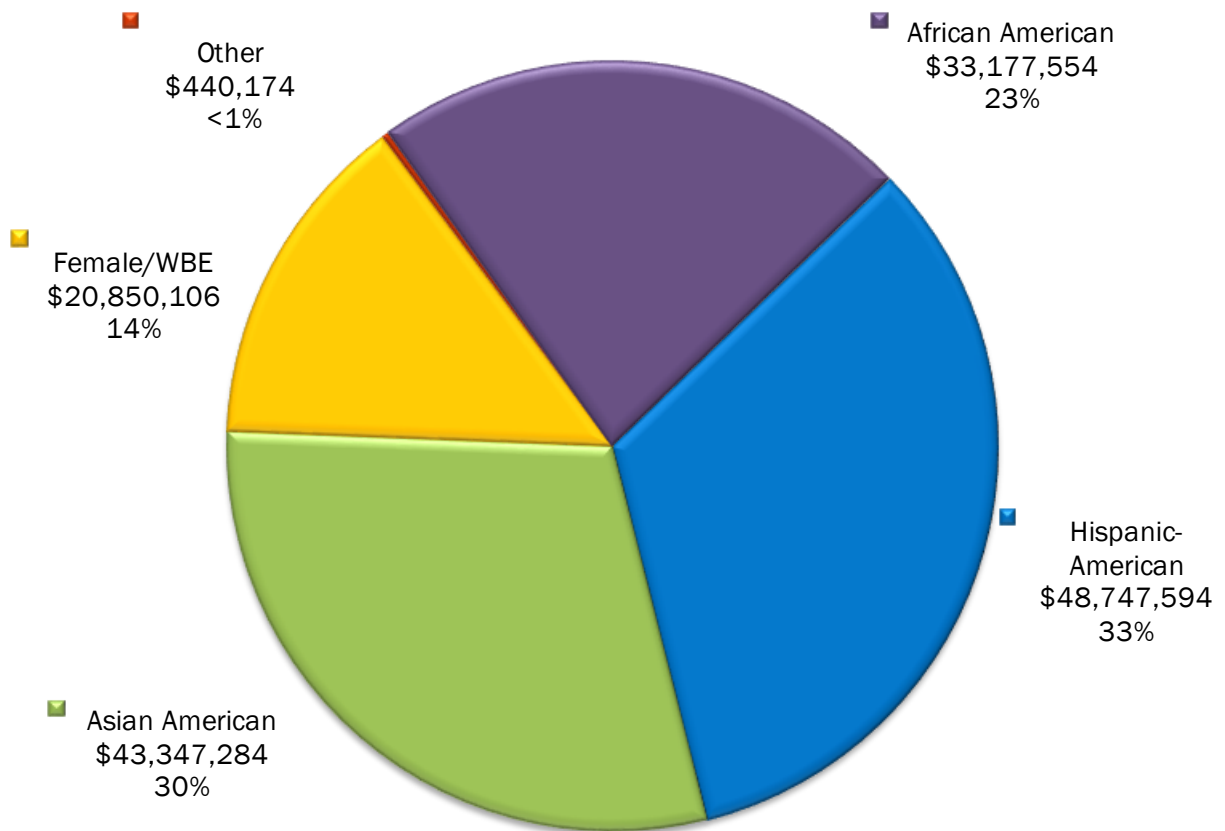
To create an inclusive purchasing environment while building sustainable relationships, expanding opportunities and cultivating growth of Small, Local and Minority Business Enterprises (SLMBE).

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.

Small, Local and Minority Business Enterprise – This activity plans, manages, coordinates and monitors the Commission's MBE and SLBE Programs, in accordance with state law.

MBE Program – Total FY 2018 Contract Payments by Business Classification



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

Finance Non-Departmental	FY 2018 Actual		FY 2019 Approved		FY 2020 Proposed		Increase/(Decrease)	
	Work years	Amount	Work years	Amount	Work years	Amount	Work years	Amount
Finance Non-Departmental	-	\$56,051,491	-	\$84,841,038	-	\$82,072,376	-	\$(2,768,662)
Debt-Service		278,186,844		294,348,690		319,882,700		25,534,010
Total	-	\$334,238,335	-	\$379,189,728	-	\$401,955,076	-	\$22,765,348

Explanation of Major Variances

The Proposed Budget FY 2020 is approximately 6.0% greater than the Approved Budget FY 2019. This increase is primarily attributable to an 8.7% increase in debt service associated with the FY 2020 CIP, offset by a decrease in other Finance Non-Departmental costs.

