

WASHINGTON SUBURBAN SANITARY COMMISSION

# PROPOSED BUDGET

FY 2021

July 1, 2020 - June 30, 2021





# **FISCAL YEAR 2021 PROPOSED BUDGET**

Chris Lawson, Chair  
T. Eloise Foster, Vice Chair  
Sandra L. Thompson, Commissioner  
Fausto R. Bayonet, Commissioner  
Keith E. Bell, Commissioner  
Howard A. Denis, 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 FY 2021 PROPOSED BUDGET

Public Hearings by the Commission	January 2 and February 4, 2020 (held as scheduled)
Submission to County Executives	March 1, 2020
Approval by the County Councils	June 1, 2020
Adopted for the Fiscal Year	July 1, 2020

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

## PROGRAM CONTACT

Contact the Budget Division at 301-206-8110 or email at [BudgetGroup@wsscwater.com](mailto:BudgetGroup@wsscwater.com) for more information regarding this budget document.

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**CONTAINED HEREIN IS WSSC WATER'S FY 2021 PROPOSED BUDGET DATED MARCH 1, 2020, WHICH REPLACES AND SUPERCEDES THE PREVIOUS JANUARY 15, 2020 EDITION.**



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished  
Budget Presentation  
Award*

PRESENTED TO

**Washington Suburban Sanitary Commission**

**Maryland**

For the Fiscal Year Beginning

**July 1, 2019**

*Christopher P. Morill*

Executive Director

The Government Finance Officers Association (GFOA) of the United States and Canada presented an award of Distinguished Budget Presentation to WSSC Water for its annual budget for the fiscal year beginning July 1, 2019. This is the twenty-fifth consecutive year that WSSC Water has received this award.

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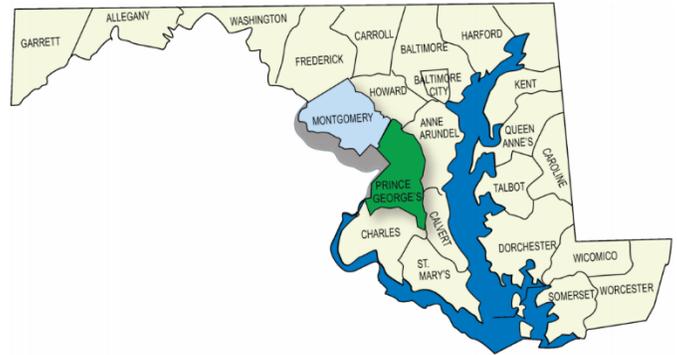
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**SECTION I**  
**OVERVIEW, CHAIR'S LETTER AND**  
**BUDGET SUMMARIES**

# OVERVIEW

## GENERAL INFORMATION

WSSC Water provides water and sewer services to approximately 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) agency under Article 29 and later re-codified into Division II of the Public Utilities Article of the Annotated Code of Maryland. The agency 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 Water operates and maintains an extensive array of highly automated facilities. The agency's two water filtration plants (WFPs), 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 2021 and deliver that water to homes and businesses in Montgomery and Prince George's Counties, serving over 475,000 customer accounts through a system of over 5,900 miles of water mains. To ensure a reliable water supply for all seasons and conditions, WSSC Water operates three reservoirs with a total capacity exceeding 14 billion gallons.

### How long is 11,600 miles of water and sewer pipeline



and the Blue Plains Advanced Wastewater Treatment Plant (Blue Plains) operated by the District of Columbia Water and Sewer Authority (DC Water). In FY 2021, it is projected that an average of 197.2 million gallons of wastewater per day from Montgomery and Prince George's Counties will move to these facilities through approximately 5,700 miles of sewer lines maintained by WSSC Water. The six WRRFs owned by the agency 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 WSSC Water. Under the Inter-Municipal Agreement that governs the agency's arrangement with Blue Plains, WSSC Water is allocated 169 MGD of Blue Plains' 370 MGD capacity. The agency, 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.

The agency also reviews preliminary subdivision plats as to suitability of water and sewer design; reviews street grades where there are agency facilities; formulates regulations, issues permits, 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.

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## WSSC WATER STRATEGIC PLAN

# Journey to World Class

**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.



### CORE VALUES

- Accountability
- Collaboration
- Environmental Stewardship
- Excellence
- Innovation

### STRATEGIC PRIORITIES

- Enhance Customer Experience
- Optimize Infrastructure
- Spend Customer Dollars Wisely
- Transform Employee Engagement
- Protect Our Resources

### GUIDING PRINCIPLES

- Simplify
- Focus
- Connect

### VISION

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

## Our Values

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

- **Accountability:** We are responsible employees who act ethically, are accountable and conduct ourselves with integrity and transparency
- **Collaboration:** We work as a team across the Commission to fulfill the needs of our customers
- **Environmental Stewardship:** We continuously enhance and protect natural resources and the environment for the health of future generations
- **Excellence:** We achieve the highest level of quality, safety, productivity and cost-effectiveness, demonstrating world class service to everyone
- **Innovation:** We promote creativity to develop new products, streamline processes and enhance services

## Our Strategic Priorities

Our methods for achieving our Mission and Vision:

- **Enhance Customer Experience:** Deliver Safe, Reliable and Consistent Service; Provide Timely Response to Customer Queries; Be a Good Citizen Within Our Communities
- **Optimize Infrastructure:** Achieve Industry-Leading Reliability and Asset Integrity; Expand Resilience and Balance Risk
- **Spend Customer Dollars Wisely:** Improve Operational Efficiency; Improve Fixed Asset Utilization; Improve Financial Process Efficiency and Fiscal Sustainability
- **Transform Employee Engagement:** Acquire the Best People; Retain Top Performers; Develop and Grow Talent; Communicate Effectively
- **Protect our Resources:** Resolve and Learn from Past Incidents; Maintain Best-in-Class Operating Environment Safety for Employees; Plan Proactively with Community Stakeholders; Secure the Commission's Critical Infrastructure

# Journey to World Class

## WSSC Water's FY 2021 Strategic Roadmap

The men and women of WSSC Water work 24/7/365 to fulfill our clean water mission. Throughout FY 2021, we will work with our customers, neighbors, stakeholders and each other to deliver these essential key strategic initiatives:



### Enhance Customer Experience

- Deliver the essential: Produce an average of 164 million gallons/day (MGD) of safe, clean reliable drinking water and safely process an average of 197 MGD of wastewater each day for our 1.8 million residents (approx. 475,000 customer accounts)
- Initiate Advanced Metering Infrastructure (AMI) so customers can better track their water usage, which can significantly reduce their bills and save them money
- Enhance and expand customer affordability programs
- Stabilize Customer to Meter (C2M) billing system



### Optimize Infrastructure

- Implement the first year of the FY 2021-2026 Capital Improvements Program (CIP)
- Rehabilitate and repair wastewater collection system in southern Prince George's County to reduce infiltration and inflow
- Ensure resiliency of WSSC Water's water supply and delivery
- Continue to invest in innovative technology, processes and ideas
- Invest in maintenance programs to improve the condition of buildings, systems and grounds



### Spend Customer Dollars Wisely

- Continue efforts to control costs and save money through Strategic Sourcing, reducing overtime, freezing positions, streamlining group insurance plan, conserving energy and focusing on employee safety to reduce lost work days
- Improve contract management to ensure deliverables are provided on-time, on-budget and within scope
- Maintain AAA Bond Rating through strong financial policies and planning



### Transform Employee Engagement

- Infuse innovation and creativity throughout the workforce to help retain and recruit employees
- Consolidate and enhance employee training, learning and development
- Drive employee culture change through research, data-driven decision-making and program management
- Update employee onboarding process and new employee orientation



### Protect Our Resources

- Assess and adapt to the impacts of climate change on WSSC Water infrastructure and continue to invest in projects that reduce greenhouse gas emissions
- Comply with the Sanitary Sewer Overflow and Potomac Plant consent orders
- Develop a biosolids and water treatment residuals Master Plan
- Conduct analysis to determine resource needs to support core mission
- Develop a Digital Strategy to create value added improvements for WSSC Water and its customers, while ensuring confidentiality and integrity

## WSSC Water Commission Performance Report

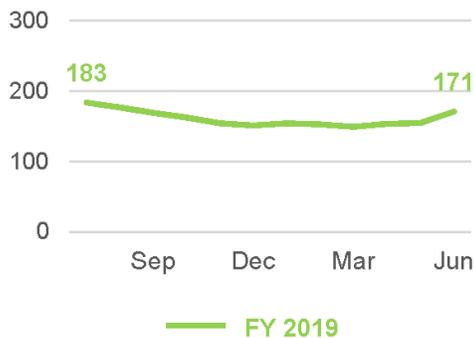
WSSC Water's Commission Performance Report contains Key Performance Indicators that are aligned to the Strategic Plan Priorities and Objectives. The report demonstrates WSSC Water's commitment to accountability, which is a Core Value in the Strategic Plan.

### Mission

#### Provide Safe and Reliable Water

##### Water Production

Average gallons of water produced in millions per day



#### Return Clean Water to Our Environment

##### Wastewater Treatment

Average gallons of wastewater treated in millions per day

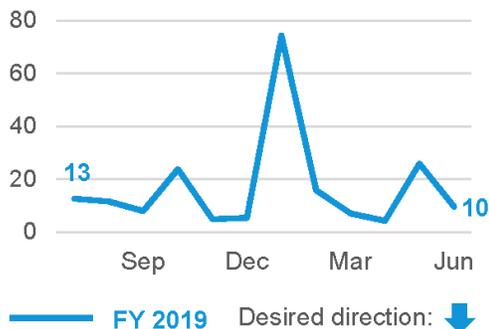


### Enhance Customer Experience

#### Deliver Safe, Reliable and Consistent Service

##### Water Service Restoration Time

# of outage hours / # of housing units impacted\*



\*For FY 2020, this KPI is being refined to reflect only those outages that impact customers

New for FY 2020, the following KPIs are drawn from the new Customer-to-Meter billing system and will be available next budget cycle.

##### Accounts Billed On-Time

% of accounts billed on-time, within 15 calendar days after billing window closes

##### Past Due Accounts

# of accounts 30 days past the bill date

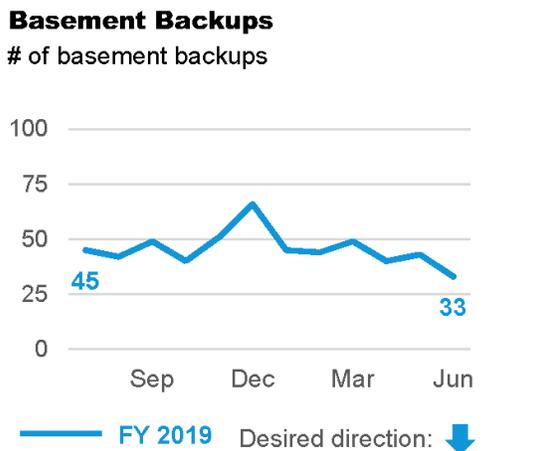
##### Past Due Amount

\$ of accounts (millions) 30 days past the bill date

## Enhance Customer Experience

**Provide Timely Response to Customer Queries**

**Be a Good Citizen within Our Community**

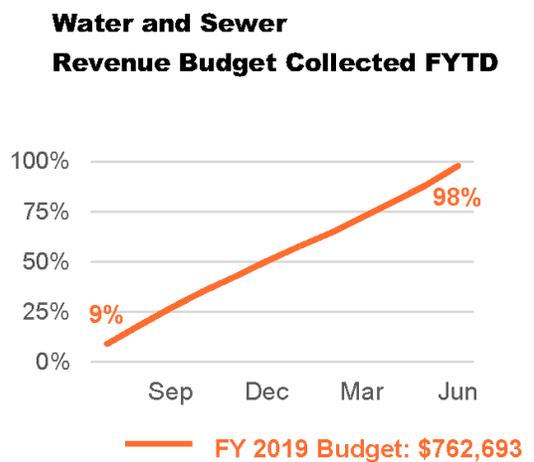
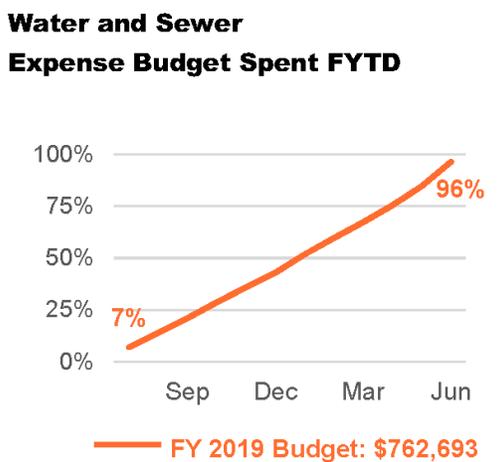


## Optimize Infrastructure

Under the Optimize Infrastructure Strategic Priority, capital improvement projects are highlighted to demonstrate how WSSC Water is working to achieve industry-leading reliability and asset integrity, expanding resilience and balancing risk. See Capital Budget section for highlighted projects.

## Spend Customer Dollars Wisely

### Improve Financial Process Efficiency and Fiscal Sustainability



# Transform Employee Engagement

## Acquire the Best People

### Positions Filled

# of positions filled / # of actively recruited positions



## Retain Top Performers

### Turnover Rate

# of employee separations / # of FTEs



## Develop and Grow Talent

# of regular employees eligible for retirement within next x years / total # of FTEs

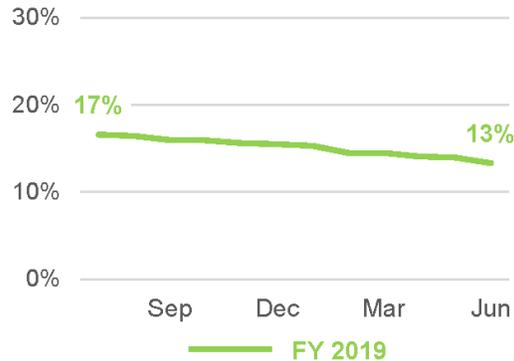
### Retirement Eligibility (Full)

#### Eligible Now



### Retirement Eligibility (Early)

#### Eligible Now



### Retirement Eligibility (Full)

#### Eligible Within 5 Years



### Retirement Eligibility (Early)

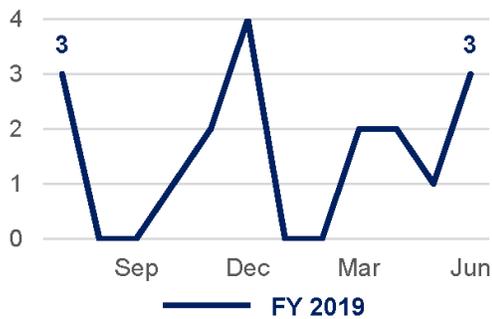
#### Eligible Within 5 Years



## Protect Our Resources

**Plan Proactively with Community Stakeholders and Resolve and Learn from Past Incidents**      **Maintain Best in Class Operating Environment Safety for Employees**

**Emergency & Coordinated Responses**  
 # of cross-departmental coordinated responses, exercises and drills



**Occupational Injuries**  
 # of occupational injuries



### Secure Commission's Critical Infrastructure

**Sanitary Sewer Overflows**  
 # of sanitary sewer overflows



**Sanitary Sewer Overflow Volume**  
 Total gallons of sanitary sewer overflows in millions per month



## GOVERNANCE

### Commissioners

A six-member commission governs WSSC Water - 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 agency'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 WSSC Water 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 agency's mains to abutting property lines
- To approve the locations of, and issue permits for, utilities installed in public ways
- 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



### PRINCE GEORGE'S COUNTY



**Chris Lawson**  
Chair



**Sandra L. Thompson**  
Commissioner



**Keith E. Bell**  
Commissioner



### MONTGOMERY COUNTY



**T. Eloise Foster**  
Vice Chair

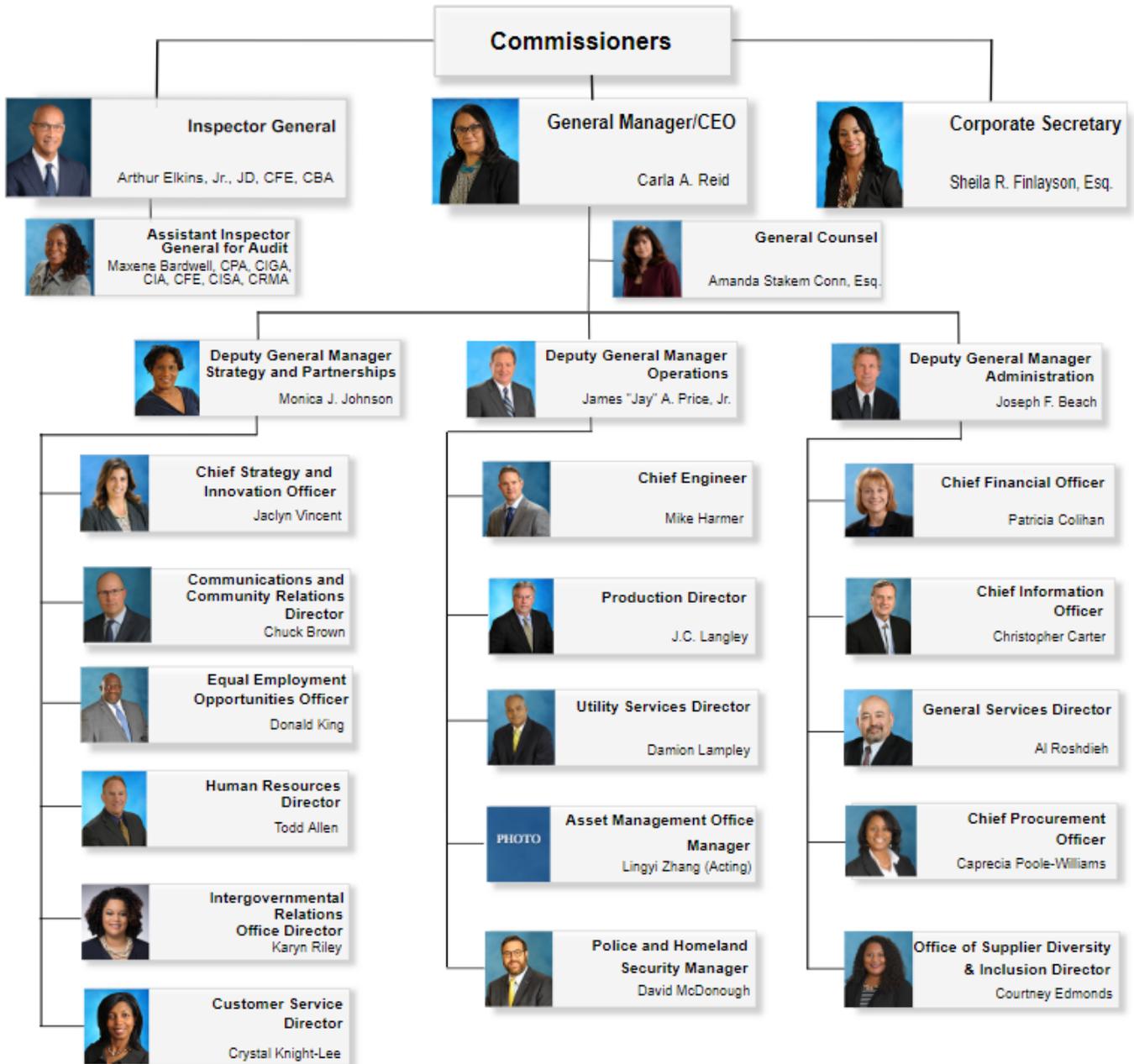


**Fausto R. Bayonet**  
Commissioner



**Howard A. Denis**  
Commissioner

# OUR LEADERSHIP AND ORGANIZATION



# **CHAIR'S LETTER**



COMMISSIONERS  
Chris Lawson, Chair  
T. Eloise Foster, Vice Chair  
Fausto R. Bayonet  
Keith E. Bell  
Howard A. Denis  
Sandra L. Thompson

GENERAL MANAGER  
Carla A. Reid

March 1, 2020

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 Sidney Katz, President, Montgomery County Council

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

We are hereby transmitting WSSC Water's Proposed Fiscal Year 2021 (FY 2021) 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 WSSC Water's mission through the following strategic priorities:

- Enhance Customer Experience
- Optimize Infrastructure
- Spend Customer Dollars Wisely
- Protect our Resources
- Transform Employee Engagement

## FY 2021 PROPOSED CAPITAL AND OPERATING BUDGETS

The proposed budget for Fiscal Year 2021 for all operating and capital funds totals \$1.463 billion or \$7.0 million (0.5%) more than the Approved FY 2020 Budget. The proposed operating budget of \$856.2 million represents an increase of \$38.8 million (4.7%) over the FY 2020 Approved Operating Budget of \$817.4 million. The primary cost drivers are the holistic rehabilitation of the Piscataway basin to help address excess flows at the Piscataway Water Resource Recovery

Facility (WRRF) and help prevent permit violations; increased operating costs for this WRRF, and debt service on infrastructure renewal. Other cost drivers include bio-solids hauling and additional funding to stabilize business operations using the new Customer-to-Meter (C2M) billing system stabilization. When controlling for the non-discretionary increases in debt service and Piscataway related costs, the FY 2021 Operating Budget is only 2.5% over the FY 2020 Approved Budget.

The proposed capital budget of \$606.7 million represents a decrease of \$31.8 million (-5.0%) from the FY 2020 Approved Capital Budget of \$638.5 million. This decrease is due to construction progress on the Trunk Sewer Reconstruction Consent Decree work and some significant projects winding down such as the Brink Zone Water Storage Improvements and the Broad Creek Waste Water Pumping Station Augmentation projects.

The proposed budget calls for a combined 7.0% 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 up to 7.0%. Even with this change, WSSC Water rates continue to be favorable when compared to many similar sized water and sewer utilities. The average WSSC Water customer's residential bill is 1% (Section 2) of the median household income. The rate increase will add approximately \$13.26 (6.1% bill increase) per quarter 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.

It is important to point out that WSSC Water'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 River Consent Decrees; 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 Water 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 compares favorably 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. There are currently 12,655 customers enrolled in CAP who will save \$1.2 million in fixed fees in FY 2021. This budget includes funding for enhancements to customer service including programs that will provide conservation kits and plumbing inspections for qualifying customers.

In addition, in accordance with House Bill 408 enacted in the FY 2018 legislative session, the proposed budget includes \$100,000 to fund the second year of the new Connection Pipe Emergency Replacement Loan Program which provides affordable financing of up to \$5,000 per eligible customer.

## SPENDING AFFORDABILITY GUIDELINE LIMITATIONS

In order to reconcile our Departments' initial FY 2021 budget requests with the Counties' Spending Affordability Guidelines, a funding gap of \$25.8 million dollars was closed. Actions included limiting growth for certain programs and the very difficult decision not to reinstate important programs and functions that were removed in previous fiscal years. For the fourth consecutive year, this budget includes no new positions. Although this budget provides funding for critical improvements required in the Piscataway basin, the stabilization of C2M business operations as well as much needed maintenance at some WSSC Water facilities, we must continue to defer 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; and
- Accelerating large water valve inspections from a four-year to a three-year cycle.

## COST SAVING MEASURES

This budget reflects WSSC Water'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 agency 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 Management project, which have been supported by the Commission and both Counties since FY 2013, have produced significant cost reductions in excess of \$47.0 million in the operating and capital budgets since the inception of this program and cost avoidance savings of nearly \$45.0 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 2019, our efforts resulted in \$8.8 million in cost reductions.
- 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 Water positions since FY 2017, and we have currently frozen the hiring of 30 to produce ongoing personnel cost savings;
- Changes to our Workers Compensation have resulted in the following:
  - 62% reduction in lost workday cases
  - 25% reduction in lost work days
  - 50% reduction in claims totals (\$425,000)
- 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 \$3.0 million since FY 2017.

## OPTIMIZE INFRASTRUCTURE

New technologies and tools are emerging to help WSSC Water 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 Water decreased the Water Reconstruction Program (rehabilitation of smaller water mains <16 inches in diameter) over the next few years from 45 miles in FY 2019 to 25 miles in FY 2020 and FY 2021. This strategic reduction frees up the resources required for WSSC Water to develop a more efficient and effective Water Reconstruction Program, enabling us to develop our enhanced pipe condition assessment program over the next several years. In addition, new water main rehabilitation technologies to help control costs while also minimizing disruption for our customers are being evaluated.