HUMAN RESOURCES NON-DEPARTMENTAL

This organization budgets for payments associated with Group Life, Accidental Death & Dismemberment, Accident & Sickness, health care programs, and Maryland Unemployment Insurance.

Budget Summary

Human Resources Non-Departmental	FY 2018 Actual		FY 2019 Approved		FY 2020 Proposed		Increase/(Decrease)	
	Work years	Amount	Work years	Amount	Work years	Amount	Work years	Amount
Human Resources Non-Departmental	-	\$27,247,866	-	\$34,524,900	-	\$31,139,492	-	\$(3,385,408)
Total	-	\$27,247,866	-	\$34,524,900	-	\$31,139,492	-	\$(3,385,408)

Explanation of Major Variances

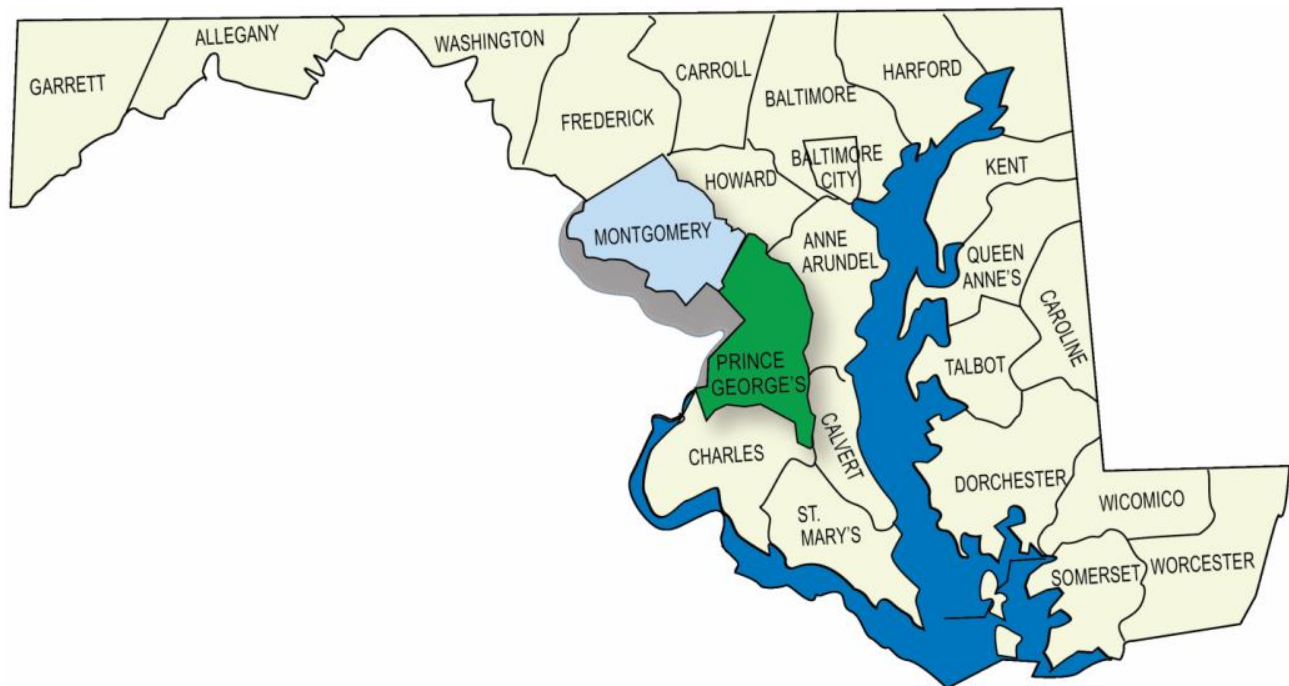
The Proposed Budget FY 2020 reflects a decrease of \$3.4 million from the Approved Budget FY 2019. This decrease is primarily due to lower healthcare rates negotiated with the insurance providers resulting in lower healthcare cost to the Commission. In addition, the Human Resources (HR) Office manages workers' compensation functions instead of the HR Non-Departmental. Therefore, the workers' compensation transfer from the HR Non-Departmental to the HR Office has zero impact on the Commission's overall budget.

APPENDICES

MAP

THE BI-COUNTY WASHINGTON SUBURBAN SANITARY DISTRICT (WSSD)

The WSSD was created in 1918 and operates as a public corporation of the State of Maryland under the Public Utilities Article. Through its governing body, the Commission, it provides, as authorized, water and sewerage systems, including water supply and sewage disposal facilities for Montgomery and Prince George's Counties, Maryland. The area initially incorporated in the WSSD has been expanded by legislative enactments to its present boundaries encompassing over 950 square miles within Montgomery and Prince George's Counties.



ECONOMIC INDICATORS BY COUNTY

Montgomery County	2012	2013	2014	2015	2016	2017
Population	1,006,472	1,019,164	1,030,476	1,040,116	1,047,500	1,055,000
Percent Change (%)	1.7%	1.3%	1.1%	0.9%	0.7%	0.7%
Labor Market Characteristics						
Labor Force	540,427	542,690	544,210	548,499	551,392	554,029
Employment	512,438	515,689	520,288	527,034	533,201	536,300
Employment Percent Change (%)	0.8%	0.6%	0.9%	1.3%	1.2%	0.6%
Unemployment Rate	5.2%	5.0%	4.4%	3.9%	3.3%	3.2%
Per Capita Income ⁽¹⁾	\$76,499	\$72,626	\$73,598	\$76,863	\$79,150	\$82,209
Median Household Income ⁽²⁾	\$94,965	\$98,326	\$97,765	\$98,917	\$99,763	\$103,235
Percent Change (%)	2.2%	3.5%	-0.6%	1.2%	0.9%	3.5%
Families Income Below Poverty Level ⁽³⁾	6.4%	6.9%	7.0%	7.5%	6.7%	6.9%

1= Per Capita Income is derived by dividing personal income by population.

2= Income and Benefits (In Inflation-Adjusted Dollars) US Census Bureau, American Community Survey 1-Year Estimates

3=Percentage of all people whose income in past 12 months is below the poverty level, US Census Bureau, American Community Survey 1-Year Estimates

Prince George's County	2012	2013	2014	2015	2016	2017
Population	881,138	890,081	904,430	909,535	908,049	912,756
Percent Change (%)	1.1%	1.0%	1.6%	0.6%	-0.2%	0.5%
Labor Market Characteristics						
Labor Force	484,964	485,677	486,269	487,573	494,517	506,790
Employment	449,665	451,935	456,768	461,938	472,880	485,807
Employment Percent Change (%)	0.6%	0.5%	1.1%	1.1%	2.4%	2.7%
Unemployment Rate	6.8%	6.9%	6.2%	4.7%	4.4%	4.1%
Per Capita Income ⁽¹⁾	\$43,672	\$43,362	\$44,465	\$44,866	46,168	n/a
Median Household Income ⁽²⁾	\$69,879	\$72,052	\$72,290	\$76,741	79,184	\$81,240
Percent Change (%)	-1.2%	3.1%	0.3%	6.2%	3.2%	2.6%
Families Income Below Poverty Level ⁽³⁾	10.2%	9.8%	10.2%	9.3%	9.1%	8.4%

1= Per Capita Income is derived by dividing personal income by population.

2= Income and Benefits (In Inflation-Adjusted Dollars) US Census Bureau, American Community Survey 1-Year Estimates

3=Percentage of all people whose income in past 12 months is below the poverty level, US Census Bureau, American Community Survey 1-Year Estimates

CUSTOMER CHARACTERISTICS

TOP 20 CUSTOMERS – WATER AND SEWER USAGE CHARGES

Name of Customer	Total Collected	Annual Consumption
	(In \$'s)	(In Kilo Gallons)
	Amount	Amount
National Institute of Health	\$ 12,170,803	1,305,772
University of Maryland	8,999,882	950,420
Prince George's County Public Schools	3,316,309	357,601
Andrews Air Force Base	3,059,122	317,237
Southern Management - Properties	2,918,920	467,473
General Services Administration (GSA)	2,645,611	277,493
Gaylord Hotels	2,334,116	247,338
Leisure World of Maryland	2,258,679	445,913
Riderwood Retirement	2,112,828	268,515
US Navy (Jones Bridge Road Account)	2,020,498	212,298
Southern Management Corp - Properties	1,898,096	315,632
Franklin Park Apartments	1,691,987	305,045
MGM National Harbor	1,599,257	165,360
National Institute of Standards and Technology (NIST)	1,574,040	192,897
US Navy (Rockville Pike Account)	1,570,173	162,208
Bdmg Quest Pg Owner, LLC - Apartments	1,353,485	213,412
Trinity Health Hospitals	1,323,096	136,885
Fort Detrick - Forest Glen Annex	1,126,326	116,356
MedImmune LLC	1,121,345	117,466
Prince George's County Correctional Center	1,014,494	105,592
Total (20 largest Customers)	\$ 56,109,067	6,680,913

Collected represents only water and sewer usage charges at FY 2018 rate.