For large diameter water mains, the Pre-stressed Concrete Cylinder Pipe (PCCP) Program provides for the ongoing acoustic fiber optic (AFO) monitoring of over 100 miles of pipe, ongoing inspection, and rehabilitation and replacement of large diameter pipes. Inspection, rehabilitation and replacement of large valves continues at two per year. The PCCP program will begin the replacement of pipe with one-half mile projected for FY 2021, eventually building the program up to two miles per year. Replacement of ferrous pipes is projected to increase from four miles to six miles per year. Funding is also included for the continued compliance with all requirements of the WSSC Water Sanitary Sewer Overflow and Potomac Water Filtration Plant Consent Decrees.

## INFORMATION TECHNOLOGY MODERNIZATION

In addition to our ongoing investments in WSSC Water's physical infrastructure, the FY 2021 budget invests in our organizational infrastructure. Strategic contributions from Fund Balance will be used to modernize our IT infrastructure and streamline our business processes and help lay the foundation for Advanced Metering Infrastructure project.

## SPENDING AFFORDABILITY

WSSC Water, 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. Last fall, the Montgomery County Council and Prince George's County Council approved resolutions establishing four limits on the WSSC Water's FY 2021 budget. As indicated in the following table, the proposed FY 2021 budget meets the spending affordability limits for New Water and Sewer Debt, Debt Service and Average Water/Sewer Rate Increase.

WSSC FY 2021 PROPOSED BUDGET VS. SPENDING AFFORDABILITY LIMITS  
(\$ in Millions)

	<b>FY 2021 Proposed Budget</b>	<b>Prince George's County Limit</b>	<b>Montgomery County Limit</b>
New Water and Sewer Debt	\$409.9	\$409.9	\$409.9
Total Water and Sewer Debt Service	\$313.9	\$313.9	\$313.9
Total Water/Sewer Operating Expenses	\$842.5*	\$837.7	\$837.7
Water/Sewer Rate Revenue Increase	7.0%	7.0%	7.0%

\*Covered by offsetting non rate related funding sources

The proposed budget provides for:

- Implementing the first year of the FYs 2021-2026 Capital Improvement Program (CIP);
- Paying WSSC Water's share of operating (\$58 million in FY 2021) and capital costs (\$60 million in FY 2021; \$443 million FYs 2021-2026) for the District of Columbia Water and Sewer Authority's (DC Water) Blue Plains Wastewater Treatment Plant;
- Initiating Advanced Metering Infrastructure (AMI) so customers can better track their water usage, which can significantly reduce their bills and save them money
- Paying debt service of \$325.6 million - of which \$313.9 million is in the Water and Sewer Operating Funds;
- Rehabilitating holistically the Piscataway basin to reduce infiltration and inflow;
- Funding additional operating costs at the Piscataway WRRF due to increased flows;
- Funding maintenance and repairs at critical facilities;
- Replacing 25 miles of water mains and 26 miles of sewer mains and lateral lines;
- Funding \$67.9 million for large diameter pipe rehabilitation. This includes \$32.9 million for PCCP inspection, repair, and acoustic fiber optic monitoring of the pipes' condition; \$31.9 million for large diameter repairs and cathodic protection; \$3.1 million for large valve inspections, replacement, and repairs;
- Complying with the Sanitary Sewer Overflow and the Potomac Plant Consent Orders;
- Operating and maintaining a system of 3 reservoirs impounding 14 billion gallons of water, 2 water filtration plants, 6 WRRFs, 5,900 miles of water main, and 5,700 miles of sewer main 24 hours a day, 7 days a week; and
- Proposing competitive salary enhancement considering the Counties' compensation proposals and collective bargaining agreements.

In addition to reviewing expenses and revenues for water and sewer services, we have analyzed the cost and current fee levels for other WSSC Water services. Based upon these analyses, and to better align fees with program costs, some new fees and adjustments to current fees are recommended (Section 2).

## SYSTEM DEVELOPMENT CHARGE

State law provides that the System Development Charge (SDC), a charge to new applicants for WSSC Water service which is intended to recover growth costs, may be adjusted annually by the change in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) in the Washington, D.C. metropolitan area. Historically, we have adjusted the maximum allowable charge based on the change in the November CPI-W. We recommend the same this year.

## 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, 2020.

Sincerely,



Chris Lawson  
Commission, Chair

cc:

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

# **BUDGET SUMMARIES**

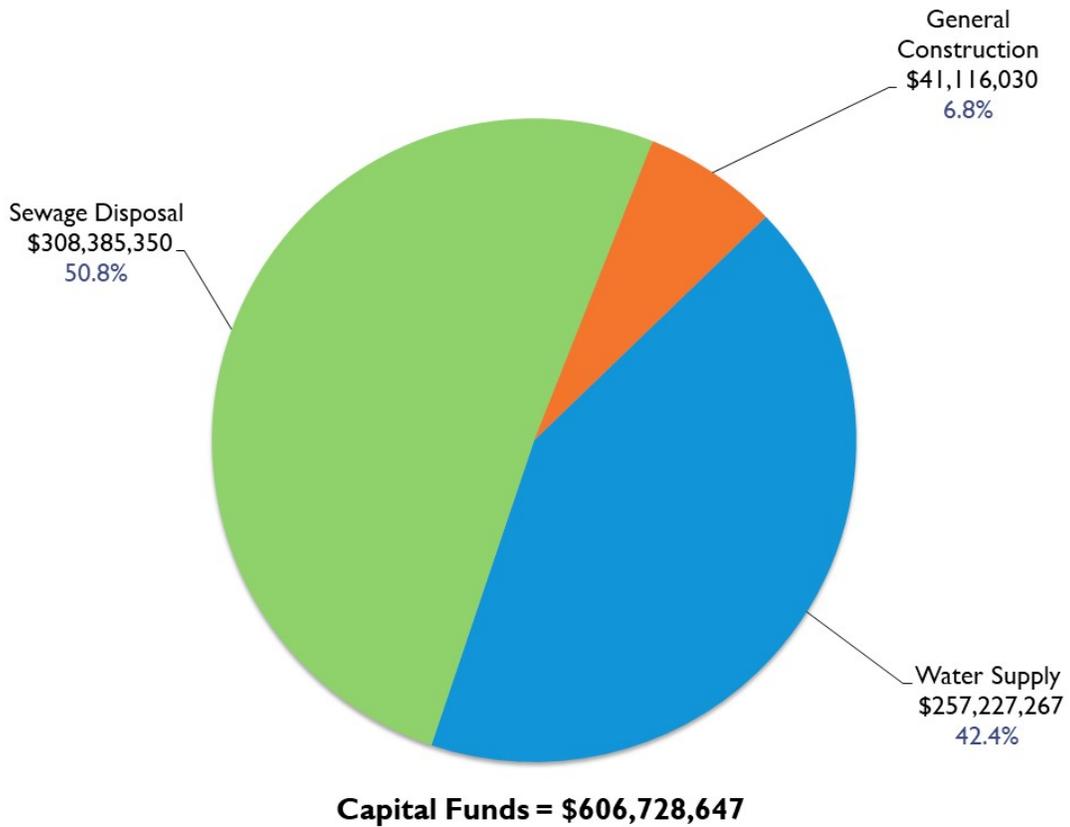
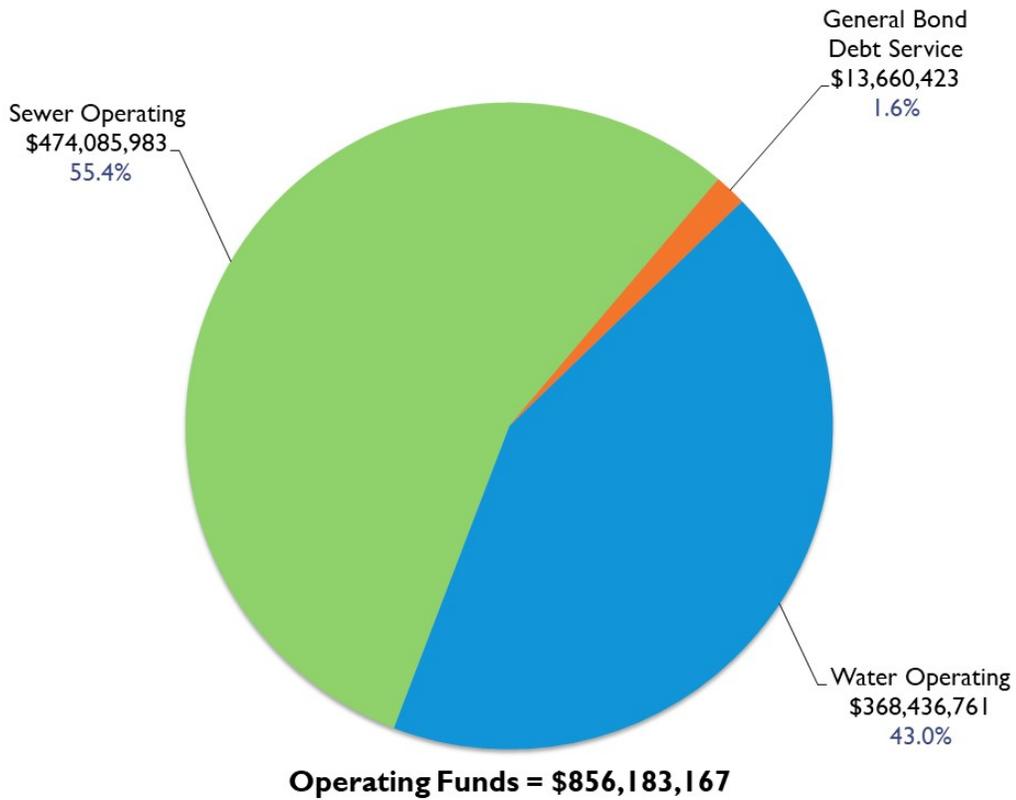
## COMPARATIVE EXPENDITURES BY FUND

(\$ in Thousands)	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Approved	FY 2021 Proposed	FY 2021 Over / (Under) FY 2020	% Change
<b>Operating Funds</b>							
Water Operating	\$ 300,599	\$ 320,088	\$ 339,200	\$ 352,472	\$ 368,437	\$ 15,965	4.5%
Sewer Operating	374,234	385,527	419,633	450,148	474,086	23,938	5.3%
General Bond Debt Service	15,557	19,108	18,847	14,773	13,660	(1,113)	-7.5%
Total Operating	690,390	724,723	777,680	817,393	856,183	38,790	4.7%
<b>Capital Funds</b>							
Water Supply	\$ 263,569	\$ 261,602	\$ 210,783	\$ 287,256	257,227	\$ (30,029)	-10.5%
Sewage Disposal	280,632	190,058	152,891	334,377	308,386	(25,992)	-7.8%
General Construction	12,784	23,555	23,121	16,893	41,116	24,224	143.4%
Total Capital	556,985	475,215	386,795	638,526	606,729	(31,797)	-5.0%
<b>Grand Total</b>	<b>\$ 1,247,375</b>	<b>\$ 1,199,938</b>	<b>\$ 1,164,475</b>	<b>\$ 1,455,919</b>	<b>\$ 1,462,912</b>	<b>\$ 6,993</b>	<b>0.5%</b>

## COMPARATIVE EXPENDITURES BY MAJOR EXPENSE CATEGORY

(\$ in Thousands)	FY 2019 Actual			FY 2020 Approved			FY 2021 Proposed		
	Capital	Operating	Total	Capital	Operating	Total	Capital	Operating	Total
<b>Expense Categories</b>									
Salaries & Wages	\$ 27,293	\$ 125,851	\$ 153,144	\$ 27,154	\$ 130,134	\$ 157,288	\$ 29,080	\$ 133,866	\$ 162,946
Heat, Light & Power	-	19,683	19,683	-	19,444	19,444	-	20,431	20,431
Regional Sewage	-	54,809	54,809	-	59,000	59,000	-	58,000	58,000
Contract Work	202,735	14,263	216,998	383,332	15,167	398,499	353,066	22,446	375,512
Consulting Engineers	51,872	19,388	71,260	58,073	17,761	75,834	77,182	19,326	96,508
Debt Service	-	292,656	292,656	-	319,883	319,883	-	325,593	325,593
All Other	104,895	251,030	355,925	169,967	256,004	425,971	147,401	276,521	423,922
<b>Grand Total</b>	<b>\$ 386,795</b>	<b>\$ 777,680</b>	<b>\$1,164,475</b>	<b>\$ 638,526</b>	<b>\$ 817,393</b>	<b>\$1,455,919</b>	<b>\$ 606,729</b>	<b>\$ 856,183</b>	<b>\$1,462,912</b>

**GRAND TOTAL = \$1,462,911,814**



## REVENUE AND EXPENSE TRENDS

### Water & Sewer Operating Funds - Combined

(\$ in Thousands)	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Approved	FY 2021 Proposed
<b>REVENUES</b>							
Water Consumption Charges	\$ 242,867	\$ 235,805	\$ 270,134	\$ 271,735	\$ 273,753	\$ 280,997	\$ 298,759
Sewer Use Charges	319,488	307,264	329,332	325,879	341,496	377,902	396,952
Account Maintenance Fee	22,753	29,247	32,508	32,473	32,116	32,296	32,360
Infrastructure Investment Fee	-	16,700	37,561	39,847	39,278	39,331	39,410
Plumbing and Inspection Fees	9,129	10,430	11,178	12,141	13,594	12,900	14,470
Rockville Sewer Use	3,186	3,142	2,907	3,223	3,106	3,000	3,000
Miscellaneous	17,169	18,417	18,823	19,117	20,913	19,800	20,800
Interest Income	532	696	1,540	5,478	9,306	5,500	10,000
<b>Total Revenues</b>	<b>615,124</b>	<b>621,701</b>	<b>703,983</b>	<b>709,893</b>	<b>733,562</b>	<b>771,726</b>	<b>815,751</b>
<b>Other Credits and Transfers</b>							
Use of Fund Balance	30,193	20,721	24,450	227	11,580	11,341	8,000
Reconstruction Debt Service Offset	10,000	8,500	9,800	7,700	12,500	11,600	9,500
SDC Debt Service Offset	1,167	728	2,609	2,396	5,551	4,658	5,772
Premium Transfer	-	-	-	-	-	2,900	1,500
Underwriters Discount Transfer	-	-	-	-	-	-	2,000
Miscellaneous Offset	-	-	-	-	-	395	-
<b>Total Funds Available</b>	<b>\$ 656,484</b>	<b>\$ 651,650</b>	<b>\$ 740,842</b>	<b>\$ 720,216</b>	<b>\$ 763,193</b>	<b>\$ 802,620</b>	<b>\$ 842,523</b>
<b>EXPENDITURES</b>							
Salaries & Wages	\$ 100,118	\$ 104,030	\$ 109,059	\$ 117,144	\$ 125,100	\$ 129,676	\$ 133,197
Heat, Light & Power	24,229	22,000	22,099	20,033	19,683	19,436	20,423
Regional Sewage Disposal	54,485	50,068	53,946	58,331	54,809	59,000	58,000
<b>Debt Service</b>							
Principal Payments	153,968	134,171	141,817	151,057	153,565	196,069	177,022
Interest Payments	68,013	76,190	94,918	106,445	121,819	110,238	136,843
Debt Reduction (PAYGO)	19,996	18,821	21,495	10,065	15,754	31,016	31,016
All Other	203,934	214,607	224,975	242,540	268,103	257,185	286,022
Working Capital Reserve Transfer	2,300	6,300	6,524	-	-	-	-
<b>Total Expenditures</b>	<b>\$ 627,043</b>	<b>\$ 626,187</b>	<b>\$ 674,833</b>	<b>\$ 705,615</b>	<b>\$ 758,833</b>	<b>\$ 802,620</b>	<b>\$ 842,523</b>

### General Bond Debt Service Fund

(\$ in Thousands)	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Approved	FY 2021 Proposed
<b>OPERATING REVENUES</b>							
Front Foot Benefit & House Connection	\$ 29,971	\$ 24,925	\$ 22,039	\$ 19,191	\$ 15,809	\$ 12,507	\$ 10,378
Interest Income	62	87	383	865	1,127	500	600
Miscellaneous	384	312	294	285	268	260	230
<b>Total Operating Revenues</b>	<b>30,417</b>	<b>25,324</b>	<b>22,716</b>	<b>20,341</b>	<b>17,204</b>	<b>13,267</b>	<b>11,208</b>
<b>Other Credits and Transfers</b>							
Reconstruction Debt Service Offset	10,000	8,500	9,800	7,700	12,500	11,600	9,500
Use of Fund Balance	(10,000)	(8,500)	(9,800)	(7,700)	(12,500)	(11,600)	(9,500)
<b>Total Funds Available</b>	<b>\$ 30,417</b>	<b>\$ 25,324</b>	<b>\$ 22,716</b>	<b>\$ 20,341</b>	<b>\$ 17,204</b>	<b>\$ 13,267</b>	<b>\$ 11,208</b>
<b>OPERATING EXPENSES</b>							
Salaries & Wages	\$ 604	\$ 723	\$ 689	\$ 701	\$ 751	\$ 459	\$ 668
Heat, Light & Power	-	-	-	-	-	8	8
All Other	618	1,018	858	813	825	730	1,256
<b>Subtotal</b>	<b>1,222</b>	<b>1,741</b>	<b>1,547</b>	<b>1,514</b>	<b>1,576</b>	<b>1,197</b>	<b>1,932</b>
<b>Debt Service</b>							
Principal Payments	18,961	14,102	9,259	12,672	13,337	10,182	8,796
Interest Payments	7,080	4,009	4,751	4,922	3,934	3,394	2,932
<b>Subtotal</b>	<b>26,041</b>	<b>18,111</b>	<b>14,010</b>	<b>17,594</b>	<b>17,271</b>	<b>13,576</b>	<b>11,728</b>
<b>Total Expenses</b>	<b>\$ 27,263</b>	<b>\$ 19,852</b>	<b>\$ 15,557</b>	<b>\$ 19,108</b>	<b>\$ 18,847</b>	<b>\$ 14,773</b>	<b>\$ 13,660</b>

**SECTION 2**  
**PROPOSED RATES, FEES AND CHARGES**

# PROPOSED RATES, FEES AND CHARGES

## COMBINED WATER/SEWER OPERATING FUNDS – FY 2021 PROPOSED RATE IMPACT

### 7.0% Average Water and Sewer Rate Increase

<b>Funding Sources</b>	<b>FY 2021 Proposed</b>
	(\$ in Thousands)
Revenues at Current Rates	
Consumption Charges	\$ 650,197
Account Maintenance Fee	32,360
Infrastructure Investment Fee	39,410
Miscellaneous Revenues	48,270
Subtotal	770,237
Use of Fund Balance	8,000
Reconstruction Debt Service Offset	9,500
System Development Charge Debt Service Offset	5,772
Premium Transfer	1,500
Underwriters Discount Transfer	2,000
Total Funding Sources	797,009
<b>Requirements</b>	
Expenditures	
Operating, Maintenance & Support Services Expenses	497,642
Debt Service	313,865
Debt Reduction (PAYGO)	31,016
Total Expenditures	842,523
Shortfall to be Covered by Rate Increase	\$ <u>(45,514)</u>
Proposed Average Water and Sewer Rate Increase	<u><b>7.0%</b></u>

The FY 2021 Proposed Budget calls for a combined 7.0% average increase in water and sewer consumption revenue. This proposed increase meets the 7.0% Spending Affordability Guidelines (SAG) limit recommended by both Prince George’s and Montgomery Counties. Even with this change, WSSC Water rates remain 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 2-5.

## WATER AND SEWER RATE SCHEDULES

### Rate Schedule Proposed for Implementation July 1, 2020

Average Daily Consumption by Customer Unit During Billing Period (Gallons Per Day)	FY 2021 July 1, 2020 Proposed		Total
	Water Rates	Sewer Rates	Combined
	Per 1,000 Gallons		
0 - 80.9999	\$ 5.41	\$ 7.31	\$ 12.72
81 - 165.9999	6.10	8.13	14.23
166 - 275.9999	7.04	10.18	17.22
276 & Greater	8.25	13.44	21.69

Proposed Flat Rate Sewer Charge - \$135.00 per quarter

### Current Rate Schedule

Average Daily Consumption by Customer Unit During Billing Period (Gallons Per Day)	FY 2020 July 1, 2019 Approved		Total
	Water Rates	Sewer Rates	Combined
	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

Current Flat Rate Sewer Charge - \$125.00 per quarter

## QUARTERLY CUSTOMER BILLS AT VARIOUS CONSUMPTION LEVELS

Meter Size	Average Daily Consumption (Gallons Per Quarter)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
3/4" Residential Meter	100 (9,125 gal/qtr)	\$ 119.53	\$ 122.72	\$ 127.01	\$ 138.94	\$ 146.69
3/4" Residential Meter	165 (15,056 gal/qtr)	200.09	206.12	213.95	217.83	231.09
3/4" Residential Meter	500 (45,625 gal/qtr)	789.94	816.40	851.99	794.66	848.58
2" Meter	1,000 (91,250 gal/qtr)	1,821.65	1,878.23	1,952.14	1,903.02	2,022.18
3" Meter	5,000 (456,250 gal/qtr)	8,881.75	9,169.19	9,552.44	9,736.92	10,378.03
6" Meter	10,000 (912,500 gal/qtr)	18,491.90	19,085.00	19,878.88	19,748.55	21,042.10

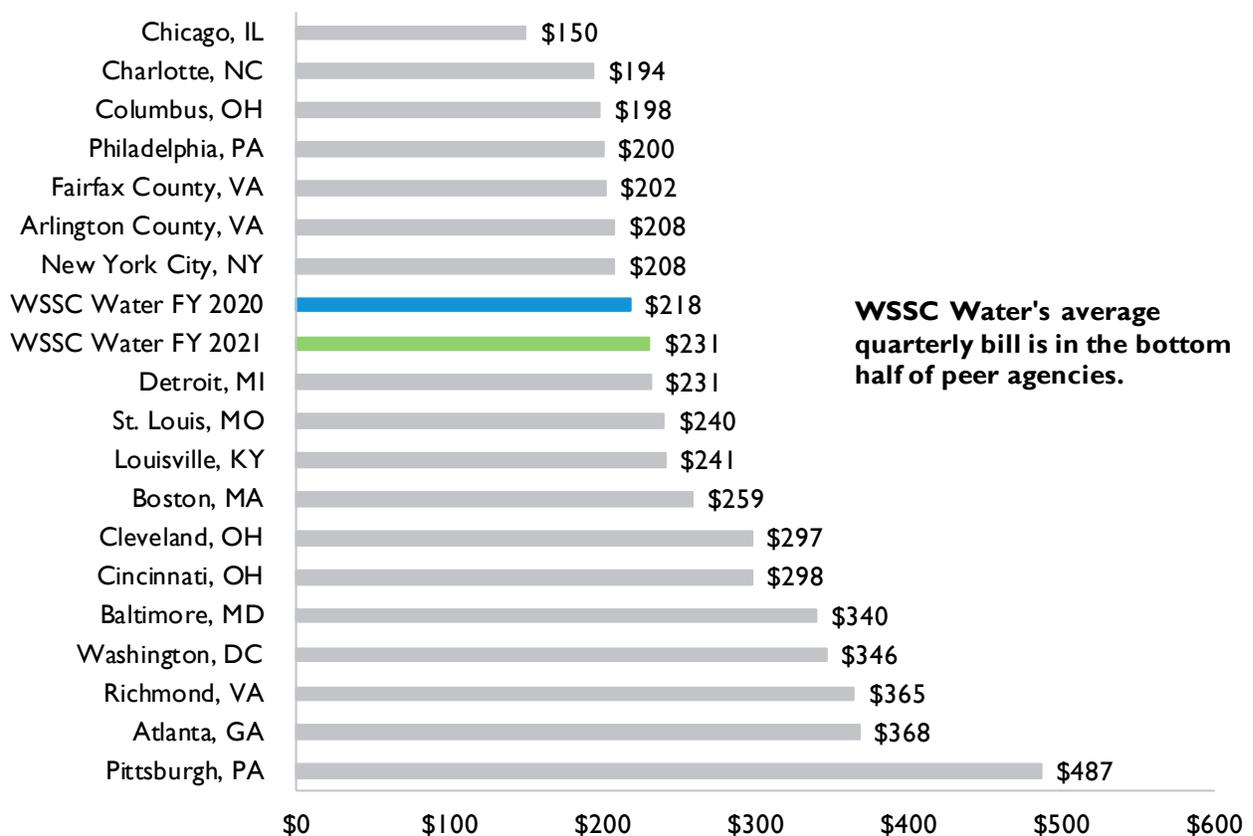
Quarterly customer bills include the Account Maintenance Fee and Infrastructure Investment Fee shown on pages 2-7 and 2-8.