CUSTOMER CHARACTERISTICS (CONTINUED)

CUSTOMER ACTIVE ACCOUNTS

WSSC active customer accounts for Montgomery County and Prince George's County as of the end of the fiscal year.

	2012	2013	2014	2015	2016	2017	2018
Customer Accounts both counties	439,805	441,480	443,827	445,385	448,061	451,904	456,078
<i>Percent Change (%)</i>		0.4%	0.5%	0.4%	0.6%	0.9%	0.9%
By Type of Customer							
Residential	415,200	416,781	418,982	420,458	422,965	426,611	430,552
<i>Percent Change (%)</i>		0.4%	0.5%	0.4%	0.6%	0.9%	0.9%
Commercial and Industrial	21,122	21,200	21,333	21,415	21,566	21,721	21,922
<i>Percent Change (%)</i>		0.4%	0.6%	0.4%	0.7%	0.7%	0.9%
Government	3,482	3,499	3,512	3,511	3,530	3,572	3,605
<i>Percent Change (%)</i>		0.5%	0.4%	0.0%	0.5%	1.2%	0.9%
By Type of Property							
Single-Family Residence	326,176	326,978	328,274	328,234	329,593	333,911	336,995
Townhouse	81,156	81,894	82,775	84,290	85,424	84,635	85,417
General Commercial	21,122	21,200	21,333	21,415	21,566	21,721	21,922
Garden Apartment	4,155	4,174	4,176	4,167	4,171	4,246	4,285
Multi-Unit (individually metered)	3,147	3,140	3,135	3,123	3,122	3,191	3,221
High-Rise Apartment	421	432	444	448	455	448	452
Other	3,628	3,663	3,690	3,708	3,730	3,752	3,786
	<u>439,805</u>	<u>441,480</u>	<u>443,827</u>	<u>445,385</u>	<u>448,061</u>	<u>451,904</u>	<u>456,078</u>

REVENUE AND EXPENSE TRENDS

Water & Sewer Operating Funds – Combined

(\$ in Thousands)

	FY 2014 ACTUAL	FY 2015 ACTUAL	FY 2016 ACTUAL	FY 2017 ACTUAL	FY 2018 ACTUAL	FY 2019 APPROVED	FY 2020 PROPOSED
REVENUES							
Water Consumption Charges	\$ 227,923	\$ 242,867	\$ 235,805	\$ 270,134	\$ 271,735	\$ 273,316	\$ 280,997
Sewer Use Charges	309,403	319,488	307,264	329,332	325,879	354,626	377,902
Interest Income	630	532	696	1,540	5,478	1,500	5,500
Miscellaneous	25,104	29,484	31,989	32,908	34,481	34,731	35,700
Account Maintenance Fee	22,582	22,753	29,247	32,508	32,473	32,182	32,296
Infrastructure Investment Fee	-	-	16,700	37,561	39,847	38,894	39,331
Total Revenues	<u>585,642</u>	<u>615,124</u>	<u>621,701</u>	<u>703,983</u>	<u>709,893</u>	<u>735,249</u>	<u>771,726</u>
SDC Debt Service Offset	1,428	1,167	728	2,609	2,396	3,364	4,658
Reconstruction Debt Service Offset	10,500	10,000	8,500	9,800	7,700	12,500	11,600
Premium Transfer	-	-	-	-	-	-	2,900
Miscellaneous Offset	-	-	-	-	-	-	395
Use of Fund Balance	27,481	30,193	20,721	24,450	227	11,580	11,341
Total Funds Available	<u>\$ 625,051</u>	<u>\$ 656,484</u>	<u>\$ 651,650</u>	<u>\$ 740,842</u>	<u>\$ 720,216</u>	<u>\$ 762,693</u>	<u>\$ 802,620</u>
EXPENDITURES							
Salaries & Wages	\$ 95,482	\$ 100,118	\$ 104,030	\$ 109,059	\$ 117,144	\$ 127,901	\$ 129,676
Heat, Light & Power	24,443	24,229	22,000	22,099	20,033	20,577	19,436
Regional Sewage Disposal	44,631	54,485	50,068	53,946	58,331	53,617	59,000
Debt Service							
Principal Payments	150,069	153,968	134,171	141,817	151,057	165,988	196,069
Interest Payments	60,772	68,013	76,190	94,918	106,445	111,073	110,238
Debt Reduction (PAYGO)	13,782	19,996	18,821	21,495	10,065	31,016	31,016
All Other	185,487	203,934	214,607	224,975	242,540	252,521	257,185
Working Capital Reserve Transfer	11,700	2,300	6,300	6,524	-	-	-
Total Expenditures	<u>\$ 586,366</u>	<u>\$ 627,043</u>	<u>\$ 626,187</u>	<u>\$ 674,833</u>	<u>\$ 705,615</u>	<u>\$ 762,693</u>	<u>\$ 802,620</u>
Water Supplied (Average MGD)	160.6	162.9	164.2	163.1	163.9	164.0	164.0