## WATER/SEWER BILL COMPARISON

### Quarterly Bill Comparison

Presented below is a comparison of WSSC Water’s average quarterly residential bill for water and sewer services at 165 gallons per day to the equivalent bill from 18 other cities and communities, both locally and nationally. The consumption level of 165 gallons per day is used for comparison because it represents the average household in WSSC Water’s service area, a 3-person household using 55 gallons of water per person per day. The rates used in this comparison were in effect November 2019. The chart includes WSSC Water bills at FY 2020 approved and FY 2021 proposed rates. As shown in the chart, the quarterly bills in the other communities range from a low of \$150 in Chicago, Illinois to a high of \$487 in Pittsburgh, Pennsylvania. WSSC Water ranks in the bottom half of the peer agencies, with quarterly bills of \$218 in FY 2020 and \$231 in FY 2021. Therefore, WSSC Water’s rates and fees are competitive both locally and nationally.

**Residential Quarterly Water/Sewer Bill Comparison  
(165 Gallons per Day)**

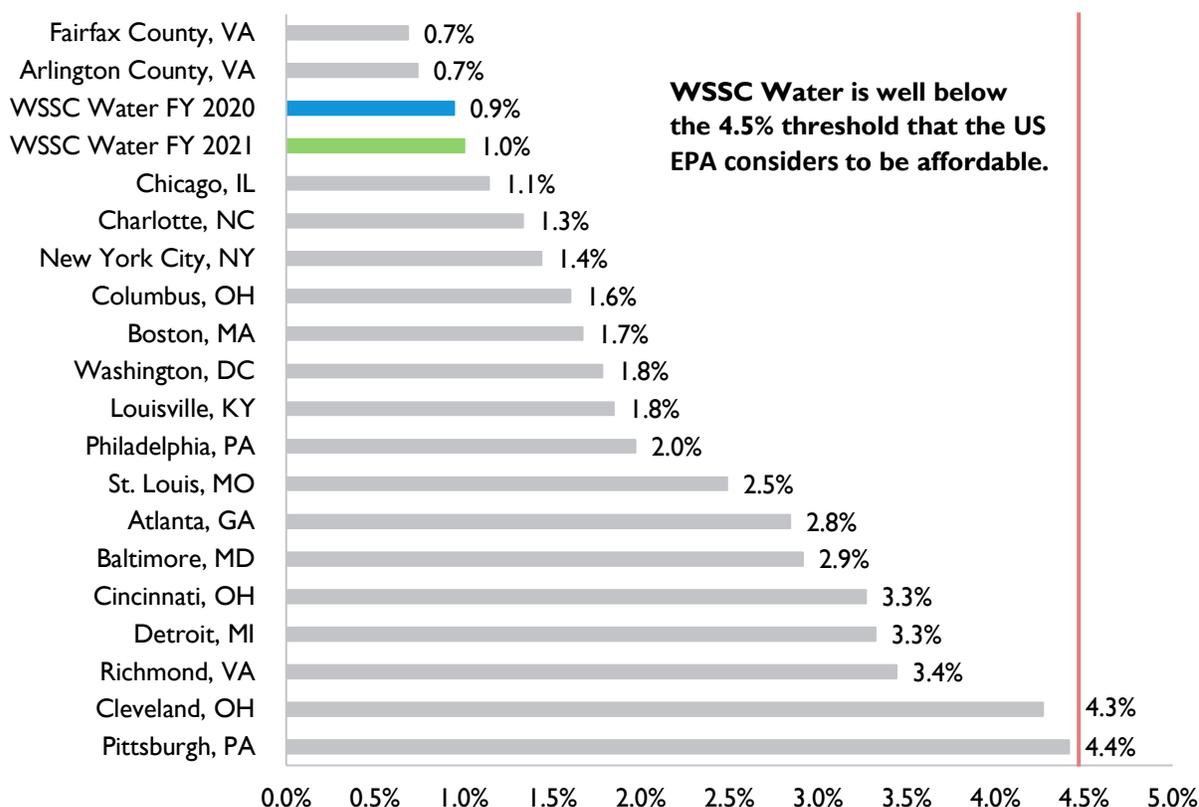


## WATER/SEWER BILL COMPARISON (CONTINUED)

### Bill as a Percentage of Median Household Income Comparison

The chart below shows a comparison of the average residential bills as a percentage of median household income for WSSC Water and the 18 other cities and communities analyzed for customers using 165 gallons of water per day. The average annual bill from WSSC Water in FY 2021 is only 1.0% of the median household income of its customers, a slight increase from the 0.9% in FY 2020. This places WSSC Water at the bottom end of the peer agencies, with only two agencies (Fairfax and Arlington counties in Virginia) having lower percentages. Additionally, WSSC Water is well below the 4.5% threshold that the US Environmental Protection Agency (EPA) considers to be affordable for customers.

Average Residential Bill as a Percentage of Median Income  
(165 Gallons per Day)



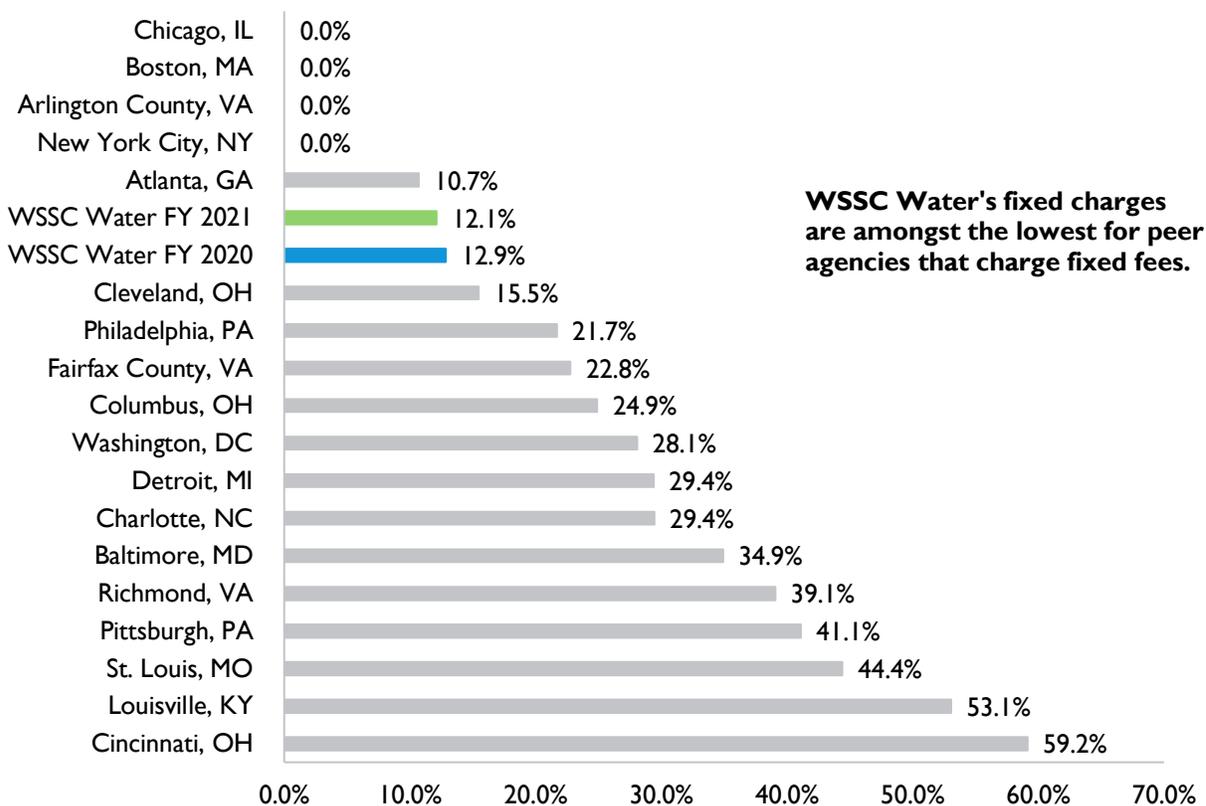
Median household income (in 2017 dollars) 2013-2017. Figures gathered from [www.census.gov](http://www.census.gov), 2013-2017 American Community Survey 5-Year Estimates.

## WATER/SEWER BILL COMPARISON (CONTINUED)

### Percentage of Bill from Fixed Charges Comparison

A comparison of the percentage of the average residential bill, at 165 gallons per day, that is due to fixed charges is shown below for WSSC Water and the 18 other cities and communities reviewed. Four of the peer agencies (Chicago, Illinois; Boston, Massachusetts; Arlington County, Virginia; and New York City, New York) do not have any fixed fees as part of their water and sewer bills. Of the agencies that do charge fixed fees, WSSC Water has the second lowest percentage of its bill that is derived from those fees. In FY 2020, 12.9% of the average residential bill from WSSC Water was attributable to fixed fees. In FY 2021, that percentage has dropped to 12.1%, as the water and sewer rates have increased but fixed fees have remained the same.

Percentage of Average Residential Bill from Fixed Charges  
(165 Gallons per Day)



ACCOUNT MAINTENANCE FEES – PROPOSED FOR IMPLEMENTATION JULY 1, 2020

<u>Meter Size</u>	FY 2020 Current <u>Quarterly Charges</u>	FY 2021 Proposed <u>Quarterly Charge</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, 2020

<u>Meter Size</u>	FY 2020 Current <u>Quarterly Charges</u>	FY 2021 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</u>		
<u>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, 2020

	<u>FY 2020 Current Charges</u>	<u>FY 2021 Proposed Charges</u>	<u>Current Maximum Allowable</u>	<u>Proposed Maximum Allowable</u>
<b>Apartment</b>				
Water	\$ 896	\$ 896	\$ 1,330	\$ 1,346
Sewer	1,140	1,140	1,694	1,714
<b>1-2 toilets/residential</b>				
Water	1,344	1,344	1,998	2,022
Sewer	1,710	1,710	2,538	2,568
<b>3-4 toilets/residential</b>				
Water	2,240	2,240	3,328	3,368
Sewer	2,850	2,850	4,234	4,285
<b>5 toilets/residential</b>				
Water	3,135	3,135	4,658	4,714
Sewer	3,991	3,991	5,929	6,000
<b>6+ toilets/residential (per fixture unit)</b>				
Water	88	88	132	134
Sewer	115	115	173	175
<b>Non-residential (per fixture unit)</b>				
Water	88	88	132	134
Sewer	115	115	173	175

No increase is proposed for the System Development Charge for FY 2021 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 1.2% 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 2018 to November 2019.

## MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2020

The agency 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, 2020.

### Inspections, Licenses, and Permits

Item	Current Charge	FY 2021 Proposed Charge	Charge Change
<b>I Inspection Fees - Water/Sewer Connection Hookup, Well/Septic Hookup</b>			
<u>Plumbing and Gasfitting Inspections</u>			
New Single Family Detached Dwellings	\$ 919	\$ 1,011	Yes
New Attached Dwellings (townhouse/multiplex excluding apartments)	919	1,011	Yes
<u>All Other Residential:</u>			
Water/Well Hookup	120	132	Yes
Meter Yoke Inspection (meter only installation)	120	132	Yes
Water Hookup Converting from Well (includes 2 inspections)	240	264	Yes
Sewer/Septic Hookup	120	132	Yes
First Plumbing Fixture	120	132	Yes
Each Additional Fixture	46	53	Yes
SDC Credit Fixture Inspection (per fixture)	44	48	Yes
Minimum Permit Fee	220	242	Yes
Permit Reprocessing Fee	66	73	Yes
Long Form Permit Refund Fee (1B write-up form)	220	242	Yes
Long Form Permit Re-Issue Fee	220	242	Yes
<u>All Non-Residential:</u>			
<u>Plan Review (without Permit Application)</u>			
25 Fixtures or Less	499	534	Yes
26-200 Fixtures	1,772	2,038	Yes
Over 200 Fixtures	3,531	4,061	Yes
<u>2<sup>nd</sup> or 3<sup>rd</sup> Review (with or without Permit Application)</u>			
25 Fixtures or Less	173	187	Yes
26-200 Fixtures	397	457	Yes
Over 200 Fixtures	846	973	Yes
Water/Well Hookup	214	235	Yes
Meter Yoke Inspection (meter only installation)	214	235	Yes
Sewer/Septic Hookup	214	235	Yes
FOG Interceptor	214	235	Yes
First Plumbing Fixture	214	235	Yes
Each Additional Fixture	55	59	Yes
SDC Credit Fixture Inspection (per fixture)	44	48	Yes
Minimum Permit Fee	306	337	Yes
Permit Reprocessing Fee	65	73	Yes
Long Form Permit Refund Fee (1B write-up form)	320	352	Yes
Long Form Permit Re-Issue Fee	320	352	Yes

## MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2020

### Inspections, Licenses, and Permits (Continued)

Item	Current Charge	FY 2021 Proposed Charge	Charge Change
<b>2 License Fees for the Regulated Trades</b>			
<u>Reciprocal Master Plumber, Gasfitter:</u>			
Initial Registration per type (for 2 years)	\$ 112	\$ 123	Yes
Registration Renewal all types (for 2 years)	96	106	Yes
Late Registration Renewal	57	63	Yes
<u>Examined Master Plumber, Gasfitter:</u>			
Initial Registration per type (for 4 years)	118	130	Yes
Registration Renewal all types (for 4 years)	118	130	Yes
Late Registration Renewal	57	63	Yes
Cross-connection Technician Registration	29	32	Yes
Sewer and Drain Registration and Renewal (for 2 years)	46	53	Yes
Sewer and Drain Late Renewal Fee	22	24	Yes
<u>Journeyman License Registration:</u>			
Initial Registration (for 2 years)	34	37	Yes
Registration Renewal (for 2 years)	34	37	Yes
Late Registration Renewal	23	25	Yes
License Transfer Fee	31	31	-
License Replacement Fee	17	18	Yes
Apprentice License Registration Renewal	12	13	Yes
<b>3 Short Form Permit Fee (up to 3 fixtures) – Non-Refundable</b>	103	113	Yes
<b>4 Long Form Permit Transfer Fee (with Inspection)</b>	176	194	Yes
<b>5 Tapper License Fees</b>			
Permit Fee	363	363	-
Duplicate	36	36	-
<b>6 Watershed Use Permit Fees</b>			
<u>Boat Removal and Impoundment Fees</u>			
Boat/Craft Removal and Removal Fee	103	103	-
Monthly Storage Fee for Removed Boats	82	82	-
<u>Watershed Use Permit Fees</u>			
Watershed Use Permit (January 1 - December 31)	72	72	-
Single Day Watershed Use Permit	6	6	-
Open Season Boat Mooring (March 15 – November 30)	82	82	-
Winter Boat Mooring (December 1 – March 14)	55	57	Yes
Rental for the Azalea Garden (4 hours)	77	77	-
Rental for the Bio-Brick Pavilion (4 hours)	77	77	-
Boarding Stable Entrance Permit	258	258	-
Adjacent Landowner Entrance Permit	82	82	-
<u>Picnic Permit</u>			
Picnic Permit - groups of 1-5 persons	6	6	-
Picnic Permit - groups of 6-10 persons	12	12	-
Picnic Permit - groups of 11-15 persons	19	18	Yes
<b>7 Site Utility Inspection Fees (Non-Minor)</b>			
Base Fee	1,133	1,133	-
Pipeline (per foot)	6	6	-

Proposed Rates, Fees and Charges

## MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2020

### Discharge and Water Protection

Item	Current Charge	FY 2021 Proposed Charge	Charge Change
<b>8 Septic Hauler Discharge Permit Fees</b>			
<u>Category I Residential &amp; Septic Waste &amp; Grease</u>			
1 - 49 gallons (per vehicle)	\$ 255	\$ 257	Yes
50 - 799 gallons (per vehicle)	5,071	5,578	Yes
800 - 2,999 gallons (per vehicle)	14,464	15,910	Yes
3,000 - gallons and up (per vehicle)	34,307	34,754	Yes
January through June	50% of fee	50% of fee	-
Transfer and/or Replacement Permit Sticker	118	130	Yes
Industrial/Special Waste Disposal Fee (per 1,000 gallons)	355	366	Yes
Zero Discharge Permit Fee	118	130	Yes
Temporary Discharge Permit Fee	118 + Sewer Rate/1,000 gallons	130 + Sewer Rate/1,000 gallons	Yes
Sewer Rate - Hauled Waste	43/1,000 gallons of truck capacity	47/1,000 gallons of truck capacity	Yes
<b>9 Industrial Discharge Control Program Fees By Category</b>			
<u>Industrial users subject to Categorical Pretreatment Standards</u>			
Less than 5,000 gpd (double visit)	5,085	5,594	Yes
Greater than 5,000 gpd (double visit)	7,792	8,571	Yes
Non-discharging Categorical Industries (zero discharge)	1,370	1,507	Yes
<u>Significant Industrial User</u>			
Less than 25,000 gpd (single visit - priority pollutant sampling)	5,085	5,594	Yes
Greater than 25,000 gpd (double visit - priority pollutant sampling)	7,792	8,571	Yes
Penalty Charge for Late Fee Payment	5% of fee	5% of fee	-
<b>10 Discharge Authorization Permit Fees</b>			
Significant Industrial User – Initial Permit (for 4 years)	6,046	6,651	Yes
Significant Industrial User – Renewal (for 4 years)	2,963	3,259	Yes
Initial Zero-Discharge CIU Permit (for 4 years)	2,296	2,526	Yes
Reissued Zero-Discharge CIU Permit (for 4 years)	1,531	1,684	Yes
Temporary Discharge Permit (non – SIU)	6,046	6,651	Yes
<b>11 Discharge Fees - Food Service Establishment (FSE)</b>			
Full Permit FSE	537	537	-
BMP Permit FSE	152	152	-
<b>12 Cross Connection Fees</b>			
Test Report Fee (per report)	38	42	Yes
Base Fee for High Hazard Commercial Water Customer (per month)	16	18	Yes
Base Fee for All Other Commercial Water Customer (per month)	8	9	Yes

MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2020

**Meter Related Services and Fees**

Item	Current Charge	FY 2021 Proposed Charge	Charge Change
<b>13 Small Meter Replacement (at Customer Request)</b>	\$ 211	\$ 215	Yes
<b>14 Meter Replacement Fees (Damaged or Stolen Meter)</b>			
5/8" w/ touch pad (inside w/remote)	150	152	Yes
5/8" w/ pit pad (outside w/o remote)	150	150	-
5/8 Meter - pad encoder	125	127	Yes
5/8" x 3/4" w/ touch pad (inside w/ remote)	126	129	Yes
3/4" w/ touch pad (inside w/ remote)	160	160	-
3/4" w/ pit pad (outside w/o remote)	151	157	Yes
1" w/ touch pad (inside w/ remote)	202	202	-
1" w/ pit pad (outside w/o remote)	196	199	Yes
1" Kamstrup Meter, UT	315	319	Yes
1 1/2" Badger Flanged Meter	561	567	Yes
1 1/2" Flanged Meter	750	750	-
1 1/2" Nipple Meter	725	739	Yes
2" Flanged Meter	1,100	1,100	-
2" 1 1/4 Flanged Meter	1,185	1,207	Yes
3" Compound Meter	3,190	3,190	-
4" Compound Meter	3,960	3,960	-
6" Compound Meter	5,830	5,830	-
Turbine, Horizontal 3" Neptune w/ pit pad	1,456	1,475	Yes
Turbine, Horizontal 4" Neptune w/ pit pad	1,952	1,975	Yes
2" Hersey MVR Turbine	1,210	1,210	-
3" Hersey MVR Turbine	2,296	2,296	-
4" Hersey MVR Turbine	3,216	3,216	-
6" Hersey MVR Turbine	4,970	4,970	-
2" Detector Check	4,562	4,615	Yes
4" Detector Check	3,195	3,275	Yes
6" Detector Check	3,761	3,850	Yes
8" Detector Check	4,876	4,986	Yes
10" Detector Check	6,224	6,350	Yes
12" Detector Check	21,946	22,211	Yes
4" Fire Service Meter	8,239	8,239	-
6" Fire Service Meter	9,874	10,037	Yes
8" Fire Service Meter	12,315	12,502	Yes
10" Fire Service Meter	14,225	14,389	Yes
12" Fire Service Meter	16,250	20,403	Yes
3" Octave UT L=24	3,050	3,095	Yes
4" Octave UT L=29/ L=33	4,034	4,095	Yes
6" Octave UT L=45	5,944	6,026	Yes
8" Octave UT L=53	9,528	9,677	Yes
10" Octave UT L=68	12,901	13,080	Yes
<b>15 Meter Testing Fees</b>			
5/8" to 1"	261	261	-
1-1/2"	424	424	-
2" and up	473	473	-

Proposed Rates, Fees and Charges

## MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2020

### Meter Related Services and Fees (Continued)

Item	Current Charge	FY 2021 Proposed Charge	Charge Change
<b>16 Sub-Meter Installation Fees</b>			
One-time Sub-Meter Charge - Small	\$ 261	\$ 261	-
One-time Sub-Meter Charge - Large	528	528	-
One-time Inspection Fee	57	66	Yes
Minimum Permit Inspection Fee	200	220	Yes
<b>17 Water Turn-Off, Turn-On Fees</b>			
Small Meter Turn-Off	80	80	-
Small Meter Turn-On	97	100	Yes
Large Meter Turn-Off	203	203	-
Large Meter Turn-On	241	241	-
<b>18 Call Back Fee (small meters, plumbers)</b>	93	93	-
<b>19 Call Back Fee (large meters, plumbers)</b>	262	301	Yes
<b>20 Missed Appointment Fees</b>			
First Missed Appointment or Turn-On	97	97	-
Each Additional Missed Appointment	110	110	-
<b>21 Meter Reinstallation Correction Fee</b>	388	388	-
<b>22 Sewer Meter Maintenance Fee (per year)</b>	12,003	13,803	Yes
Quarterly Calibrations (per quarter)	3,001	3,451	Yes
<b>23 Property Inspection Fee</b>	115	119	Yes
<b>24 Warehouse Restocking Fee</b>	39	47	Yes

## MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2020

### Fire Hydrant Services and Fees

Item	Current Charge	FY 2021 Proposed Charge	Charge Change
<b>25 Temporary Fire Hydrant Connection Fees</b>			
<u>3/4" Meter - Deposit</u>			
2 Weeks or Less w/approved payment record	No fee	No fee	-
Over 2 Weeks/Less than 2 weeks w/unapproved payment record	\$ 379	\$ 379	-
<u>3" Meter - Deposit</u>			
2 Weeks or Less w/approved payment record	No fee	No fee	-
Over 2 Weeks/Less than 2 weeks w/unapproved payment record	2,420	2,420	-
<u>Service Charge</u>			
2 Weeks or Less (3/4" meter)	62	68	Yes
2 Weeks or Less (3" Meter)	130	130	-
Over 2 Weeks (3/4" and 3" Meters)	175	175	-
Water Consumption Charge - 3/4" Meter	Approved rate for 1,000 gal ADC; \$33 min.	Approved rate for 1,000 gal ADC; \$36 min.	Yes
Water Consumption Charge - 3" Meter	Approved rate for 1,000 gal ADC; \$214 min.	Approved rate for 1,000 gal ADC; \$229 min.	Yes
Late Fee for Return of Meter (per day)	10	10	-
Fee on Unpaid Temporary Fire Hydrant Meter Billings	1.5%/month	1.5%/month	-
Loss/Destruction of Meter	Replacement cost	Replacement cost	-
Loss/Destruction of Wrench	40	40	-
<b>26 Truck Inspection Fee w. Attached Fire Hydrant Meter (2 Years)</b>	52	52	-
<b>27 Fire Hydrant Inspection Fee (per hydrant)</b>	137	158	Yes
Controlled Access Surcharge Fee	26	30	Yes
<b>28 Fire Hydrant Flow Test Fees</b>			
No Current Test	693	693	-
Current Test	83	83	-

## MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2020

Development Services	Current Charge	FY 2021 Proposed Charge	Charge Change
<u>Item</u>			
<b>29 Feasibility Review Fees (WSSC Water Built)</b>			
Feasibility Submission Fee (Non-refundable)	\$ 1,780	\$ 1,956	Yes
Feasibility Review & Report Fee Deposit <i>(can be deferred as deficit when extension is completed)</i>	11,862	13,048	Yes
<b>30 Construction Services Fee</b>	9.3% of WSSC Water unit cost estimate or 12.0% of contractor's cost estimate	9.3% of WSSC Water unit cost estimate or 12.0% of contractor's cost estimate	-
<b>31 Design Review</b>			
Development is more than 10 Residential Units or Commercial	6,500	6,500	-
Development is 10 Residential Units or Less	3,250	3,250	-
<b>32 Extra Review Fees</b>			
<u>Per SEP Plan Review:</u>			
Minor Additional Reviews of Unsigned or Signed Plans (per review)	1,202	1,322	Yes
Major/Splitting Additional Reviews of Unsigned or Signed Plans (per review)	2,453	2,698	Yes
<u>Per Site Utility/Minor Utility Additional Signed or Unsigned Plan Review:</u>			
Site Utility (per review)	1,458	1,604	Yes
Minor Site Utility (per review)	379	417	Yes
<u>Per Hydraulic Planning Analysis/Systems Planning Forecast Application:</u>			
Additional Review of Required Data (per application)	822	904	Yes
<b>33 Hydraulic Planning Analysis and System Planning Forecast</b>			
Modeling and Re-Modeling Fee - Up to 3 parts	1,840	2,116	Yes
Modeling and Re-Modeling Fee - per part over 3	765	765	-
Pressure Sewer System Review Fee - per system	367	404	Yes
<b>34 In-House Design Deposit</b>	Deposit	Deposit	-
<b>35 Partial Release for Service Fee</b>	1,398	1,468	Yes
<b>36 Off-Property Service Connection Reimbursement</b>	Prevailing service connection fee	Prevailing service connection fee	-
<b>37 Service Connection Application and Inspection Fee (per permit)</b>	2,434 water and/or sewer connection	2,434 water and/or sewer connection	-
<b>38 Government Referred Plan Review Fees</b>			
Major Development – Over 10 Units	1,583	1,693	Yes
Minor Development – 10 or Less Units	791	791	-
Re-Review Fee for Major Development	791	791	-
Re-Review Fee for Minor Development	396	396	-
<b>39 Pre-Screen Fee All Plan Types</b>	365	394	Yes
<b>40 Site Utility (On-Site) Review Fees</b>			
Base Fee	3,522	3,631	Yes
Additional Fee per 100 feet	332	352	Yes
Minor (Waived) Site Utility (On-Site) Fee	1,106	1,217	Yes
<b>41 Name/Transfer of Ownership Change Fee</b>	250	275	Yes
<b>42 Variance Review Fee</b>	1,238	1,362	Yes

Proposed Rates, Fees and Charges

## MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2020

### Pipeline, Engineering, and Environmental Services

Item	Current Charge	FY 2021 Proposed Charge	Charge Change
<b>43 Shut Down/Charge Water Main Fee</b>	\$ 1,177	\$ 1,177	-
Shut Down/Complex Water Main Fee	2,144	2,144	-
<b>44 Fees for Review and Inspection of Site Work Potentially Impacting WSSC Water Pipelines</b>			
Simple Review	399	399	-
Complex Review / Non-DR Developer Review	2,615	3,138	Yes
Inspection for minor adjustment / Non-DR Developer (per inspection)	266	266	-
<b>45 Relocation Fees</b>			
Relocation Design Review Fee	6,500	DELETE	Yes
Inspection Fee for MOU Project (minimum charge up to 4 hours)	600	600	-
<b>46 Connection Abandonment Fees</b>			
County Roads (Except Arterial Roads) - Water	1,474	1,474	-
County Roads (Except Arterial Roads) - Sewer	1,873	1,873	-
State Roads and County Arterial Roads - Water	1,778	1,778	-
State Roads and County Arterial Roads - Sewer	2,200	2,200	-
<b>47 Chlorination Confirmation Test Fee (per first test)</b>	247	247	-
Re-Test or Additional Tests (per hour)	157	173	Yes
<b>48 Re-Test or Additional Tests Chlorination and Pressure Test (per test)</b>	157	173	Yes
Inspector Overtime (per hour)	206	206	-
<b>49 Review Fee for Additional Reviews of Contract Documents and As-Builts (per hour)</b>	206	206	-
<b>50 Residential Outside Meter Housing Upgrade/Pipe Alteration</b>	6,786	6,805	Yes
<b>51 Utility Erosion and Sediment Control Permit Fees</b>			
Minor Projects (less than 125 linear ft OR less than 42 in. deep and 20 in. width)	0.23	0.26	Yes
Major Projects (per linear foot)	0.34	0.39	Yes
Minimum for Major Projects	124	124	-
<b>52 Right-of Way Release or Subordination Review Fee (per document)</b>	1,236	1,335	Yes
<b>53 Right-of-Way Acquisition and Condemnation for SEP Projects</b>	Reimbursement	Reimbursement	-
<b>54 Environmental Site Review Fee</b>			
With Database Search Submitted by Applicant	331	381	Yes
<b>55 Feasibility Report and Committee Review Fee for On-Site Takeover Projects</b>	1,120	1,288	Yes

MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2020

**Publications and Administrative**

Item	Current Charge	FY 2021 Proposed Charge	Charge Change
<b>56 Fee for Sale of Copies of Plans, Plats, and 200' Reference Maps</b>			
Xerographic bond paper copy (per sheet)	\$ 6	\$ 6	-
<b>57 Fee for Sale of WSSC Water Plumbing and Fuel Gas Code (Plumbing Code)</b>			
Sale of Plumbing Regulation (per book)	42	46	Yes
<b>58 Fees for Sale of Contract Specifications, Contract Specification Books, Drawings, Design Manuals, Standard Details, and General Conditions</b>			
<u>Construction Specifications/Drawings</u>			
Utility Contracts (up to \$20)	11 - 20	11 - 20	-
Facility Contracts (up to \$450)	40 - 450	40 - 450	-
Construction Standard Details	60	66	Yes
Construction General Conditions & Standard Specifications	53	61	Yes
SEP Construction General Conditions & Standard Specifications	53	61	Yes
<u>Procurement Specifications/Drawings/General Conditions</u>			
with Routine Specifications	No charge	No charge	-
with Complex/Voluminous Specifications (up to \$200)	40 - 200	40 - 200	-
<b>59 Charge for Photocopies of WSSC Water Documents</b>			
Readily Available Source Material (per single sided page)	0.30	0.30	-
Certified Copy of Readily Available Source Material (per single sided page)	0.60	0.60	-
Scanning Documents (per single sided page)	0.30	0.30	-
(A reasonable fee may be charged for time in excess of two hours expended by WSSC Water in searching for requested records or preparing such records for inspection and copying.)			
<b>60 Fee for WSSC Water Pipeline Design Manual</b>	90	90	-
<b>61 Sale of WSSD Laws</b>			
Bound Volume	83	83	-
Supplements	42	45	Yes
<b>62 Facilities Design Guideline Fee</b>	40	DELETE	Yes
<b>63 Fee for Transcribed Tape of a Hearing or Meeting</b>	Prevailing fee charged by vendor	Prevailing fee charged by vendor	-

## MISCELLANEOUS FEES AND CHARGES – PROPOSED FOR IMPLEMENTATION JULY 1, 2020

### Other Fees and Charges

Item	Current Charge	FY 2021 Proposed Charge	Charge Change
<b>64 Patuxent Watershed Civil Citation Fee (State Mandated)</b>			
First Offense	\$ 150	\$ 150	-
Each Additional Offense Within Calendar Year	300	300	-
<b>65 Civil Citation Fees - Sediment Control, Theft of Service, and Plumbing Civil Citations (State Mandated)</b>			
First Offense	250	250	-
Second Offense	500	500	-
Third Offense	750	750	-
Each Violation in Excess of Three	1,000	1,000	-
<b>66 Lobbyist Registration Fee (Code of Ethics)</b>	100	110	Yes
<b>67 Dishonored Check Fee &amp; Electronic Payment Fee</b>	46	46	-
<i>(Applies to all dishonored checks and dishonored electronic payments)</i>			
<b>68 Credit Card Surcharge</b>	2% of amount charged	2% of amount charged	-
<i>(Applies to customer payment of any fee/charge by credit card (MasterCard and Visa) other than water and sewer billing.)</i>			
<b>69 Protest Filing Fee</b>	770	847	Yes
<b>70 Preparation of Hold Harmless Agreement Fee</b>	1,228	1,351	Yes
<b>71 Connection Redemption Fee</b>	44	44	-

**SECTION 3**  
**SPENDING AFFORDABILITY AND LONG-RANGE**  
**FINANCIAL PLAN**

# 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 Water's 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, and maintain operating and capital budgets and debt service at prudent and sustainable levels.

The agency 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 Water's work program. The plan is the agency'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 Water'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 2021 Spending Affordability.

- Fiscal Policy Guidelines - Fund Balance - It was assumed for the purpose of preparing the FY 2021 Proposed Budget that, at the end of FY 2020, accumulated net revenues for the water and sewer operating funds would total \$129.4 million. For FY 2021, approximately \$81.6 million will be held in accumulated net revenues in adherence to WSSC Water's reserve policy (see Fiscal Guidelines page 5-1). Fund balance of \$8.0 million will be used to finance IT modernization efforts.
- Revenues - The estimated FY 2021 revenues from water consumption and sewer use charges are \$298.7 million and \$397.0 million, respectively. Water production is assumed to be 164.0 MGD and water purchases are projected to remain the same.
- Capital Budget and Capital Improvements Program (CIP) - 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 2021 Capital Budget is \$606.7 million.
- Debt Service - The debt service estimates for FY 2021 assume that \$189.7 million in Water bonds and \$220.2 million in Sewer bonds will be issued in FY 2021, in addition to repayment of existing debt. The water and sewer issues will be 30-year bonds with an estimated 5.0% net interest rate.

## MAJOR ASSUMPTIONS AND WORKLOAD INDICES (CONTINUED)

- **Reconstruction Debt Service Offset (REDO)** - For FY 2021, \$9.5 million will be transferred from the General Bond Debt Service Fund to the Water and Sewer Operating Funds. The transfer is made to help defray the debt service on funds borrowed to finance water and sewer systems reconstruction activities.
- **Workforce and Compensation** - Funding for employee salary enhancements in a manner coordinated with the Counties is included in the budget.

## ASSUMPTIONS, WORKLOAD INDICES, AND DEMAND PROJECTIONS

The following table presents data used during the Spending Affordability to develop the FY 2021 Proposed Budget.

Workload Data	Actual					Projected	
	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Water and Sewer Combined Rate Increase (%)	5.5	1.0	3.0	3.5	4.5	5.0	7.0
Population to be Served (000s)	1,765	1,774	1,785	1,777	1,801	1,810	1,819
Customer Accounts (000s):	445	448	452	456	460	472	476
Residential (%)	94.4	94.4	94.4	94.4	94.4	94.4	94.4
Commercial and Industrial (%)	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Government (%)	0.8	0.8	0.8	0.8	0.8	0.8	0.8
<b>Water Program:</b>							
Water Supplied (Average MGD)	162.9	164.2	163.1	163.9	161.7	164.0	164.0
Water Mains Maintained (miles)	5,552	5,586	5,647	5,768	5,816	5,877	5,939
Water House Connections Maintained (000s)	453	457	461	465	469	472	475
<b>Sewer Program:</b>							
Sewage Treated (Average MGD)	190.8	184.8	179.0	172.8	218.7	191.6	197.2
Sewer Mains Maintained (miles)	5,424	5,451	5,549	5,578	5,604	5,645	5,687
Sewer House Connections Maintained (000s)	428	432	435	438	441	444	446
<b>House connections added:</b>							
Water	3,671	4,389	3,498	2,931	3,480	2,800	2,900
Sewer	2,834	3,310	2,997	2,500	3,152	2,600	2,600
New Water & Sewer Bond & Notes Debt Issues (\$ in millions)	340	535	455	459	390	386	410
Average Annual Interest Rate for New Bond Issuance (%)	4.05	3.26	4.27	3.97	4.16	3.75	5.00

## LONG-RANGE FINANCIAL PLAN FOR WATER AND SEWER OPERATING FUNDS

(\$ In Thousands)	FY 2020 Approved	FY 2021 Proposed	FY 2022 Projected	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected
New Water and Sewer Debt Issues	384,910	409,922	503,092	495,728	403,775	354,972	379,483
Water and Sewer Combined Rate Increase (Avg)	5.0%	7.0%	8.0%	7.0%	7.0%	6.5%	6.5%
<b>OPERATING REVENUES</b>							
Water and Sewer User Charges	\$ 658,899	\$ 695,711	\$ 752,668	\$ 806,749	\$ 864,729	\$ 922,553	\$ 984,252
Other Sources/Fees:							
Account Maintenance Fees	32,296	32,360	32,426	32,491	32,556	32,621	32,686
Rockville Sewer Use	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Plumbing and Inspection Fees	12,900	14,470	14,904	15,351	15,812	16,286	16,774
Infrastructure Investment Fee	39,331	39,410	39,488	39,567	39,647	39,726	39,805
Miscellaneous	19,800	20,800	21,008	21,218	21,430	21,645	21,861
Interest Income	5,500	10,000	10,000	10,000	10,000	10,000	10,000
<b>Total Operating Revenues</b>	<b>771,726</b>	<b>815,751</b>	<b>873,494</b>	<b>928,376</b>	<b>987,173</b>	<b>1,045,830</b>	<b>1,108,379</b>
<b>OTHER CREDITS AND TRANSFERS</b>							
Use of Fund Balance	11,341	8,000	7,000	6,000	5,000	-	-
Reconstruction Debt Service Offset (REDO)	11,600	9,500	7,400	6,000	-	-	-
SDC Debt Service Offset	4,658	5,772	4,984	4,983	4,982	4,984	4,984
Premium Transfer	2,900	1,500	-	-	-	-	-
Underwriters Discount Transfer	-	2,000	2,000	2,000	2,000	2,000	2,000
Miscellaneous Offset	395	-	-	-	-	-	-
<b>Total Funds Available</b>	<b>\$ 802,620</b>	<b>\$ 842,523</b>	<b>\$ 894,878</b>	<b>\$ 947,359</b>	<b>\$ 999,155</b>	<b>\$ 1,052,814</b>	<b>\$ 1,115,363</b>
<b>OPERATING EXPENSES</b>							
Salaries and Wages	129,676	133,197	139,191	145,454	152,000	158,840	165,988
Heat, Light, and Power	19,436	20,423	21,240	22,089	22,973	23,892	24,847
Regional Sewage Disposal	59,000	58,000	59,160	60,343	61,550	62,781	64,037
All Other	257,185	286,022	291,742	297,577	294,545	291,452	297,281
<b>Total Operating Expenses</b>	<b>465,297</b>	<b>497,642</b>	<b>511,333</b>	<b>525,464</b>	<b>531,068</b>	<b>536,964</b>	<b>552,153</b>
<b>DEBT SERVICE</b>							
Bonds and Notes Principal and Interest	306,307	313,865	336,142	365,610	389,665	415,176	437,884
<b>OTHER TRANSFERS AND ADJUSTMENTS</b>							
Additional and Reinstated	-	-	-	-	-	-	15,926
PAYGO	31,016	31,016	31,016	31,016	56,000	88,000	95,000
<b>Total Expenditures</b>	<b>\$ 802,620</b>	<b>\$ 842,523</b>	<b>\$ 878,491</b>	<b>\$ 922,091</b>	<b>\$ 976,733</b>	<b>\$ 1,040,140</b>	<b>\$ 1,100,963</b>
<b>Net Revenue (Loss)</b>	<b>-</b>	<b>-</b>	<b>16,387</b>	<b>25,269</b>	<b>22,423</b>	<b>12,674</b>	<b>14,400</b>
<b>BEGINNING FUND BALANCE - JULY 1</b>	<b>\$ 140,729</b>	<b>\$ 129,388</b>	<b>\$ 121,388</b>	<b>\$ 130,775</b>	<b>\$ 150,044</b>	<b>\$ 167,467</b>	<b>\$ 180,141</b>
Net Increase (Decrease) in Fund Balance	-	-	16,387	25,269	22,423	12,674	14,400
Use of Fund Balance/Other Adjustments	(11,341)	(8,000)	(7,000)	(6,000)	(5,000)	-	-
<b>ENDING FUND BALANCE - JUNE 30</b>	<b>\$ 129,388</b>	<b>\$ 121,388</b>	<b>\$ 130,775</b>	<b>\$ 150,044</b>	<b>\$ 167,467</b>	<b>\$ 180,141</b>	<b>\$ 194,541</b>
Debt Service Coverage (1.10 is target)	1.00	1.01	1.08	1.10	1.17	1.23	1.27
Debt Service as a % of Total Expenditures (Below 40% is target)	38.2%	37.3%	38.3%	39.7%	39.9%	39.9%	39.8%
Operating Reserve Required 10% Level (\$)	\$77,173	\$81,575	\$87,349	\$92,838	\$98,717	\$104,583	\$110,838
Days Operating Reserve-on-Hand (60-90 days is target)	59.7	53.0	54.7	59.7	62.9	63.5	64.8
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 2022-2026 projections reflect WSSC Water'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 2021 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 and PAYGO) divided by the debt service on bonds and notes.
- Operating Reserve represents 10.0% of Operating Revenue.

**SECTION 4**  
**EXPLANATION OF BUDGET AND SUMMARIES**

# EXPLANATION OF BUDGET AND SUMMARIES

## BUDGET FORMULATION

Maryland State law requires that WSSC Water prepare capital and operating budgets each fiscal year. The FY 2021 Proposed Budget 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. WSSC Water's annual audited financial statements 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 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 Water budget are held in each County before February 15. The agency considers comments and testimony given at the public hearings before the proposed budget is transmitted to the Counties.

State law requires that WSSC Water transmit its proposed budget to the Counties by March 1 of each year. The County Councils, 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 agency 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 & Capital Improvements Program**

Preparation of the six-year Capital Improvements Program (CIP) spans 13 months, beginning in May of each year. After a preliminary staff-level review in June, the General Manager and key management personnel review all CIP project submissions in July to assess the justification for new projects, the criticality and priority of on-going projects, and the overall financial impacts of these projects on spending affordability.

## BUDGET FORMULATION (CONTINUED)

### Capital Budget & Capital Improvements Program (Continued)

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 WSSC Water'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. WSSC Water 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 CIP, 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 agency then has 30 days to adopt these changes before the beginning of the fiscal year on July 1.

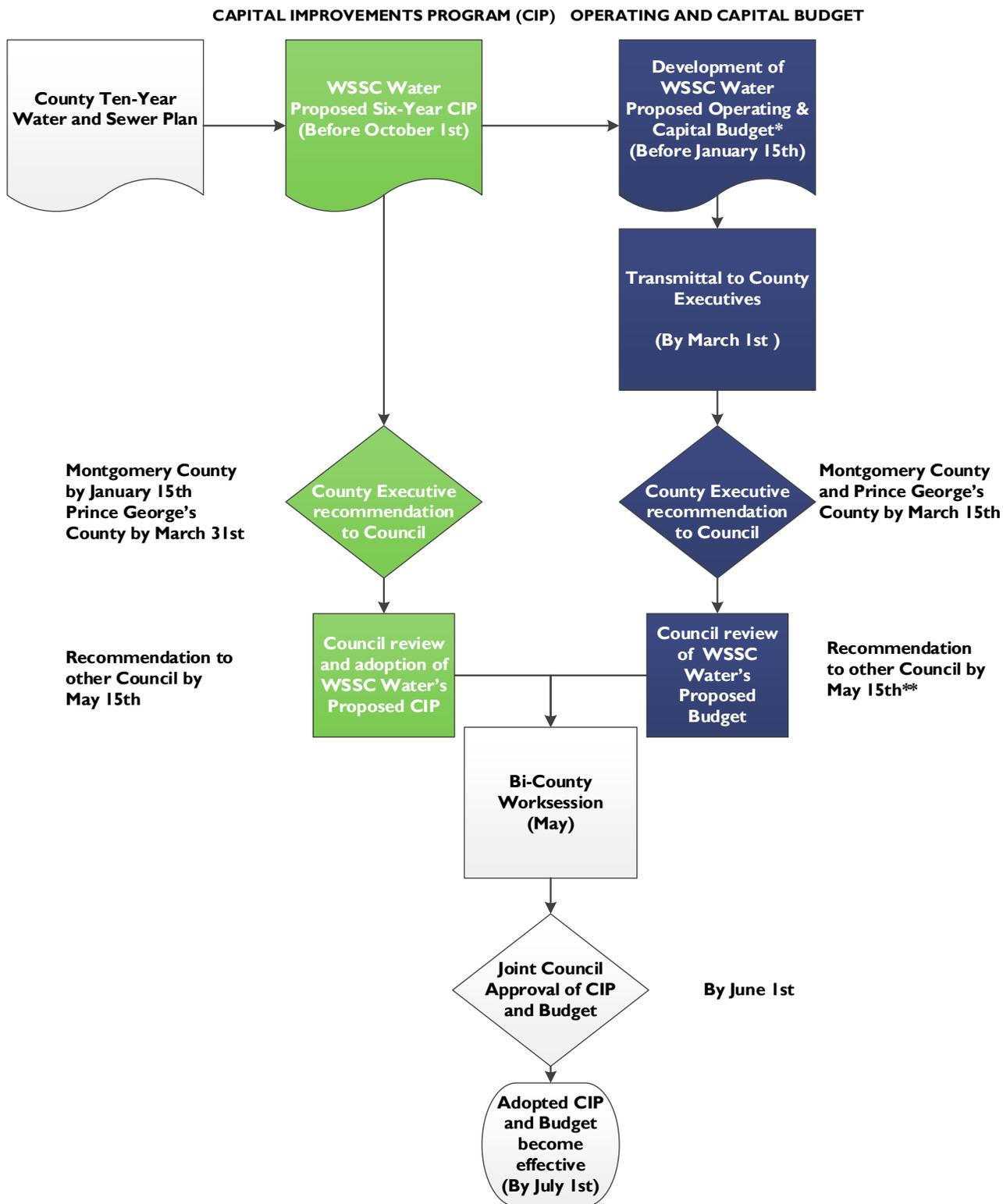
### Operating Budget

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 WSSC Water'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 CIP, 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 agency'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 WSSC Water must contribute to the capital and operating expenses of the Blue Plains Advanced Wastewater Treatment Plant (Blue Plains), budget planning by the District of Columbia Water and Sewer Authority (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 WSSC Water's capital and operating budgets.

# WSSC WATER BUDGET & CAPITAL IMPROVEMENT PROGRAM PROCESS – FLOW CHART



\*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 FY 2021 Proposed Budget consists of six separate funds, three in the capital budget (the Water Supply Bond, Sewage Disposal Bond, and General Construction Bond Funds) and three in the operating budget (the Water Operating, Sewer Operating, and General Bond Debt Service 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.

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 Water 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 (FFBC) and Deferred House Connections (H/C) Charges

### Water

WSSC Water issues Water Supply Bonds (Capital Fund) and collects System Development Charges (SDC) 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 - are used to pay for operating and maintaining these water facilities, and to pay the debt service (principal and interest that must be repaid) on Water Supply Bonds.

## FUND STRUCTURE (CONTINUED)

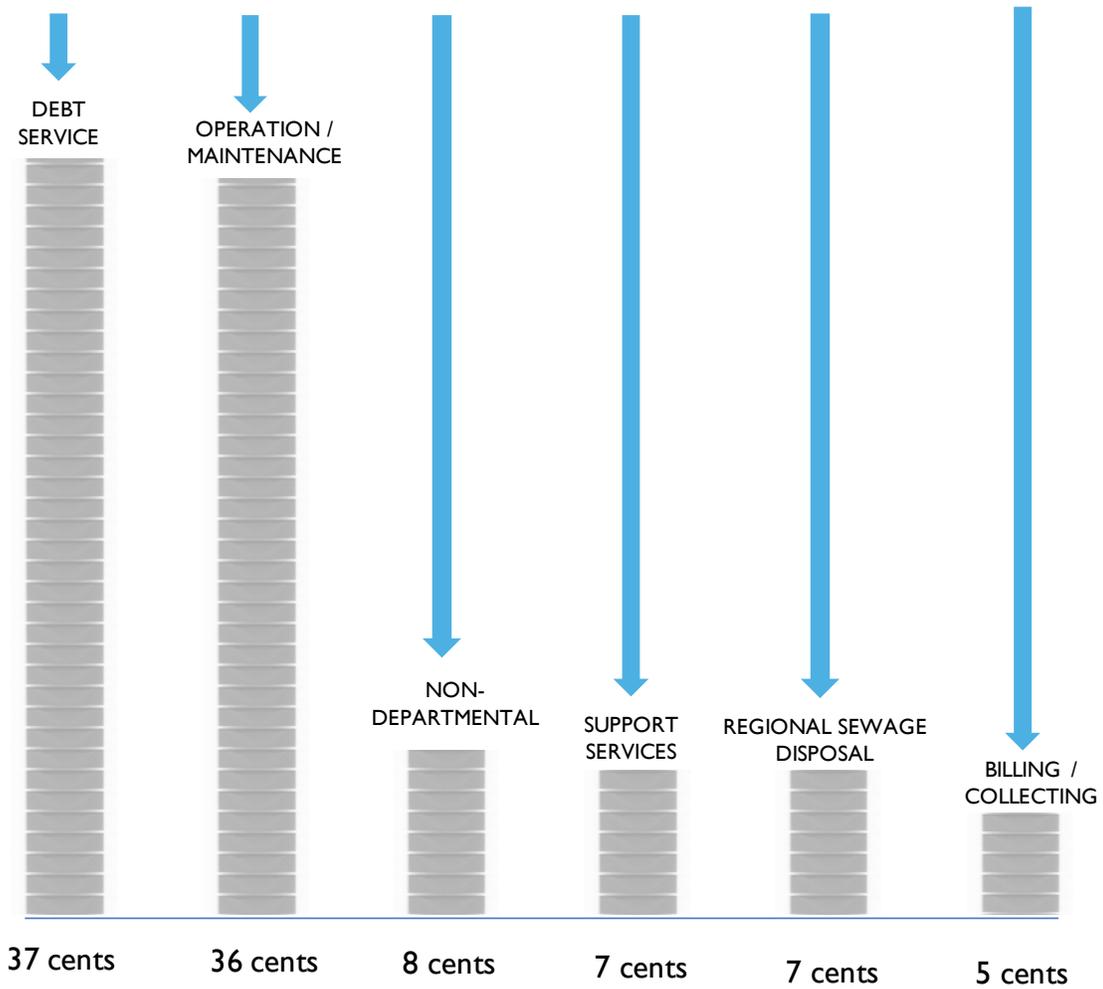
### **Sewer**

WSSC Water issues Sewage Disposal Bonds (Capital Fund), collects SDC's, 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 DC Water for construction at Blue Plains), and improvements or modifications to these facilities. Sewer operating revenues - customer payments for sewer bills - are used to pay for operating and maintaining these facilities, and to pay the debt service on Sewage Disposal Bonds. Sewer use charges are generally based upon metered water use.

### **General Construction**

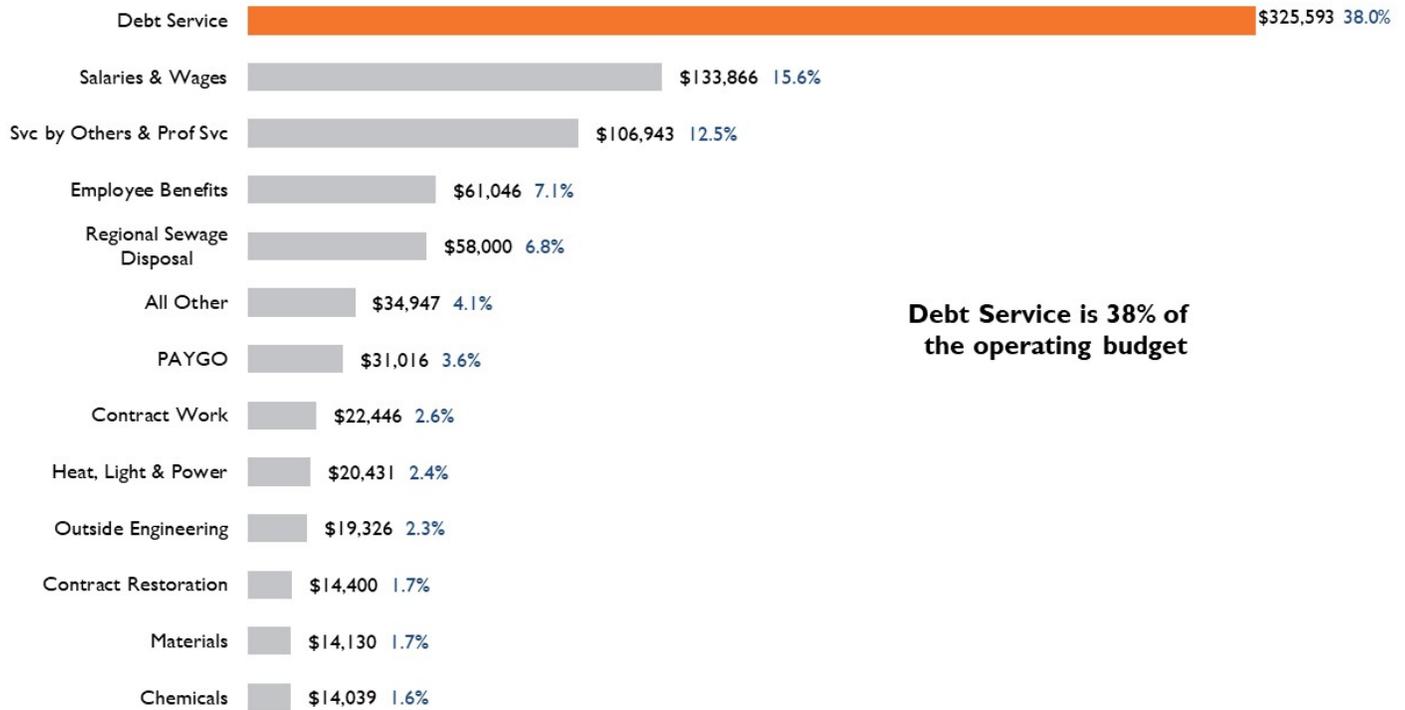
WSSC Water issues General Construction Bonds (Capital Fund) to pay for the construction of minor water and sewer lines (water distribution lines less than 15 inches in diameter, and sewer lines less than 14 inches in diameter) and support facilities. General Bond Debt Service Fund revenues - customer payments for FFBC - 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.

# FY 2021 PROPOSED BUDGET – HOW EACH DOLLAR OF A WATER & SEWER BILL IS SPENT



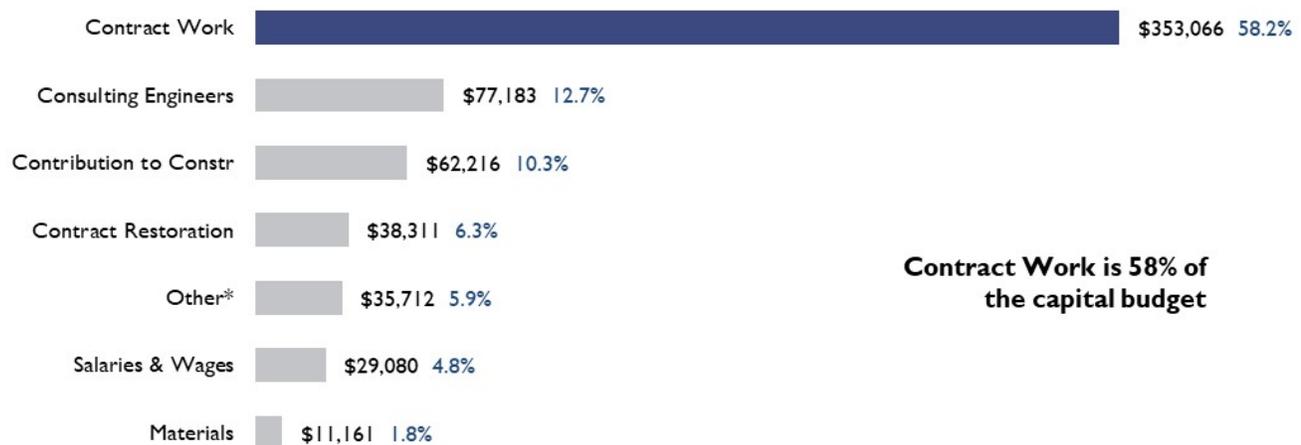
## FY 2021 PROPOSED BUDGET – BY MAJOR EXPENSE CATEGORIES

### Total Operating Budget = \$856,183 (\$ in thousands)



Includes Water Operating, Sewer Operating, and General Bond Debt Service

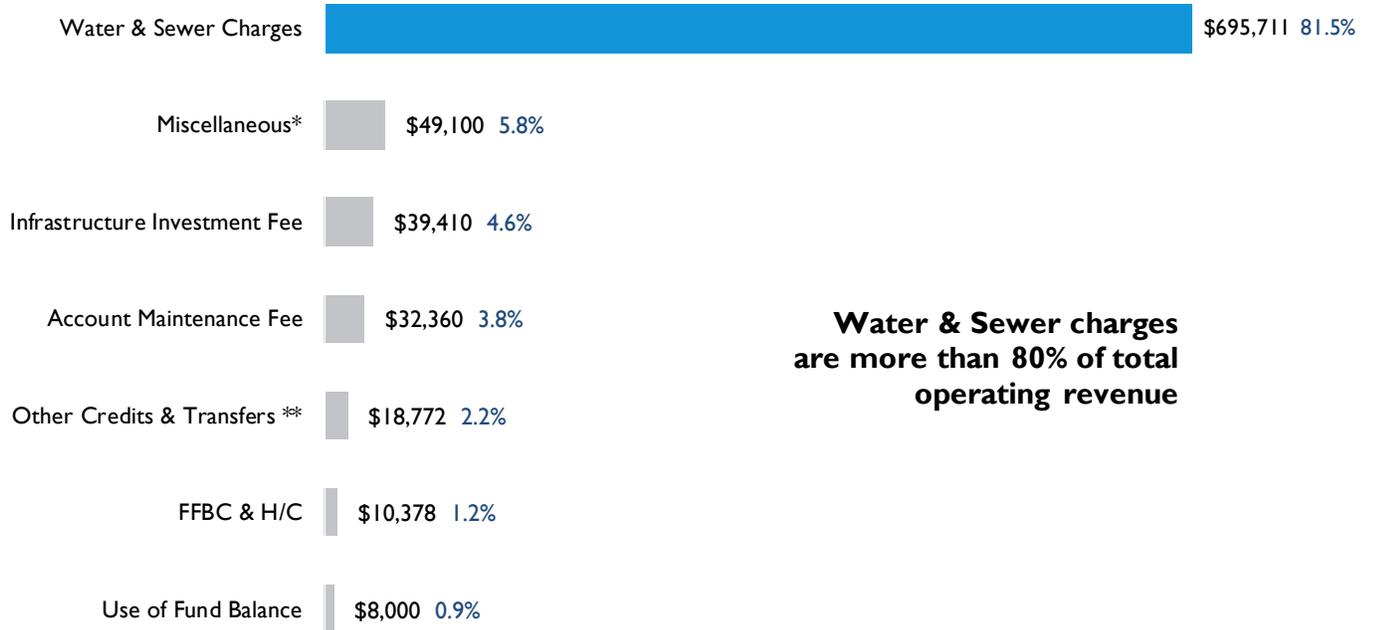
### Total Capital Budget = \$606,729 (\$ in thousands)



\*Includes Land, Professional Services, Water Meters, and Non-Departmental Accounts.  
Includes Water Supply, Sewage Disposal, and General Construction Bond

FY 2021 PROPOSED BUDGET – BY SOURCES

**Total Operating Revenue = \$853,731 (\$ in Thousands)**

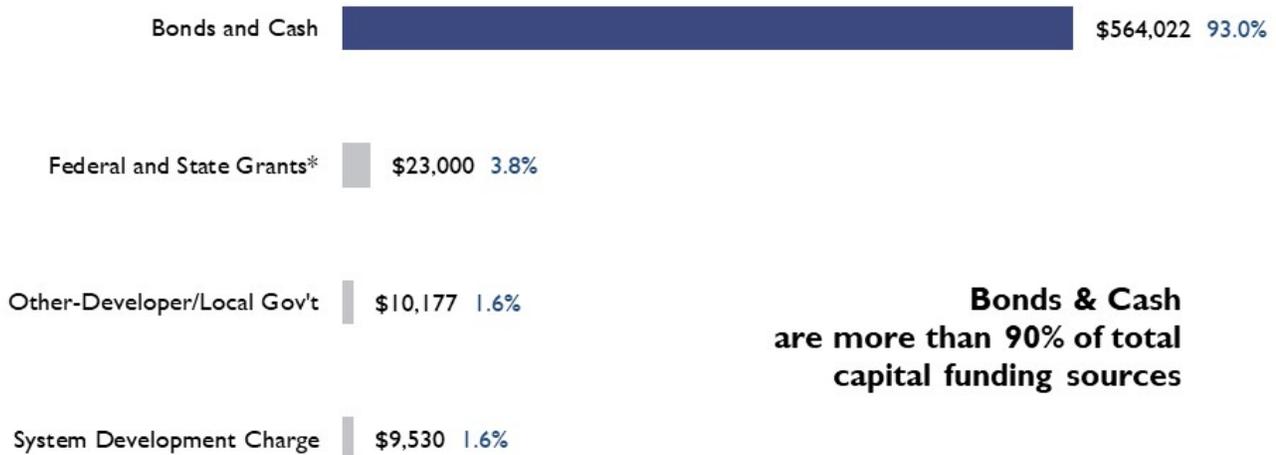


**Water & Sewer charges are more than 80% of total operating revenue**

\* Plumbing and inspection fees; Rockville sewer use, interest income, and other miscellaneous fees

\*\* Includes Reconstruction Debt Service Offset (REDO), SDC Debt Service Offset, Underwriter’s Discount Transfer, and Premium Transfer

**Total Capital Funding Sources = \$606,729 (\$ in Thousands)**

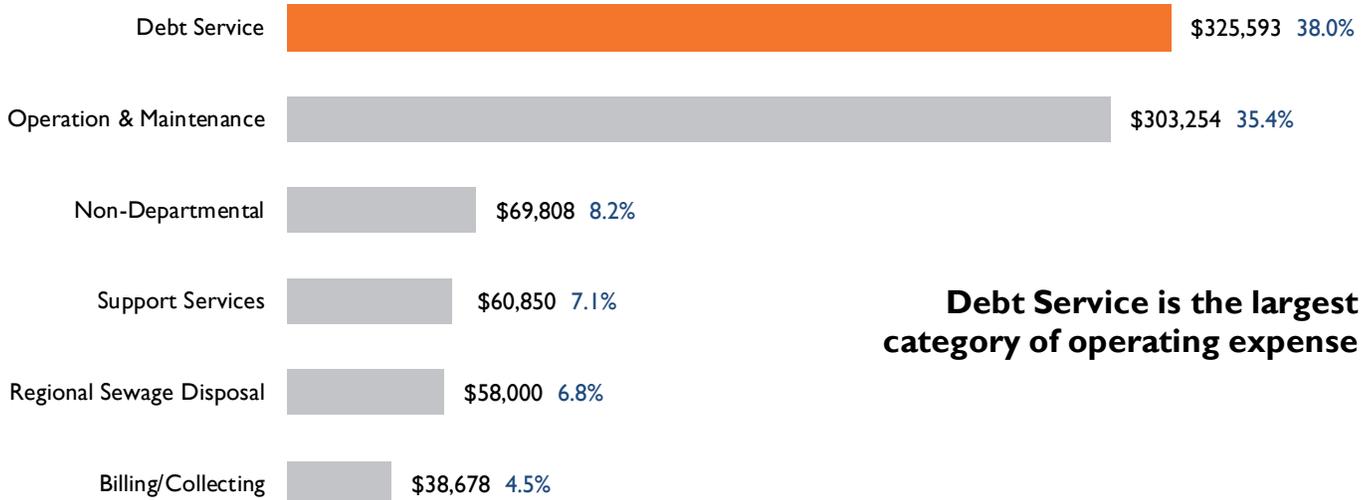


**Bonds & Cash are more than 90% of total capital funding sources**

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

FY 2021 PROPOSED BUDGET – BY FUND USES

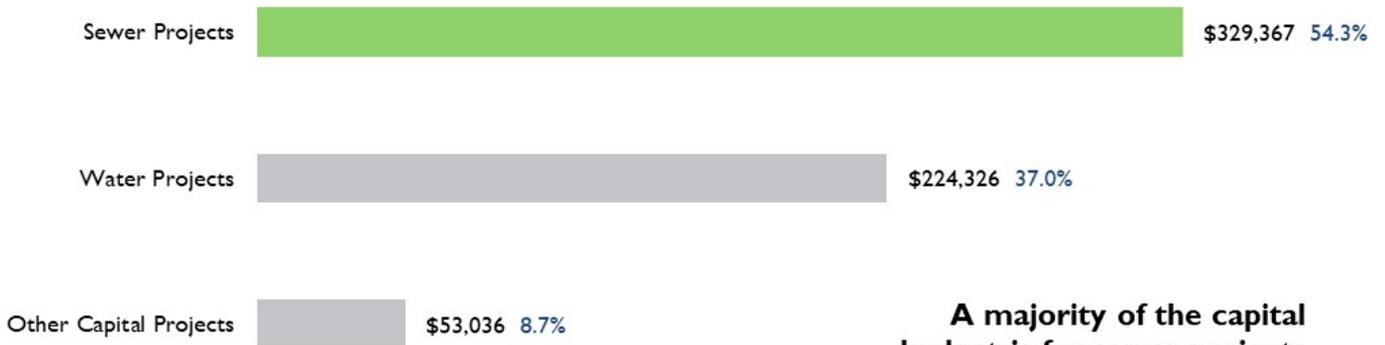
**Total Operating Uses = \$856,183 (\$ in Thousands)**



**Debt Service is the largest category of operating expense**

Includes Water Operating, Sewer Operating, and General Bond Debt Service

**Total Capital Uses = \$606,729 (\$ in Thousands)**



**A majority of the capital budget is for sewer projects**

Includes Water Supply, Sewage Disposal, and General Construction Bond

FY 2020 - FY 2021 SUMMARY OF OPERATING REVENUE & EXPENSE BY BUDGET, MAJOR SOURCE CATEGORY AND FUND TYPE

(\$ in Thousands)	Water Operating		Sewer Operating		General Bond Debt Service		Totals			
	FY 2020	FY 2021	FY 2020	FY 2021	FY 2020	FY 2021	FY 2020	FY 2021	%	
	Approved	Proposed	Approved	Proposed	Approved	Proposed	Total	Total	Chg	
<b>OPERATING REVENUES</b>										
Water Consumption Charges	\$ 280,997	\$ 298,759	\$ -	\$ -	\$ -	\$ -	\$ 280,997	\$ 298,759	6.3%	
Sewer Use Charges	-	-	377,902	396,952	-	-	377,902	396,952	5.0%	
Front Foot Benefit & House Connections	-	-	-	-	12,507	10,378	12,507	10,378	-17.0%	
Account Maintenance Fees	16,471	16,503	15,825	15,857	-	-	32,296	32,360	0.2%	
Infrastructure Investment Fee	20,059	20,099	19,272	19,311	-	-	39,331	39,410	0.2%	
Plumbing and Inspection Fees	7,470	8,380	5,430	6,090	-	-	12,900	14,470	12.2%	
Rockville Sewer Use	-	-	3,000	3,000	-	-	3,000	3,000	0.0%	
Miscellaneous	10,600	10,500	9,200	10,300	260	230	20,060	21,030	4.8%	
Interest Income	2,000	1,000	3,500	9,000	500	600	6,000	10,600	76.7%	
Subtotal Operating Revenues	337,597	355,241	434,129	460,510	13,267	11,208	784,993	826,959	5.3%	
<b>OTHER CREDITS AND TRANSFERS</b>										
Use of Fund Balance	5,784	4,080	5,557	3,920	-	-	11,341	8,000	-29.5%	
Other	-	-	-	-	11,600	9,500	11,600	9,500	-18.1%	
Reconstruction Debt Service Offset	4,000	4,845	7,600	4,655	(11,600)	(9,500)	-	-	-	
SDC Debt Service Offset	3,540	2,731	1,118	3,041	-	-	4,658	5,772	23.9%	
Premium Transfer	1,337	692	1,563	808	-	-	2,900	1,500	-48.3%	
Underwriter's Discount Transfer	-	848	-	1,152	-	-	-	2,000	100.0%	
Miscellaneous Offset	214	-	181	-	-	-	395	-	-100.0%	
Subtotal Other Credits and Transfers	14,875	13,196	16,019	13,576	-	-	30,894	26,772	-13.3%	
<b>Total Funds Available</b>	<b>352,472</b>	<b>368,437</b>	<b>450,148</b>	<b>474,086</b>	<b>13,267</b>	<b>11,208</b>	<b>815,887</b>	<b>853,731</b>	<b>4.6%</b>	
<b>OPERATING EXPENSES</b>										
Salaries & Wages	63,707	72,921	65,968	60,276	459	668	130,134	133,865	2.9%	
Heat, Light, and Power	10,808	11,671	8,628	8,752	8	8	19,444	20,431	5.1%	
Regional Sewage Disposal	-	-	59,000	58,000	-	-	59,000	58,000	-1.7%	
All Other	131,218	140,872	125,967	145,150	730	1,256	257,915	287,278	11.4%	
Subtotal Operating Expenses	205,734	225,464	259,563	272,178	1,197	1,932	466,494	499,574	7.1%	
<b>DEBT SERVICE</b>										
Bonds and Notes Principal	84,505	72,416	111,564	104,606	10,182	8,796	206,251	185,818	-9.9%	
Bonds and Notes Interest	48,711	60,588	61,527	76,255	3,394	2,932	113,632	139,775	23.0%	
Subtotal Debt Service	133,216	133,004	173,091	180,861	13,576	11,728	319,883	325,593	1.8%	
Total Operating Expenses & Debt Service	338,950	358,468	432,654	453,039	14,773	13,660	786,377	825,167	4.9%	
<b>OTHER TRANSFERS</b>										
PAYGO	13,522	9,969	17,494	21,047	-	-	31,016	31,016	0.0%	
<b>Total Expenditures</b>	<b>352,472</b>	<b>368,437</b>	<b>450,148</b>	<b>474,086</b>	<b>14,773</b>	<b>13,660</b>	<b>817,393</b>	<b>856,183</b>	<b>4.7%</b>	
<b>Net Revenue (Loss)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(1,506)</b>	<b>(2,452)</b>	<b>(1,506)</b>	<b>(2,452)</b>	<b>62.8%</b>	
<b>Fund Balance - July 1</b>	<b>\$ 16,320</b>	<b>\$ 10,536</b>	<b>\$ 124,409</b>	<b>\$ 118,852</b>	<b>\$ 34,229</b>	<b>\$ 21,123</b>				
Net Increase (Decrease) in Fund Balance	-	-	-	-	(1,506)	(2,452)				
Use of Fund Balance	(5,784)	(4,080)	(5,557)	(3,920)	(11,600)	(9,500)				
<b>Fund Balance - June 30</b>	<b>\$ 10,536</b>	<b>\$ 6,456</b>	<b>\$ 118,852</b>	<b>\$ 114,932</b>	<b>\$ 21,123</b>	<b>\$ 9,171</b>				

FY 2020 - FY 2021 CAPITAL FUNDING & COSTS BY BUDGET, MAJOR SOURCE CATEGORY AND FUND TYPE

(\$ in Thousands)	Water Supply Bond		Sewer Disposal Bond		General Construction Bond		Totals		
	FY 2020	FY 2021	FY 2020	FY 2021	FY 2020	FY 2021	FY 2020	FY 2021	%
	Approved	Proposed	Approved	Proposed	Approved	Proposed	Total	Total	Chg
<b>FUNDS PROVIDED</b>									
Bonds and Notes Issues/Cash on Hand	\$ 254,490	\$ 236,345	\$ 278,305	\$ 255,555	\$ 16,012	\$ 41,106	\$ 548,807	\$ 533,006	-2.9%
PAYGO	13,522	9,969	17,494	21,047	-	-	31,016	31,016	0.0%
Anticipated Contributions:									
Federal & State Grants	-	1,500	22,291	21,500	-	-	22,291	23,000	3.2%
System Development Charge	16,418	8,057	5,298	1,473	-	-	21,716	9,530	-56.1%
Others	2,826	1,356	10,990	8,811	880	10	14,696	10,177	-30.7%
<b>Total Funds Provided</b>	<b>287,256</b>	<b>257,227</b>	<b>334,378</b>	<b>308,386</b>	<b>16,892</b>	<b>41,116</b>	<b>638,526</b>	<b>606,729</b>	<b>-5.0%</b>
<b>CONSTRUCTION COSTS</b>									
Salaries & Wages	15,065	16,774	8,828	8,914	3,261	3,392	27,154	29,080	7.1%
Contract Work	163,664	143,327	219,668	206,567	-	3,172	383,332	353,066	-7.9%
Consulting Engineers	30,810	33,641	24,759	20,778	2,504	22,763	58,073	77,182	32.9%
All Other	77,717	63,485	81,123	72,127	11,127	11,789	169,967	147,401	-13.3%
<b>Total Construction Costs</b>	<b>\$ 287,256</b>	<b>\$ 257,227</b>	<b>\$334,378</b>	<b>308,386</b>	<b>\$ 16,892</b>	<b>\$ 41,116</b>	<b>\$ 638,526</b>	<b>\$ 606,729</b>	<b>-5.0%</b>

## SUMMARY OF CHANGE IN FUND BALANCE

Fund (\$ in Thousands)	Fiscal Year	Fund Balance - July 1st	Operating Revenues	Operating Expenses <sup>1</sup>	Other Credits and Transfers	Use of Fund Balance	Fund Balance - June 30th	Fund Balance Increase/ (Decrease)	% Change
Water Operating	FY 2020	\$ 16,320	\$ 337,597	\$ (352,472)	\$ 14,875	\$ (5,784)	\$ 10,536	\$ (5,784)	-35.4%
	FY 2021	10,536	355,241	(368,437)	13,196	(4,080)	6,456	(4,080)	-38.7%
Sewer Operating	FY 2020	124,409	434,129	(450,148)	16,019	(5,557)	118,852	(5,557)	-4.5%
	FY 2021	118,852	460,510	(474,086)	13,576	(3,920)	114,932	(3,920)	-3.3%
General Bond Debt Service	FY 2020	34,229	13,267	(14,773)	-	(11,600)	21,123	(13,106)	-38.3%
	FY 2021	21,123	11,208	(13,660)	-	(9,500)	9,171	(11,952)	-56.6%

<sup>1</sup>Includes debt service.