General Bond Debt Service Fund

(\$ in Thousands)

	FY 2014 ACTUAL	FY 2015 ACTUAL	FY 2016 ACTUAL	FY 2017 ACTUAL	FY 2018 ACTUAL	FY 2019 APPROVED	FY 2020 PROPOSED
OPERATING REVENUES							
Front Foot Benefit and House Connection	\$ 38,016	\$ 29,971	\$ 24,925	\$ 22,039	\$ 19,191	\$ 15,473	\$ 12,507
Interest Income	63	62	87	383	865	75	500
Miscellaneous	505	384	312	294	285	240	260
Total Operating Revenues	<u>38,584</u>	<u>30,417</u>	<u>25,324</u>	<u>22,716</u>	<u>20,341</u>	<u>15,788</u>	<u>13,267</u>
Other Credits and Transfers:							
Reconstruction Debt Service Offset	10,500	10,000	8,500	9,800	7,700	12,500	11,600
Use of Fund Balance	(10,500)	(10,000)	(8,500)	(9,800)	(7,700)	(12,500)	(11,600)
Total Funds Available	<u>\$ 38,584</u>	<u>\$ 30,417</u>	<u>\$ 25,324</u>	<u>\$ 22,716</u>	<u>\$ 20,341</u>	<u>\$ 15,788</u>	<u>\$ 13,267</u>
OPERATING EXPENSES							
Salaries & Wages	\$ 504	\$ 604	\$ 723	\$ 689	\$ 701	\$ 533	\$ 459
Heat, Light & Power	-	-	-	-	-	-	8
All Other	727	618	1,018	858	813	1,067	730
Subtotal	<u>1,231</u>	<u>1,222</u>	<u>1,741</u>	<u>1,547</u>	<u>1,514</u>	<u>1,600</u>	<u>1,197</u>
Debt Service							
Principal Payments	29,050	18,961	14,102	9,259	12,672	11,425	10,182
Interest Payments	9,176	7,080	4,009	4,751	4,922	5,863	3,394
Interfund Transfer	-	-	-	-	-	-	-
Subtotal	<u>38,226</u>	<u>26,041</u>	<u>18,111</u>	<u>14,010</u>	<u>17,594</u>	<u>17,288</u>	<u>13,576</u>
Total Expenses	<u>\$ 39,457</u>	<u>\$ 27,263</u>	<u>\$ 19,852</u>	<u>\$ 15,557</u>	<u>\$ 19,108</u>	<u>\$ 18,888</u>	<u>\$ 14,773</u>

GLOSSARY

Account Maintenance Fee	(Also referred to as AMF) 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	(Also referred to as AMI) 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 requiring water or sewer service provided by systems, facilities, and/or service connections within the Washington Suburban Sanitary District.
Asset Management Program	(Also referred to as AMP) 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 Work Years	Employee work years 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. $\text{Billing Factor} = \frac{\text{Annual Water \& Sewer Revenue}}{\text{Annual Water Production (in thousand gallons)}}$.
Biosolids	Solids produced as a byproduct of treating sewage to produce clean water; also referred to as sludge.