## EXPLANATION OF FY 2021 SIGNIFICANT CHANGES TO FUND BALANCE

### Water and Sewer Operating Funds

The FY 2021 Proposed Budget ending fund balances are lower than the projected FY 2020 ending balance for the combined Water and Sewer Operating Funds. The decrease is primarily due to planned use of fund balance to modernize WSSC Water's IT infrastructure, streamline business processes, and help lay the foundation for the Advanced Metering Infrastructure project.

### General Bond Debt Service Fund

The FY 2021 Proposed Budget ending fund balance is 56.6% lower than the projected FY 2020 ending balance for the General Bond Debt Service Fund. Revenues for this fund are derived from FFBC and H/C. Developers now build these types of mains and lines and is expected to continue in the future which will decrease this fund. 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 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Approved	FY 2021 Proposed
<b>OPERATING EXPENSES</b>							
Salaries & Wages	\$ 100,118	\$ 104,030	\$ 109,059	\$ 117,144	\$ 125,100	\$ 129,676	\$ 133,197
Heat, Light & Power	24,229	22,000	22,099	20,033	19,683	19,436	20,423
Regional Sewage Disposal	54,485	50,068	53,946	58,331	54,809	59,000	58,000
All Other	203,934	214,607	224,975	242,540	268,103	257,185	286,022
Subtotal	382,766	390,705	410,079	438,048	467,695	465,297	497,642
Debt Service							
Principal Payments	153,968	134,171	141,817	151,057	153,565	196,069	177,022
Interest Payments	68,013	76,190	94,918	106,445	121,819	110,238	136,843
Subtotal	221,981	210,361	236,735	257,502	275,384	306,307	313,865
<b>Other Transfers:</b>							
Working Capital Reserve Transfer	2,300	6,300	6,524	-	-	-	-
PAYGO	19,996	18,821	21,495	10,065	15,754	31,016	31,016
<b>Total Expenses</b>	<b>\$ 627,043</b>	<b>\$ 626,187</b>	<b>\$ 674,833</b>	<b>\$ 705,615</b>	<b>\$ 758,833</b>	<b>\$ 802,620</b>	<b>\$ 842,523</b>

#### General Bond Debt Service Fund

(\$ In Thousands)	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Approved	FY 2021 Proposed
<b>OPERATING EXPENSES</b>							
Salaries & Wages	\$ 604	\$ 723	\$ 689	\$ 701	\$ 751	\$ 459	\$ 668
Heat, Light & Power	-	-	-	-	-	8	8
All Other	618	1,018	858	813	825	730	1,256
Subtotal	1,222	1,741	1,547	1,514	1,576	1,197	1,932
Debt Service							
Principal Payments	18,961	14,102	9,259	12,672	13,337	10,182	8,796
Interest Payments	7,080	4,009	4,751	4,922	3,934	3,394	2,932
Subtotal	26,041	18,111	14,010	17,594	17,271	13,576	11,728
<b>Total Expenses</b>	<b>\$ 27,263</b>	<b>\$ 19,852</b>	<b>\$ 15,557</b>	<b>\$ 19,108</b>	<b>\$ 18,847</b>	<b>\$ 14,773</b>	<b>\$ 13,660</b>

### Capital Budget

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

(\$ In Thousands)	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Approved	FY 2021 Proposed
<b>CAPITAL EXPENSES</b>							
Salaries & Wages	\$ 27,502	\$ 29,390	\$ 30,229	\$ 27,717	\$ 27,293	\$ 27,154	\$ 29,080
Contract Work	307,160	379,093	328,614	225,086	202,735	383,332	353,066
Consulting Engineers	45,246	45,626	53,763	41,718	51,872	58,073	77,182
All Other	184,249	196,090	144,379	180,695	104,895	169,967	147,401
<b>Total Expenses</b>	<b>\$ 564,157</b>	<b>\$ 650,199</b>	<b>\$ 556,985</b>	<b>\$ 475,216</b>	<b>\$ 386,795</b>	<b>\$ 638,526</b>	<b>\$ 606,729</b>

**SECTION 5**  
**FISCAL GUIDELINES**

# FISCAL GUIDELINES

## INTRODUCTION

Fiscal guidelines correspond to the practices of WSSC Water with respect to revenues, expenditures and debt management. Fiscal planning, generally done within the context of the Operating Budget and the Capital Budget/Capital Improvements Program (CIP), 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 Water's service population and requirements for services change.

## FISCAL CONTROL

### **Structurally Balanced Budget**

WSSC Water prepares a structurally balanced budget. Budgeted expenditures equal projected revenues from water and sewer services inclusive of recurring net transfers and any mandatory contributions 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 Water 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 Water management.

### **Pay-As-You-Go (PAYGO)**

In FY 2014, WSSC Water began to issue debt for 30 years as opposed to the prior practice of 20 years. This change included the introduction of PAYGO. WSSC Water 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 Water 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 agency has the best possible knowledge of the impacts of contemplated actions and emerging conditions.

### **Budgetary Control**

Budgetary control over WSSC Water is exercised following a joint review by Montgomery County and Prince George's County Governments through the annual review and approval of Operating and Capital Budgets. WSSC Water's Budget Division administers and 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 Water will ensure the conduct of timely, effective and periodic audit coverage of all financial records and actions of WSSC Water, its officials and employees in compliance with local, state and federal regulations and laws.

## EXPENDITURES AND ALLOCATION OF COSTS

### **Content of Budgets**

WSSC Water 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; PAYGO (revenues applied to the CIP for debt avoidance or for projects which are not debt-eligible); and presumed costs of operating new or expanded facilities. Details on the CIP can be found at <https://www.wsscwater.com/fin>.

### **Expenditure Growth**

The Prince George's County Council adopted Resolution No. CR-12-1994 and the Montgomery County Council adopted Resolution No. 12-1558 requiring WSSC Water, 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. WSSC Water's 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 Water, 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, approve the operating and capital budget, as well as the six-year CIP.

### **Expenditure Reduction**

WSSC Water 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.

## EXPENDITURES AND ALLOCATION OF COSTS (CONTINUED)

### **Private Provision of Services**

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

### **Procurement**

WSSC Water 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 Water's best interest and is the most cost-effective means of procuring goods and services. The Strategy and Innovation Office helps 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 Water's internal needs via spend analytics, process gap-analysis and defining stakeholder requirements. The benefits to the agency 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 Water's priorities within the context of current and expected environmental, social and governance expectations.

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 seek to achieve the agency's mission through alignment with its strategic priorities.

Budget planning 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 Water offers financial assistance with water and sewer bills under two programs: the Customer Assistance Program (CAP) and the Water Fund.

The 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.

## SHORT-TERM FISCAL AND SERVICE GUIDELINES (CONTINUED)

Additional factors and events that shaped the budget environment include:

- Flat or declining water consumption revenues
- Compliance with Consent Decrees
- Holistic rehabilitation to address infiltration and inflow in the Piscataway Basin
- Addressing aging infrastructure
- Uncertainty regarding potential changes in environmental regulations

As part of the FY 2021 Spending Affordability Guideline process, WSSC Water staff originally recommended a water and sewer rate increase of 8.0%. Montgomery and Prince George's Counties supported a 7.0% rate increase. In order to reconcile FY 2021 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 agency emphasized that WSSC Water 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 2021 in order to remain within approved budget limitations.

To cope with these fiscal challenges while ensuring that WSSC Water's priorities are met, the agency 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
- Use of the Supply Management process to identify savings in operating and capital procurements
- Expansion of innovation programs to improve efficiency and reduce costs

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

These short-term fiscal guidelines and actions have been critical in shaping WSSC Water's FY 2021 Proposed Budget. Together with the long-term guidelines elsewhere in this section, the short-term guidelines described here have allowed WSSC Water to construct a balanced, fiscally responsible budget consistent with current economic and fiscal realities while achieving the agency'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, of the 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 both Counties' 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 Water's responsibilities and the public's demand for clean water
- 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 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 Water'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
- Involve a long-term capital asset in accordance with accounting principles

### **Guideline on WSSC Water 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 (debt service). The annual debt service on outstanding bonds is paid from WSSC Water's operating funds.

## CURRENT CIP FISCAL GUIDELINES (CONTINUED)

Paying principal and interest on debt is the first claim on WSSC Water's revenues. By virtue of prudent financial management and the long-term strength of the regional economy, WSSC Water has maintained the highest quality rating of its general obligation bonds, AAA/Aaa/AAA. This top rating by Wall Street rating agencies assures WSSC Water 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 agency must not exceed the legislated allowable level of the total assessable tax base for all property assessed for County tax purposes within the Washington Suburban Sanitary District (WSSD), in conformance with state law governing WSSC Water. Bonds and notes issued by the agency 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 credit rating, WSSC Water 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 Water'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% of the WSSC Water's water and sewer expenditures. This measure excludes expenditures in the General Construction Bond Debt Service fund
- 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 Water'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 planning purposes.

### **Guideline on Terms for General Obligation Bond Issues**

WSSC Water'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, all of the debt service is paid from its water consumption charges, sewer usage charges, Ready-to-Serve-Charges, front foot benefit charges, assessments and other available funds. WSSC Water 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.

## CURRENT CIP FISCAL GUIDELINES (CONTINUED)

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, different repayment terms may be used.

### **Guideline on Other Forms of Debt**

The use of variable rate debt allows the agency 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 agency's capital program. The agency has established a General Obligation Multi-Modal Bond Anticipation Note Program whereby the notes may bear interest in a weekly mode.

In deciding to utilize this note program, the agency 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 agency participates in the state 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 projects. When advantageous to the agency, 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 Water'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 agency evaluates and displays the funding source and the impact of the operating budget on the project description form. In evaluating the cost of construction or acquiring assets funded with debt, the agency budgets to ensure that funding is available for debt service and the subsequent annual operation and maintenance costs of the asset.

### **Guideline on New Development and Growth**

WSSC Water funds capital facilities needed to accommodate growth with developer contributions and through the System Development Charge (SDC). This charge is reviewed annually by the County Councils. SDC funds are used to pay for new treatment, transmission 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 WSSC Water to impose, a System Development Charge. This is a charge on new development to pay for that part of WSSC Water's CIP needed to accommodate growth in WSSC Water's customer base.

During periods where SDC revenue may be inadequate to fully fund growth projects on a PAYGO basis, WSSC Water bonds are issued with the related debt service expense repaid from future SDC revenues.

## WSSC WATER MANAGEMENT

### **Productivity**

WSSC Water 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 Water 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 Water 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 Water 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 Water will assure the security of benefits for employees, retirees and beneficiaries, as well as the solvency of the Employees' Retirement Plan (Plan) of WSSC Water by providing responsibility for investment management of the Plan's assets through the Board of Trustees (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.

### **Retiree Other Post-Employment Benefits Trust**

The Retiree Other Post-Employment Benefits Trust (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 Water 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 agency appoints Trustees responsible for the investment management of the assets for the exclusive benefit of the Plan participants. Current Trustees are three employees in key positions that are appointed by the agency. The administration of the Trust has been delegated to the Executive Director of the WSSC Water Employees' Retirement Plan.

## GUIDELINES FOR REVENUES AND PROGRAM FUNDING

### **Diversification of Revenues**

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

### **One-Time Revenues**

WSSC Water 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.

### **Ready-to-Serve Charges/Fixed Fees**

WSSC Water'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 with meter size 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 agency's water and sewer pipe reconstruction programs from the approved CIP.

## GUIDELINES FOR REVENUES AND PROGRAM FUNDING (CONTINUED)

### **Intergovernmental Revenues**

WSSC Water will seek a fair share of available State and Federal financial support unless conditions attached to that assistance are contrary to WSSC Water's interest. WSSC Water 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 Water will initiate certain fees and charges rather than fund them through general ratepayer revenues. Such fees and charges are instituted for inspection services, permits and licenses, and other services. WSSC Water annually analyzes expenditures for services to ensure that related fees and charges defray the cost of providing these services.

### **Cash Management and Investments**

The objective of WSSC Water'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**

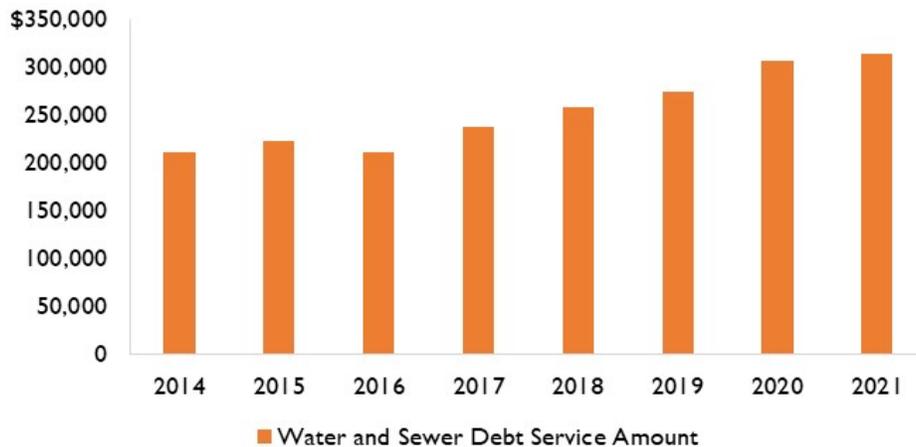
WSSC Water will maintain an unrestricted fund balance (operating reserve) of at-least 10% of water and sewer fund operating revenues. In addition, WSSC Water will budget for 60-90 days of available operating reserves on-hand.

Because WSSC Water 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 Water's reserve fund guideline establishes which 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)
- Providing liquidity for operations in the event of a revenue shortfall

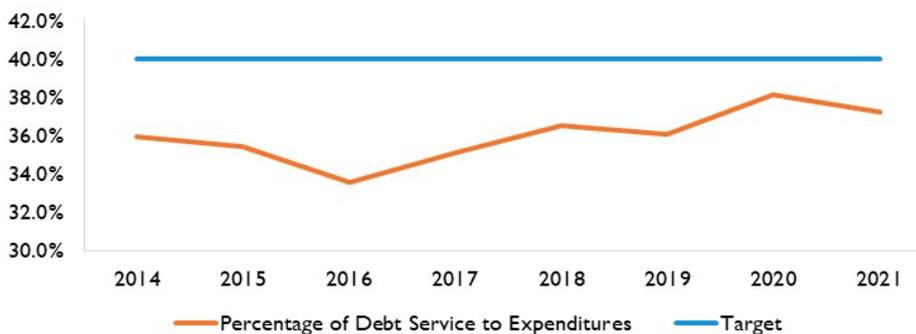
## WATER AND SEWER DEBT SERVICE



**Debt service continues to increase.**

The largest expenditure in the FY 2021 proposed water and sewer operating budget is debt service. A major factor contributing to the increase is the ongoing water and sewer rehabilitation programs aimed at addressing WSSC Water’s aging infrastructure. These programs make up 41% of the FY 2021 Proposed CIP budget and highlights can be found in the FY 2021 to FY 2026 Proposed CIP at <https://www.wsscwater.com/fin>.

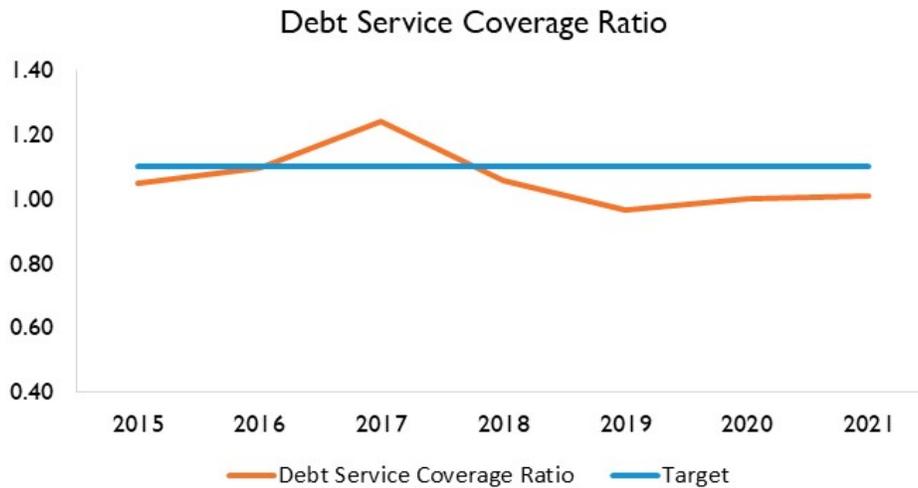
Debt Service as a Percentage of Expenditures



**Debt service remains below the targeted 40% of operating expenditures.**

As part of the long-term financial plan WSSC Water has a target benchmark of keeping water and sewer debt service below 40% of total water and sewer expenditures. The above chart shows the agency continues to be fiscally responsible in meeting this target. For FY 2021, the proposed debt service percentage is 37% of operating costs.

## WATER AND SEWER DEBT SERVICE (CONTINUED)



**Projected FY 2021  
debt service  
coverage ratio is  
1.01.**

The Debt Service Coverage Ratio (DSCR) is an important benchmark used in the measurement of the cash flow available to pay current debt obligations. WSSC Water's target DSCR is 1.10. Although the projected ratio for FY 2021 is at 1.01, the ratio is currently projected to be on target at 1.10 in FY 2023. The FY 2021 ratio reflects flat water consumption, increased debt service costs and increased Piscataway Basin infrastructure rehabilitation costs.

Below is the formula for calculating DSCR where Net Operating Income equals Operating Revenue minus Operating Expenses, excluding Debt Service and PAYGO.

$$\text{DSCR} = \frac{\text{Net Operating Income}}{\text{Total Debt Service}}$$

# **SECTION 6**

## **REVENUES**

## REVENUES

### INTRODUCTION

This section provides assumptions, including discussions of the regional economy. Revenue sources used to fund WSSC Water's FY 2021 Proposed Budget incorporate policy recommendations. WSSC Water currently recovers necessary revenues through both fixed and volumetric charges.

### ECONOMIC OUTLOOK

#### **Policy Assumptions**

Revenue and resource estimates presented are the result of the recommended policies of WSSC Water's FY 2021 Proposed Budget. Even though it is assumed that these policies will be effective during the budget period, subsequent agency 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. 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 WSSC Water's research, the organization's FY 2021 population served will increase by 0.7% from FY 2020. The agency assumes that the population will grow annually at 0.5% beyond FY 2021.

As of June FY 2021, WSSC Water is estimated to have 475,000 active customer accounts. 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 increased 18.9% in 2018. Prince George's County residential construction increased 4.9% in 2017 but decreased 23.3% in 2018. Complete 2019 data is not yet available.

### Commercial Real Estate – Building Permit Activity



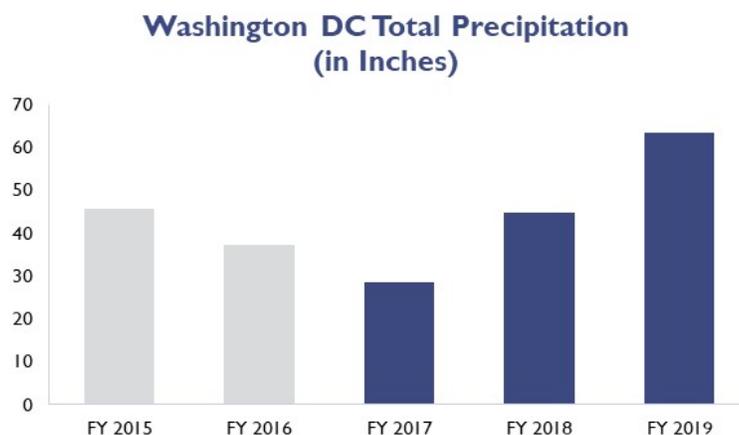
The construction of new commercial units in Montgomery County increased 14.8% in 2017, followed by a 12.9% decrease in 2018. Prince George's County's commercial building permits increased 5.9% in 2017 but decreased 32.6% in 2018. Complete 2019 data is not yet available.

### Weather Conditions

Weather influences both the supply of and demand for water. Higher rainfall levels generally 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 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.

## ECONOMIC OUTLOOK (CONTINUED)

The Washington, DC area experienced a 56.8% increase in precipitation during FY 2018 compared to FY 2017, but FY 2018 water production increased 0.5% due to record cold weather driven water main breaks. FY 2019 precipitation increased an additional 41.3%, contributing to the decrease in FY 2019 water production to 161.7 MGD compared to FY 2018 production of 163.9 MGD.



### 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 WSSC Water'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.

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. Montgomery and Prince George's Counties' economies experienced positive economic performance during calendar year 2018. Prince George's County has more than 16,000 businesses employing greater than 320,000 while Montgomery County has more than 32,000 businesses employing over 470,000. Prince George's County 2018 unemployment slightly exceeded the Labor Market Area average, while 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. The UM Capital Region Medical Center, the new regional hospital, is currently under construction in Prince George's County.

The Maryland Bureau of Revenue Estimates anticipates the continued slowing of underlying economic growth due several factors including the reduction of federal government, information and financial jobs, restraint on demand due to trade barriers, and the impact of wage and employment growth occurring primarily in lower wage industries. In addition, the work force's changing age composition has and will continue to restrain revenue growth through at least 2040. As a result, both counties' budgets are experiencing challenging lags between revenue growth and expenditure growth.

In calendar 2018 Prince George's County saw both job growth and increasing home prices due to declining inventory. The county's population growth and unemployment rate have been slightly less than the overall rate for Maryland. Per capital personal income growth has also run lower than the state average. Prince George's County's overall fiscal outlook is cautiously optimistic, noting the county has not yet returned to pre-recession growth rates.

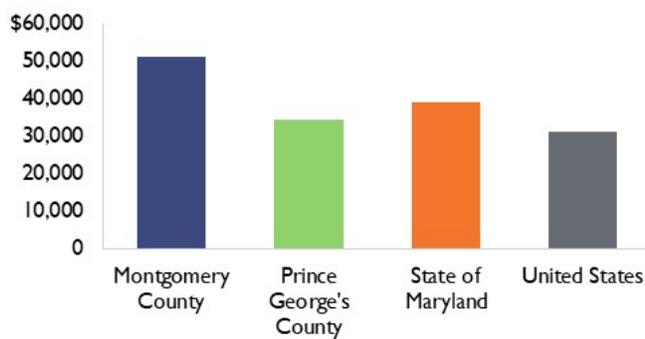
## ECONOMIC OUTLOOK (CONTINUED)

During 2018, Montgomery County increased resident employment, reduced its unemployment rate, saw existing home median prices increase, and increased residential construction. Existing home sales and retail sales decreased. Montgomery County's 2018 unemployment rate remained the lowest in the past 10 years. The median age of county residents continues to increase, following the trend of the past 50 years. Montgomery County's Department of Finance forecasts continued economic improvement.

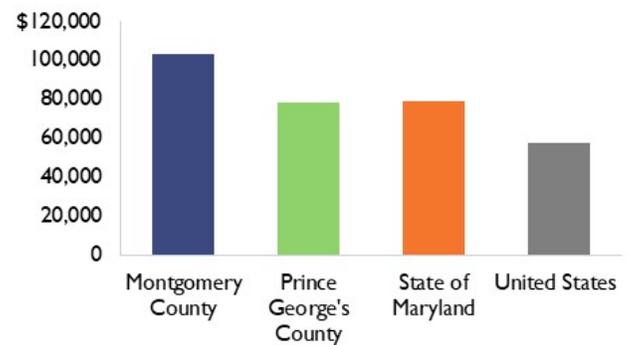
### Per Capita Income and Median Household Income Statistics

According to the U.S. Bureau of the Census, 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.

Per Capita Income 2017 Estimate



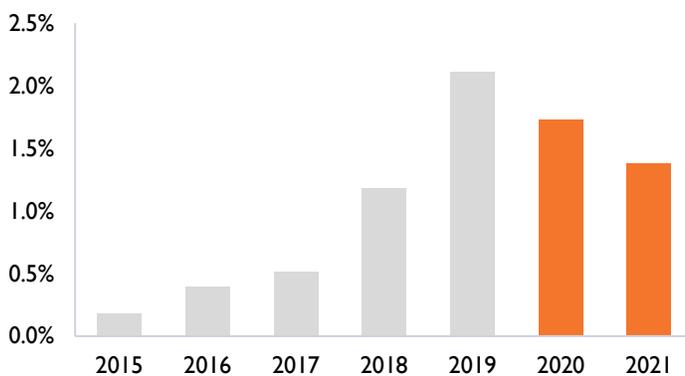
Median Household Income 2017



Additional economic information on Montgomery County and Prince George's County are found in the Appendix A.

### Interest Rates

Yield on Investment Income



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. Commencing December 2015, the FOMC increased rates to a high of 2.25% in December 2018. Subsequently, the FOMC reduced the rate 3 times to 1.50% as of October 2019. WSSC Water's short-term investments are highly correlated with the federal funds rate.

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

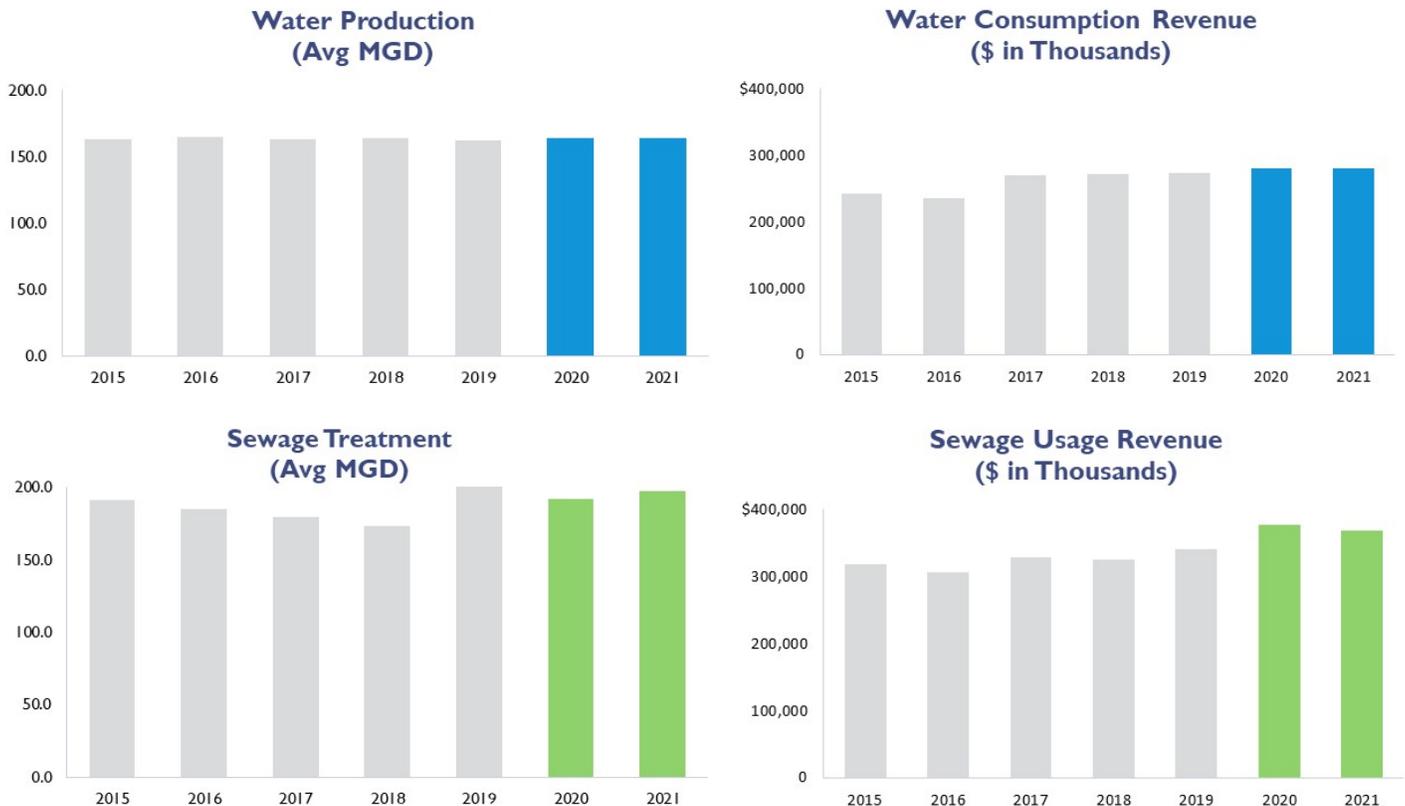
Revenues from the Water and Sewer Operating Funds are estimated at \$815.8 million in FY 2021. This is a \$44.0 million increase, or 5.7%, from the FY 2020 Approved Budget, primarily attributed to an increase in water and sewer use charges.

### 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 Water pays the District of Columbia Water and Sewer Authority (DC Water) for the agency’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 2021, water production is assumed to remain at the budgeted FY 2020 level of 164.0 MGD, and sewer treatment is projected to increase from FY 2020’s 191.6 MGD to 197.2 MGD, based on the latest projections.



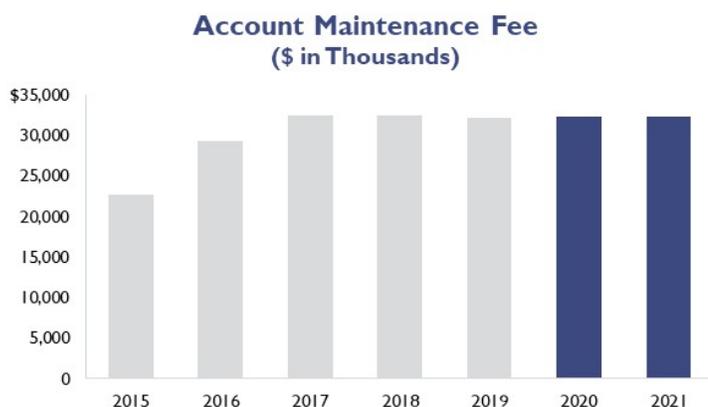
Water Consumption Charges – revenue is derived from the sale of water by applying an increasing rate schedule per 1,000 gallons of use. The rate charged for each account is based upon the average daily consumption during each billing period. The range of FY 2021 rates is \$5.41 and \$8.25 per 1,000 gallons of water consumed.

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

**Sewer Usage Charges** – revenue is 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 during each billing period. The range of FY 2021 rates is \$7.31 and \$13.44 per 1,000 gallons of metered water. Customers who only receive sewage disposal services are charged at a flat rate of \$135.00 per quarter.

The estimated FY 2021 revenues from water consumption and sewer use charges are \$298.8 million and \$397.0 million, respectively. A 7.0% revenue increase has been incorporated to help pay for debt service, maintenance and infrastructure renewal. Additional information on rates can be found in the Proposed Rates, Fees and Charges part of this document (Section 2).

### 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 FY 2021 Proposed Budget assumes a 0.2% increase due to customer growth, with \$32.4 million in FY 2021 revenue.

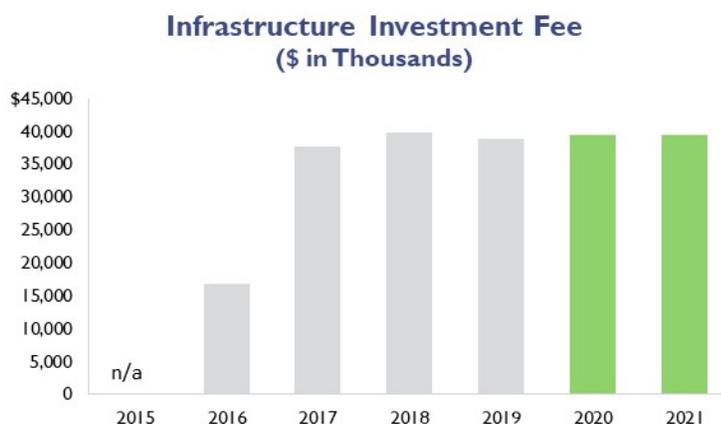
The AMF currently in place was developed in a 2014 study which resulted in a revised fee in FY 2016 based on meter size.

### Infrastructure Investment Fee

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

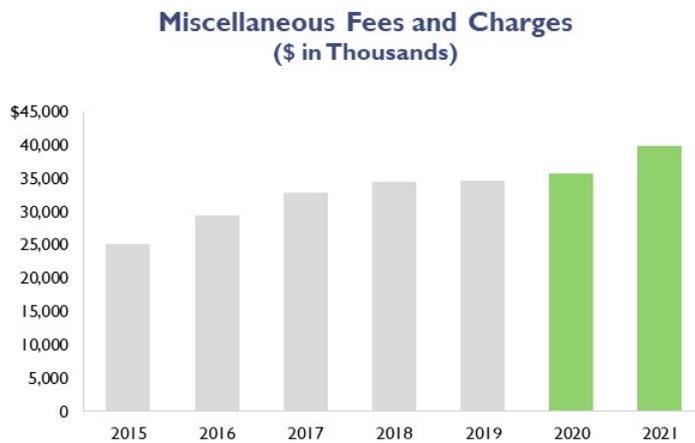
The IIF was implemented in FY 2016 with the fee phased-in over two fiscal years. WSSC Water has held the fee at the FY 2017 level through FY 2021. The fee is based on meter size.

The FY 2021 Proposed Budget assumes a 0.2% increase due to customer growth, resulting in \$39.4 million in FY 2021 revenue.



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

**Miscellaneous Fees and Charges**

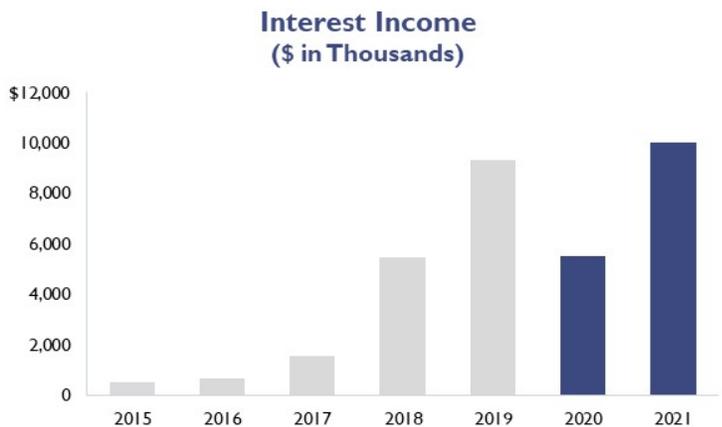


Miscellaneous revenue is derived from: plumbing and inspection fees; Rockville sewer use; late payment of bills; repair of agency property (e.g., sewer mains) damaged by individuals; relocation of WSSC Water’s sewer lines and/or facilities for the benefit of other parties (e.g., state or county departments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

The FY 2021 Proposed Budget assumes Miscellaneous Fees and Charges will increase 7.2% from FY 2020 Approved Budget, resulting in \$38.3 million in FY 2021 revenue.

**Interest Income**

Interest income includes pooled and non-pooled investments, plus interest income from other funds. WSSC Water operates an investment pool, directed by an investment manager, adhering to the agency’s adopted investment policy. WSSC Water earned an average of 1.2% in interest income on its short-term portfolio for FY 2018 with an increase to 2.1% in FY 2019, and an estimated 1.7% in FY 2020, and 1.4% in FY 2021. This assumption is based on a relatively steady interest environment reflected throughout FY 2020, with a 50% probability of one additional rate cut throughout calendar 2020.



## REVENUES AND TRANSFERS IMPACT ON DEBT SERVICE

### Front Foot Benefit Charges and House Connection Assessments

Front Foot Benefit Charge (FFBC) revenues are derived from charges assessed on 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. Developers now install the water mains and sewers previously built by WSSC Water for new builds. As a result, property owners of newly developed sites do not pay FFBC to WSSC. In addition, as the bonds associated with older sites expire, the impacted property owners cease paying WSSC Water the associated FFBC, thereby permanently reducing the agency's FFBC revenues. The continued decline in FFBC revenue is anticipated as bonds mature.

House Connections (H/C) revenues are derived from deferred or amortized house connection payments to cover the cost of building lines from WSSC Water's 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 FY 2021 Proposed Budget assumes that FFBC and H/C revenue will decrease 17.0% from FY 2020 Approved Budget.

### 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 Water's 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 FY 2021 Proposed Budget assumes that the Use of Fund Balance Transfer amount is programmed at \$8.0 million. WSSC Water will continue to strategically use Fund Balance to maintain affordability and to cover one-time expenses.

## REVENUES AND TRANSFERS IMPACT ON DEBT SERVICE (CONTINUED)

### **Debt Service Offsets**

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 Water 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.

For the FY 2021 Proposed Budget, the SDC offset is programmed at \$5.8 million.

The 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.

For the FY 2021 Proposed Budget, REDO will be \$9.5 million.

## REVENUE TRENDS

### Operating Budget

#### Water & Sewer - Combined Operating Funds

(\$ In Thousands)	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Approved	FY 2021 Proposed
<b>OPERATING REVENUES</b>							
Water Consumption Charges	\$ 242,867	\$ 235,805	\$ 270,134	\$ 271,735	\$ 273,753	\$ 280,997	\$ 298,759
Sewer Use Charges	319,488	307,264	329,332	325,879	341,496	377,902	396,952
Account Maintenance Fee	22,753	29,247	32,508	32,473	32,116	32,296	32,360
Infrastructure Investment Fee	-	16,700	37,561	39,847	39,278	39,331	39,410
Plumbing and Inspection Fees	9,129	10,430	11,178	12,141	13,594	12,900	14,470
Rockville Sewer Use	3,186	3,142	2,907	3,223	3,106	3,000	3,000
Miscellaneous	17,169	18,417	18,823	19,117	20,913	19,800	20,800
Interest Income	532	696	1,540	5,478	9,306	5,500	10,000
<b>Total Operating Revenues</b>	<b>615,124</b>	<b>621,701</b>	<b>703,983</b>	<b>709,893</b>	<b>733,562</b>	<b>771,726</b>	<b>815,751</b>
<b>Other Credits and Transfers:</b>							
Use of Fund Balance	30,193	20,721	24,450	227	11,580	11,341	8,000
Reconstruction Debt Service Offset	10,000	8,500	9,800	7,700	12,500	11,600	9,500
SDC Debt Service Offset	1,167	728	2,609	2,396	5,551	4,658	5,772
Premium Transfer	-	-	-	-	-	2,900	1,500
Underwriters Discount Transfer	-	-	-	-	-	-	2,000
Miscellaneous Offset	-	-	-	-	-	395	-
<b>Total Funds Available</b>	<b>\$ 656,484</b>	<b>\$ 651,650</b>	<b>\$ 740,842</b>	<b>\$ 720,216</b>	<b>\$ 763,193</b>	<b>\$ 802,620</b>	<b>\$ 842,523</b>

#### General Bond Debt Service Fund

(\$ In Thousands)	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Approved	FY 2021 Proposed
<b>OPERATING REVENUES</b>							
Front Foot Benefit & House Connection	\$ 29,971	\$ 24,925	\$ 22,039	\$ 19,191	\$ 15,809	\$ 12,507	\$ 10,378
Interest Income	62	87	383	865	1,127	500	600
Miscellaneous	384	312	294	285	268	260	230
<b>Total Operating Revenues</b>	<b>30,417</b>	<b>25,324</b>	<b>22,716</b>	<b>20,341</b>	<b>17,204</b>	<b>13,267</b>	<b>11,208</b>
<b>Other Credits and Transfers:</b>							
Reconstruction Debt Service Offset	10,000	8,500	9,800	7,700	12,500	11,600	9,500
Use of Fund Balance	(10,000)	(8,500)	(9,800)	(7,700)	(12,500)	(11,600)	(9,500)
<b>Total Funds Available</b>	<b>\$ 30,417</b>	<b>\$ 25,324</b>	<b>\$ 22,716</b>	<b>\$ 20,341</b>	<b>\$ 17,204</b>	<b>\$ 13,267</b>	<b>\$ 11,208</b>

**SECTION 7**  
**CAPITAL BUDGET**

# CAPITAL BUDGET

## INTRODUCTION

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 has conformed to the Spending Affordability Guidelines (SAG) established by both County governments every year since 1994.

The WSSC Water Capital Budget is comprised of two main expenditure categories: the Capital Improvements Program (CIP) and Information Only projects.

### **Capital Improvements Program**

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. WSSC Water 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 on the next page. 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 projects 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 projects that make up the largest expenditures in this section are as follows: the water and sewer system reconstruction programs, the Engineering Support Program, the Advanced Metering Infrastructure project and the Other Capital Programs. The reconstruction programs provide for the systematic replacement and rehabilitation of small diameter water mains and sewer lines. The Engineering Support Program represents a consolidation of a diverse group of smaller, non-CIP sized, projects that support our existing facilities. The Advanced Metering Infrastructure project was first approved in the FY 2013 CIP and provides for the implementation of a system-wide automated meter reading infrastructure system. Ongoing due diligence on outstanding project issues will be completed before the project implementation contract award is transmitted to the Commissioners for approval at the July 2020 Commission meeting. The Other Capital Programs 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. Detailed project information is provided in the Information Only projects section of the CIP document. A list of the Information Only projects is shown in the expenditure summary on the next page.

## CAPITAL BUDGET EXPENDITURE SUMMARY

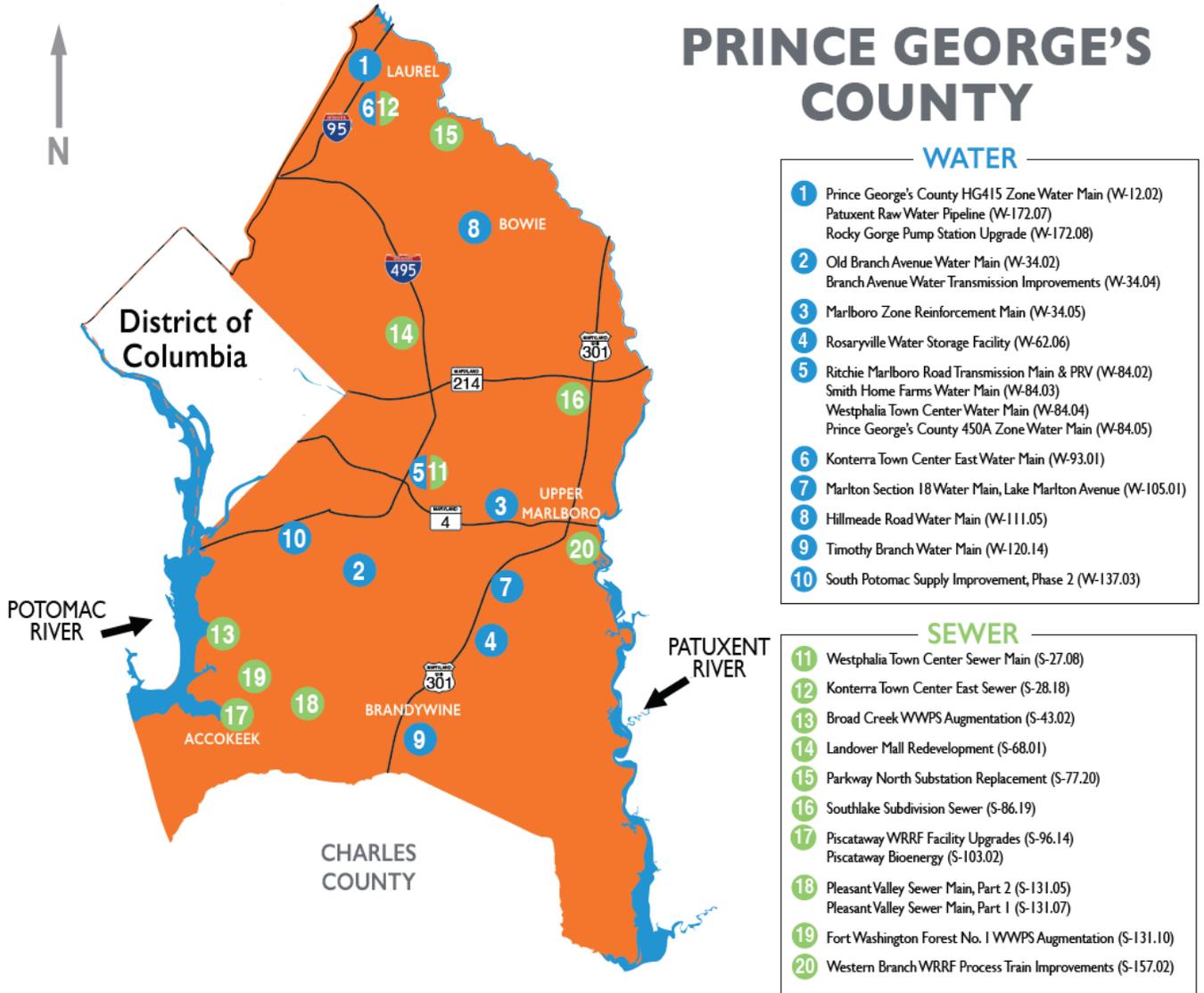
The total FY 2021 Proposed Capital Budget is \$606.7 million. This is comprised of \$375.1 million in CIP projects, \$241.3 million in Information Only projects and an adjustment of \$9.6 million to account for expenditures funded via developer contributions for projects with a signed Service Extension Permit (SEP). The FY 2021 Proposed Capital Budget is \$31.8 million lower than the FY 2020 Approved Capital Budget.

(\$ in Thousands)	FY 2020 Approved	FY 2021 Proposed
<b>Capital Improvements Program:</b>		
Montgomery County Water	\$ 7,295	\$ 1,821
Prince George's County Water	27,636	36,484
Bi-County Water	76,983	85,314
Montgomery County Sewer	7,881	9,637
Prince George's County Sewer	55,649	38,756
Bi-County Sewer	207,876	203,061
<b>Total Capital Improvements Program</b>	<b>\$ 383,320</b>	<b>\$ 375,073</b>
<b>Information Only:</b>		
Water Reconstruction Program	75,784	72,494
Sewer Reconstruction Program	64,684	55,495
Laboratory Division Building Expansion	-	1,276
Engineering Support Program	18,000	18,000
Energy Performance Program	5,898	7,595
Water Storage Facility Rehabilitation Program	3,000	1,650
Specialty Valve Vault Rehabilitation Program	1,119	1,132
Advanced Metering Infrastructure	17,577	20,687
Other Capital Programs	68,862	62,660
D'Arcy Park North Relief Sewer	282	290
<b>Total Information Only</b>	<b>\$ 255,206</b>	<b>\$ 241,279</b>
<b>Total Capital Expenditures</b>		
	<b>\$ 638,526</b>	<b>\$ 616,352</b>
Adjustment for Developer Contributions		(9,623)
<b>Total Capital Budget</b>		
	<b>\$ 638,526</b>	<b>\$ 606,729</b>



# MAP OF PROJECTS IN PRINCE GEORGE'S COUNTY

The map below shows the location of the CIP projects within Prince George's County. It does not include projects with multiple jobsites, such as the reconstruction programs. For more information on all of the CIP projects within Prince George's County, please refer to the CIP document available on our website at <https://www.wsscwater.com/fin>.



## HIGHLIGHTED PROJECTS

Below are five highlighted projects from the FY 2021 Proposed Capital Budget. Two of these projects are new, two are major ongoing projects and one is a large project that is nearing completion. Each of these projects contribute to WSSC Water's mission 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.