GLOSSARY

Blue Plains Advanced Wastewater Treatment Plant	(Also referred to as 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.
Blue Plains Inter-Municipal Agreement	Provides for the inter-jurisdictional (Washington, DC, Fairfax County, VA, Montgomery County, MD, Prince George's County, MD, and WSSC) allocation of wastewater flow capacity, including operating and capital costs associated with wastewater collection, treatment and biosolids management.
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.

GLOSSARY

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 the changes; 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 Assistance Program	(Also referred to as CAP) WSSC program providing financial assistance to approved residential customers.
Debt Service	The annual payment of principal and interest on bonded indebtedness.
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.
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 usually 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.
District of Columbia Water & Sewer Authority	(Also referred to as DCWASA or DC Water) Provides drinking water, sewage collection and sewage treatment to District of Columbia.
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.

GLOSSARY

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) Chesapeake Bay 2000 Agreement calls for the use of ENR.
Enterprise Resource Planning	(Also referred to as ERP) An automated system that integrates all data and processes of an System 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.
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 manage fats, oils, and grease (FOG); monitors and controls the discharge of FOG from commercial food service establishments; investigates sanitary sewer blockages and overflows caused by FOG discharges; and initiates enforcement action to ensure appropriate corrective measures are taken.
Federal Open Market Committee	(Also referred to as FOMC) A Federal Reserve Board committee that sets monetary policy, including the interest rates that are charged to banks.
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.

GLOSSARY

Fiscal Policy	The WSSC's policies with respect to revenues, spending, and debt management as the policies 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	(Also referred to as FY) 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.
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 fiscal year (ending fund balance). Fund balance is also referred to as Accumulated Net Revenue in this document.

GLOSSARY

General Bond Debt Service Fund	(Also referred to as GBDS) 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 for 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, and 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. Five haloacetic acids (referred to as HAA5) that are regulated by the EPA: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

GLOSSARY

House Connection Charge	(Also referred to as H/C) 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	(Also referred to as IIF) A fixed fee that funds a portion of the debt service associated with the Commission's water and sewer pipe reconstruction programs.
Interest on Investments	Revenues derived from return on cash available.
Labor Market Area	Prince George's, Anne Arundel and Montgomery counties, and Washington, DC.
Level of Service	The 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.

GLOSSARY

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.
Miscellaneous	Revenue derived from charges for late payment of bills and Front Foot charges; charges for repair of Commission property (e.g., fire hydrants, water mains, sewer lines) damaged by individuals; charges for relocation of WSSC water and sewer systems and/or facilities for the benefit of other parties (e.g., Maryland Department of Transportation and county Departments of Transportation); sewage handlers fees which are charged for discharging septic tank clean-out wastes into the WSSC's sewerage system; antenna lease fees collected; and fees charged for the use of recreational facilities in the WSSC's watershed areas.
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."
National Pollutant Discharge The National Pollutant Discharge Elimination System	(Also referred to as NPDES) 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 liquid 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.

GLOSSARY

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.
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.
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.
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	(Also referred to as PPA) 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.

GLOSSARY

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. Maryland state law requires these revenues and expenses to be itemized in the annual budget.
Project Cornerstone	Technologies to modernize and streamline business processes and implement new operational technologies.
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.
Ready-to-Serve charge	Comprised of the Account Maintenance Fee (AMF) and the Infrastructure Investment Fee
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.
Rockville Sewer Use	Revenue derived from payment by the City of Rockville for the city's share of the Regional Sewage Disposal charges.

GLOSSARY

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.
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 Offset	The use of a portion of System Development Charge (SDC) revenue to pay the debt service on bonds issued after FY'93 to pay for growth-related CIP projects. (FY'94 was the first year that the SDC 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.

GLOSSARY

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.
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	(Also referred to as SAG) 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.
Supervisory Control and Data Acquisition System	(Also referred to as SCADA) The technological system enabling WSSC to use automation to collect data from one or more (remote) facilities and send limited control instructions to those facilities.
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.

GLOSSARY

Trunk Sewer	As defined in the Sanitary Sewer Overflow 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, strict 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 Consumption Charge	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.
Water Fund	Funded by customers, community members and WSSC employees to assist approved residential customers experiencing financial hardships paying water/sewer bills.
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.

GLOSSARY

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.

Workyear

A standardized unit for measurement of personnel effort and costs. A work year is the equivalent of 2,080 work hours or 260 work days.

ACRONYMS

ADC	Average Daily Consumption	EEO	Equal Employment Opportunity
ADR	Alternative Dispute Resolution	EGIS	Enterprise Geographic Information System
ADS	Application & Database Services	ENR	Enhanced Nutrient Removal
AFO	Acoustic Fiber Optic	EPA	Environmental Protection Agency
AIS	Assessment Information System	EPMO	Enterprise Program Management Office
AMF	Account Maintenance Fee	EPP	Energy Performance Program
AMI	Advanced Metering Infrastructure	ERP	Enterprise Resource Planning
AVL	Automated Vehicle Location Services	ESP	Engineering Support Program
BANs	Bond Anticipation Note Program	FFBC	Front Foot Benefit Charge
BPMS	Best Management Practices	FICA	Social Security & Medicare
C2M	Customer-to-Meter	FOG	Fats, Oils, and Grease
CAGR	Compound Annual Growth Rate	FOMC	Federal Open Market Committee
CAP	Customer Assistance Program	FY	Fiscal Year
CCTV	Closed Circuit Television	GAAP	Generally Accepted Accounting Principles
CEO	Chief Executive Officer	GBDS	General Bond Debt Service
CFR	Code of Federal Regulations	GCO	General Counsel's Office
CIP	Capital Improvements Program	GFOA	Government Finance Officers Association
CIPP	Cured-In-Place Pipe	GIS	Geographic Information System
CIU	Categorical Industrial User	GPD	Gallons per Day
CoE	Center of Excellence	GPS	Global Positioning System
COOP	Emergency Continuity Plans	HAA	Haloacetic Acid
COR	Contracting Officer Representative	H/C	House Connection
CPI	Consumer Price Index	HR	Human Resources
CPI-W	Consumer Price Index for Urban Wage Earners & Clerical Workers	HRMS	Human Resource Information Management System
CSC	Customer Service Center	ICPRB	Interstate Commission on the Potomac River Basin
CSIS	Customer Service Information System	IIF	Infrastructure Investment Fee
DBA	Database Administration	IT	Information Technology
DBP	Disinfection Byproducts	ITSC	IT Solution Center
DCWASA	District of Columbia Water and Sewer Authority	JBAB	Joint Base Anacostia-Bolling
DOT	Department of Transportation	LBA	Line Blockage Analysis
DSP	Development Services Process		
E&C	Engineering & Construction Department		

ACRONYMS

LEED	Leadership in Energy and Environmental Design	SDWA	Safe Drinking Water Act
MBE	Minority Business Enterprise	SEP	System Extension Permit
MCL	Maximum Contaminant Level	SIU	Significant Industrial User
MDE	Maryland Department of the Environment	SLBE	Small, Local Business Enterprise
MG	Million Gallons	SLMBE	Small, Local and Minority Business Enterprise
MGD	Million Gallons per Day	SOW	Statement of Work
MHI	Median Household Income	SQL	Structured Query Language
MMIS	Maintenance Management Information System	SSES	Sewer System Evaluation Survey
MMD	Municipal Market Data	SSO	Sanitary Sewer Overflow
MWQ	Maryland Water Quality	THM	Trihalomethanes
NDA	Non-Departmental Accounts	TT	Treatment Technique
NACWA	National Association of Clean Water Agencies	TTHM	Total Trihalomethanes
NTU	Nephelometric Turbidity Units	UV	Ultraviolet
OIG	Office of the Inspector General	WAM	Work and Asset Management
OPEB	Other Post-Employment Benefits	WASA	See DCWASA
OSDI	Office of Supplier Diversity & Inclusion	WFP	Water Filtration Plant
PAYGO	“Pay-As-You-GO” Financing	WPS	Water Pumping Station
PCCP	Pre-stressed Concrete Cylinder Pipe	WRRF	Water Resource Recovery Facilities
PCI	Per Capita Income	WSSC	Washington Suburban Sanitary Commission
PEPCO	Potomac Electric & Power Company	WSSD	Washington Suburban Sanitary District
PLC	Programmable Logic Controllers	WWPS	Wastewater Pumping Station
PMO	Project Management Office	WWTP	Wastewater Treatment Plant
PMP	Proactive Maintenance Program		
PPIS	Permits Processing Information System		
PVC	Polyvinyl Chloride		
REDO	Reconstruction Debt Service Offset		
SAG	Spending Affordability Guidelines		
SCADA	Supervisory Control and Data Acquisition		
SDC	System Development Charge		
SDLC	Software Development Life Cycle		



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