### Potomac Water Filtration Plant Consent Decree Program



This project provides for the planning, design and construction of short-term and long-term capital improvements at the Potomac Water Filtration Plant (WFP) to allow WSSC Water to meet the new discharge limitations identified in the Potomac WFP Consent Decree. The objective of the consent decree is to reduce the amount of solids discharged from the plant to the Potomac River on a daily basis. Preliminary planning work for the Potomac WFP Consent Decree Program began in FY 2016. Short-term operational and capital improvements are required to be completed by April 1, 2020. The deadline for completion of the long-term capital

improvements is January 1, 2026. The total estimated cost for the Potomac WFP Consent Decree Program is \$202.0 million. A portion of this project will be financed by Green bonds.

### Regional Water Supply Resiliency

This is a new project for FY 2021 that is being undertaken by WSSC Water on behalf of itself and its Interstate Commission for the Potomac River Basin (ICPRB) partners. The Regional Water Supply Resiliency project includes the planning, preliminary engineering, community outreach and coordination with elected officials for a new regional raw water supply reservoir and raw water conveyance system to serve the long-range water supply needs of the Washington metropolitan region. A new regional reservoir is needed to mitigate against drought and contamination events in the Potomac River, which could curtail or halt withdrawal from the river for several days or even months. The justification for this project is based in part on two independent studies, one conducted by the Metropolitan Washington Council of Governments (MWCOG) and one performed by the ICPRB. Both concluded that additional off-river raw water reservoir capacity was needed for resiliency purposes. The project will include the performance of a business case to evaluate conveyance alternatives and provide a recommendation for subsequent preliminary design.



## HIGHLIGHTED PROJECTS (CONTINUED)

### Laboratory Division Building Expansion



The Laboratory Division Building Expansion is a new project that provides for the planning, design and construction of a 12,405 square-foot expansion to the Consolidated Laboratory Facility (CLF). The expansion is necessary to accommodate the increased analytical workload, ensure that all data meets requirements set forth by the regulators and to improve the safety of WSSC Water's employees and customers. The CLF is a Maryland Department of the Environment (MDE) certified laboratory constructed in 2000 to meet the original laboratory program of a maximum of 500,000 tests per year. During the past 19

years, WSSC Water has experienced a significant increase in the analytical workload, number of employees and number of instruments, and also added new functions with the creation of the Water Quality Division. The historical workload of 500,000 tests per year is expected to grow to over 750,000 tests per year in the coming years.

Currently, WSSC Water depends on subcontract laboratories for critical and regulatory analysis that cannot be handled in-house due to space, infrastructure and instrument constraints. Lack of control and supervision by qualified WSSC Water staff on the regulatory samples tested in subcontract laboratories has resulted in errors in the past that could potentially lead to a citation/violation for WSSC Water. Additionally, increased analytical time involved with subcontract analysis may delay response to critical water contamination events, which could jeopardize the safety of WSSC Water's customers. An MDE laboratory audit recommended having separate rooms for analyzing wastewater and drinking water microbiological samples.

### Piscataway Bioenergy

This project will develop a comprehensive program for the engineering, design, construction, maintenance and monitoring and verification necessary to add sustainable energy equipment and systems to produce biogas and electricity at the Piscataway Water Resource Recovery Facility (WRRF). It will also enhance existing operating conditions and reliability while continuing to meet all permit requirements, and ensure a continued commitment to environmental stewardship at all WSSC Water WRRF sites. The scope of work includes, but is not limited to, the addition of anaerobic digestion equipment, thermal hydrolysis pretreatment equipment, gas systems, effluent disinfection systems and combined heat and power generation systems.



## HIGHLIGHTED PROJECTS (CONTINUED)

### **Piscataway Bioenergy (Continued)**

The Environmental Protection Agency (EPA) is urging wastewater utilities to utilize this commercially available technology (anaerobic digestion) to produce power at a cost below retail electricity, displace purchased fossil fuels for thermal needs, produce renewable fuel for green power programs, enhance power reliability for the WRRF to prevent sanitary sewer overflows (SSO), reduce biosolids production, improve the health of the Chesapeake Bay and to reduce greenhouse gas emissions and other air pollutants. The environmental benefits of this project are estimated as follows: recover approximately two megawatts of renewable energy from wastewater biomass, reduce greenhouse gas production by 11,800 tons per year, reduce biosolids output by 50-55%, reduce lime demand by 4,100 tons per year, maintain permitted nutrient load limits to the Chesapeake Bay, reduce five million gallons per year of grease discharge to sewers and produce pathogen-free Class A biosolids for beneficial re-use.

A portion of this project will be financed by low-interest loans through MDE's Water Quality Financing Administration's Water Quality Revolving Loan Fund Program.

### **Broad Creek Wastewater Pumping Station Augmentation**



This project provides for modifications to the Broad Creek Wastewater Pumping Station (WWPS) and associated force main that convey Broad Creek sewerage basin flows to the Piscataway WRRF. The Broad Creek WWPS Facility Plan included assessments of engineering, economic, environmental and local community impacts, and recommended the construction of a 48-inch diameter force main and capacity enhancing modifications at the WWPS. At the Piscataway WRRF, a new concrete storage facility was constructed in the upper existing polishing pond, allowing intermittent storage of excess sewage until flow levels at the facility allow treatment. Implementation of this alternative was

approved by the EPA and the MDE. The installation of emergency generators to provide power to the WWPS in the event of a power outage are also a part of the project. The estimated total cost of the project is \$188.4 million. The project is currently 90% complete and is expected to be fully operational in FY 2021.

## FUNDING SOURCES

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

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

### **Bonds and Other Debt Instruments**

WSSC Water 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.

### **PAYGO**

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

### **Grants, Contributions and Other Funding Sources**

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

Federal Grants – Department of Energy grants related to WSSC Water’s Energy Performance Program and Piscataway Bioenergy projects to promote and develop green energy sources.

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

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

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.

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

## CAPITAL BUDGET FUNDING SUMMARY

The total funding for the FY 2021 Proposed Capital Budget is \$606.7 million. The funding is comprised of \$533.0 million in bonds, \$31.0 million in PAYGO and \$42.7 million in grants, contributions and other funding sources.

(\$ in Thousands)	FY 2020 Approved	FY 2021 Proposed
<b>Capital Improvements Program:</b>		
Bonds	\$ 315,063	\$ 311,921
PAYGO	31,016	31,016
Federal Grants	-	1,500
State Grants	2,291	1,500
Local Government Contribution	2,835	3,675
System Development Charge (SDC)	21,716	9,530
Contribution/Other	10,399	15,931
<b>Total Capital Improvements Program</b>	<b>\$ 383,320</b>	<b>\$ 375,073</b>
<b>Information Only:</b>		
Bonds	233,744	221,084
State Grants	20,000	20,000
Contribution/Other	1,462	194
<b>Total Information Only</b>	<b>\$ 255,206</b>	<b>\$ 241,279</b>
<b>Total Capital Funding</b>	<b>\$ 638,526</b>	<b>\$ 616,352</b>
Adjustment for Developer Contributions		(9,623)
<b>Total Capital Budget Sources</b>	<b>\$ 638,526</b>	<b>\$ 606,729</b>

## 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 WSSC Water'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 agency. 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 Budget impacts the size of water and sewer bond issues, which in turn impacts customers' water and sewer bills.

## IMPACT OF CAPITAL PROGRAM ON THE OPERATING BUDGET (CONTINUED)

### **Debt Service (Continued)**

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 SDC funds 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 expected construction completion rates. Taking into account these adjustments results in an estimated new long-term water and sewer debt requirement of \$409.9 million. The FY 2021 debt service payment is shown in the next section.

### **Operating Budget Impacts**

The construction of capital projects impacts the water and sewer portion of the 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, WSSC Water's water and sewer system reconstruction programs for infrastructure improvements are funded through the Capital Budget and are focused on the aging portions of our 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 of WSSC Water's 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 new facilities that will require operation and maintenance funding in the Operating 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.

## IMPACT OF CAPITAL PROGRAM ON THE OPERATING BUDGET (CONTINUED)

### Operating Budget Impacts (Continued)

The following table summarizes the estimated impact on the FY 2021 Proposed Operating Budget based upon projects included in the FY 2021 Proposed Capital Budget:

(\$ in Thousands)	FY 2020 Approved	FY 2021 Projected	FY 2021 Net Impact
<b>Operating - Water and Sewer Program</b>			
Debt Service Expense	\$ 306,307	\$ 313,865	\$ 7,558
Major Capital Projects Net Impact	-	115	115
<b>Total</b>	<b>\$ 306,307</b>	<b>\$ 313,980</b>	<b>\$ 7,673</b>

Major capital projects which will impact the FY 2021 Proposed Operating Budget are summarized below:

- Cabin Branch Wastewater Pumping Station - This project provides for the planning, design and construction of a 0.9 million gallons per day (MGD) WWPS. This WWPS is projected to serve new development in Stage 3 of the Clarksburg planning area west of I-270. Operating and maintenance costs will increase to support this new facility.
- Clarksburg Elevated Water Storage Facility - This project provides for the community outreach, site selection, planning, design and construction for a 1.0 million gallon (MG) elevated storage facility in the HG760 water pressure zone to meet projected future growth. Operating and maintenance costs will increase to support this new facility.
- Clinton Zone Water Storage Facility - This project provides for the planning, design and construction of a 2.0 MG water storage facility in the Brandywine area of the Clinton zone. Clinton Pressure Zone HG385B serves a large and growing area of southern Prince George's County and currently has only one storage facility. Since storage facilities must be periodically removed from service for maintenance, having only one in a large zone creates operational problems. The Modeling and Master Plan Report indicates that there will be approximately 4.0 MG of storage deficit in the Clinton Pressure Zone HG385B by the year 2040. An additional 2.0 MG water tank that will be constructed in the Rosaryville area of the Clinton zone was split off into the Rosaryville Water Storage Facility project. Operating and maintenance costs will increase to support this new facility.

**SECTION 8**  
**DEBT SERVICE**

## DEBT SERVICE

### INTRODUCTION

This section provides budget data for the repayment of Water Supply bonds (including Green bonds), Sewage Disposal bonds, and General Construction bonds, along with loans through the Maryland Water Quality Revolving Loan Fund Program, issued as long-term financing of WSSC Water's infrastructure.

### BUDGET OVERVIEW

The proposed debt service expense is based upon paying the FY 2021 principal and interest payments on current outstanding debt as of June 30, 2019, budgeted new debt issues approved for FY 2020, and the proposed issuance of \$410.5 million in new debt for FY 2021 (\$189.7 million for water; \$220.2 million for sewer; and \$0.6 million for general construction). The new debt issues are necessary to implement the first year of WSSC Water's Proposed Capital Improvements Program (CIP) for fiscal years 2021 through 2026, as well as the Information Only projects included in the CIP document. The FY 2021 Proposed Budget for debt service expenses is \$325.6 million, an increase of \$5.7 million or 1.8% more than the FY 2020 Approved Budget for FY 2020 of \$319.9 million. The increase is due in part to a planned higher level of pipe replacement as part of the Large Diameter Water Pipe & Large Valve Rehabilitation Program. The FY 2021 Proposed Budget includes, in addition to debt service payments, all bond sales expenses and bond coupon payment redemption expenses.

### WATER SUPPLY AND SEWAGE DISPOSAL – GENERAL OBLIGATION BONDS

WSSC Water 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), water resource recovery facilities (WRRF), pumping stations and force mains, storage structures, water mains, and sewer mains. WSSC Water'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 Information Only section of the CIP document. These projects include the water and sewer system reconstruction programs, the Engineering Support Program, the Advanced Metering Infrastructure project, and the Other Capital Programs.

### GENERAL CONSTRUCTION – GENERAL OBLIGATION BONDS

General Construction bonds are issued to finance a major portion of the costs of constructing new or replacement facilities for administrative and support activities, modifying existing support facilities, relocating facilities, purchasing water meters, and constructing some minor additions of small diameter water and sewer lines. Due to 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. WSSC Water will still construct those projects serving one residence or providing relief from a residential health hazard.

### GREEN BONDS

Green bonds are any type of bond instrument where the proceeds will be exclusively applied to finance eligible green projects. The International Capital Market Association describes the Green bond market as an opportunity to enable and develop the key role that debt markets can play in funding projects that contribute to environmental sustainability. WSSC Water is committed to protecting the natural environment of Montgomery and Prince George's counties as it executes its mission to provide safe and reliable water, life's

## GREEN BONDS (CONTINUED)

most precious resource, and return clean water to our environment, all in an ethical, sustainable, and financially responsible manner.

Projects focused on the eligible green project categories are qualified to be funded in whole or in part by an allocation of the Green bond proceeds. Based upon WSSC Water's review of its capital project portfolio, the following projects will be financed with the proceeds of WSSC Water's first series of Green bonds in December 2019: the Potomac WFP Pre-Filter Chlorination & Air Scour Improvements project, the Potomac WFP Consent Decree Program, and the Large Diameter Water Pipe & Large Valve Rehabilitation Program. Green bond proceeds will be specifically directed to pay the costs of design, construction, property acquisition, and other related costs necessary for the selected projects. WSSC Water will produce an annual report detailing how the Green bond proceeds were used to finance the selected projects, a description of the selected projects, and details of the environmental benefits resulting from the projects. Additional information on WSSC Water's Green bond program and reporting can be found on our website at <https://www.wsscwater.com/greenbond>.

## MARYLAND WATER QUALITY REVOLVING LOAN FUND PROGRAM

In addition to borrowing funds in the private financial markets, WSSC Water periodically borrows funds from the Water Quality Revolving Loan Fund Program managed by the Maryland Department of the Environment's Water Quality Financing Administration to fund major capital improvements that are needed to help maintain or improve water quality in the Chesapeake Bay. The fund, established by the State of Maryland, provides low interest loans to local governments to help with a variety of water quality improvement projects such as upgrades of WRRFs, 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

WSSC Water 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 the 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 WSSC Water debt is exempt from federal and state taxation.

WSSC Water's debt is primarily repaid from water consumption and sewer use charges. Other sources for debt repayment include the Infrastructure Investment Fee (IIF) and the Front Foot Benefit Charge (FFBC). The IIF is a fee that was first implemented in FY 2016 and phased in over two fiscal years. The purpose of the fee is to fund a portion of the debt service associated with the water and sewer reconstruction programs. The FFBC is assessed to owners of property abutting water and/or sewer mains who derive a benefit from the construction of these water and sewer mains.

Should the revenues from these sources be inadequate to service the debt repayments, state law provides for the levy of ad valorem taxes, annually, against all the assessable property within the Washington Suburban Sanitary District (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. WSSC Water 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.

## ACTUAL PRINCIPAL DEBT OUTSTANDING

WSSC Water's principal debt amounts outstanding are reflected in the table below. The total debt outstanding for the agency was \$3.34 billion as of June 30, 2019, a 4.3% increase over the June 30, 2018 figure of \$3.20 billion. WSSC Water's outstanding debt has been increasing over the last decade as it complies with the requirements of the Sanitary Sewer Overflow (SSO) Consent Decree and continues to implement its water and sewer reconstruction programs, which are capital intensive undertakings.

	Outstanding 06/30/18	% of Total	Outstanding 06/30/19	% of Total
Water Supply Bonds	\$ 1,153,563,855	38.3%	\$ 1,228,099,118	38.8%
Sewage Disposal Bonds	1,468,276,503	48.8%	1,559,389,018	49.3%
General Construction Bonds	142,209,641	4.7%	134,441,864	4.3%
Maryland Water Quality Bonds <sup>1</sup>	248,126,998	8.2%	240,197,781	7.6%
<b>Total Bonds</b>	<b>\$ 3,012,176,997</b>	<b>100.0%</b>	<b>\$ 3,162,127,781</b>	<b>100.0%</b>
Water, Sewer, and General Notes	190,200,000		177,800,000	
<b>Total</b>	<b>\$ 3,202,376,997</b>		<b>\$ 3,339,927,781</b>	

<sup>1</sup>Maryland Water Quality Bonds are issued for Water, Sewer, and General Construction projects.

## FY 2021 ESTIMATED DEBT OUTSTANDING

The estimated principal debt outstanding at the end of FY 2021 is built upon a base of the existing outstanding debt from past issues (as of June 30, 2019), the approved debt issues for FY 2020, and the proposed debt issues in FY 2021, along with the estimated principal payments in FY 2020 and FY 2021. The table that follows shows that the existing outstanding debt of \$3.34 billion as of June 30, 2019 is projected to grow to a total of \$3.78 billion as of June 30, 2021, an increase of 13.1%.

<b>Total Principal Debt Outstanding, June 30, 2019</b>	<b>\$ 3,339,927,781</b>
<b>Less: Estimated Principal Payments</b>	
FY 2020 for All Outstanding Bonds and Notes as of June 30, 2019	(167,652,787)
FY 2021 for All Outstanding Bonds and Notes as of June 30, 2019	(170,129,748)
<b>Total (As of June 30, 2021)</b>	<b>\$ 3,002,145,246</b>
<b>Plus:</b>	
<b>FY 2020 Budgeted New Debt Issues:</b>	
Water Supply Bonds	160,719,000
Sewage Disposal Bonds	224,191,000
General Construction Bonds	616,000
<b>FY 2021 Proposed New Debt Issues:</b>	
Water Supply Bonds	189,738,000
Sewage Disposal Bonds	220,184,000
General Construction Bonds	600,000
<b>Less: Estimated Principal Payments:</b>	
FY 2020 for Budgeted New Issues as of June 30, 2020	(7,165,938)
FY 2021 for Budgeted and Proposed New Issues as of June 30, 2021	(13,613,606)
<b>Total Estimated Debt Outstanding (As of June 30, 2021)</b>	<b>\$ 3,777,413,702</b>

## RATING AGENCY REVIEWS

WSSC Water bonds carry AAA/Aaa/AAA credit ratings from the three major bond rating agencies: Fitch Ratings, Moody's, and Standard and Poor's, respectively. These high ratings are critical in ensuring a low cost of debt to WSSC Water customers. High credit ratings translate into low interest rates and considerable savings over the bond repayment period. WSSC Water has been able to secure these ratings primarily due to the quality of its operations, its policy of maintaining a 10.0% or greater operating reserve, the willingness of the agency and local governments to raise the water consumption and sewer use 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 WSSC Water and the Montgomery and Prince George's county governments to support public debt.

## BORROWING LIMITATION

Bonds and notes issued by WSSC Water are limited under the State of Maryland's Public Utilities Article to an amount outstanding at any time that may not exceed the sum of 7.0% of the total assessable personal property and operating real property and 3.8% of the total assessable base of all real property for county taxation purposes within the WSSD. The following table shows WSSC Water's legal debt limit and remaining debt margin.

<b>Debt Limit per Public Utilities Article:</b>	
7.0% of Total Assessable Personal & Operating Real Property	\$ 159,835,794
3.8% of Total Assessable Tax Base of All Real Property	11,772,749,775
<b>Total Debt Limit (As of June 30, 2019)</b>	<b>\$ 11,932,585,569</b>
Total Estimated Debt Outstanding (As of June 30, 2021)	\$ 3,777,413,702
<b>Legal Debt Margin</b>	<b>\$ 8,155,171,867</b>

<sup>1</sup>The assessed valuation figures used to calculate the debt limit are based on the totals for Montgomery and Prince George's counties, which are being used as an approximation of the values for the WSSD.

Shown below are the latest certified assessed valuations for the counties, the total estimated debt limit, and the ratio of debt to permitted debt. The table shows that as of June 30, 2019 the total outstanding debt of \$3.34 billion represented only 27.9% of the total estimated debt limit.

Fiscal Year	Total Assessed Valuation <sup>1,2,3</sup>	Total Debt Limit <sup>1</sup>	Total Debt Outstanding <sup>1</sup>	Ratio of Outstanding to Limit
2019	\$ 312,092,573	\$ 11,932,586	\$ 3,339,928	27.9%
2018	297,032,873	11,364,855	3,202,377	28.2%
2017	284,821,913	10,898,330	2,813,369	25.8%
2016	273,112,412	10,451,218	2,470,352	23.6%
2015	242,885,625	9,289,681	1,961,364	21.1%

<sup>1</sup>Values are in thousands of \$ and as of June 30 of each fiscal year.

<sup>2</sup>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 of 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 of Prince George's County.

<sup>3</sup>The assessed valuation figures are based on the totals for Montgomery and Prince George's counties, which are being used as an approximation of the values for the WSSD.

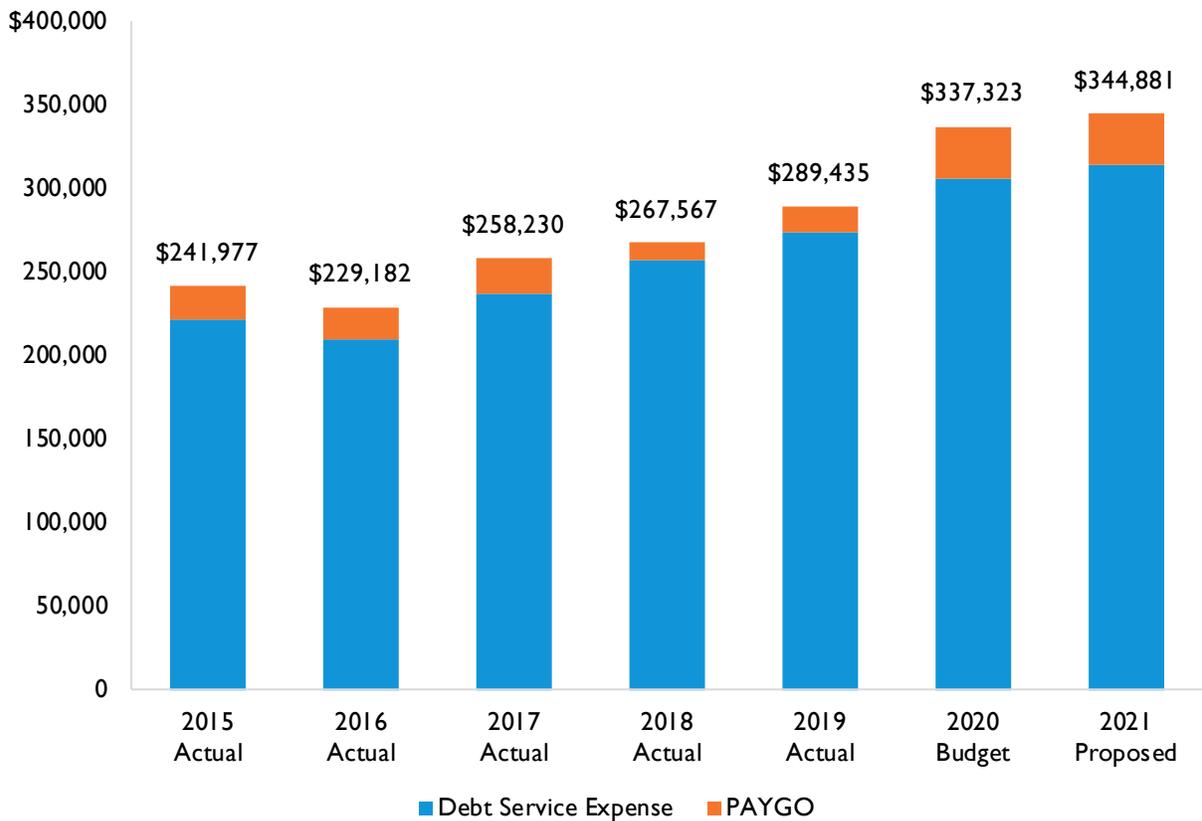
## DEBT SERVICE EXPENSE – WATER SUPPLY AND SEWAGE DISPOSAL BONDS

The water and sewer debt service expenses (\$313.9 million in FY 2021) are funded by WSSC Water rate payers through water consumption and sewer use charges and the IIF. As noted in the Fiscal Guidelines section, WSSC Water will program at least \$31.0 million in PAYGO each fiscal year to reduce the amount of planned debt issued for capital projects, thereby lowering future debt service requirements.

The chart that follows shows water and sewer debt service expenses and PAYGO for FY 2015 through FY 2021. WSSC Water’s requirements for water and sewer debt service have been increasing, from a total of \$242.0 million in debt service and PAYGO in FY 2015 to an estimated \$344.9 million in FY 2021. This increase is due to the investments WSSC Water is making in its capital intensive infrastructure including, the water and sewer reconstruction, SSO Consent Decree, and Potomac WFP Consent Decree programs.

### Water and Sewer Debt Service & PAYGO

(\$ in Thousands)

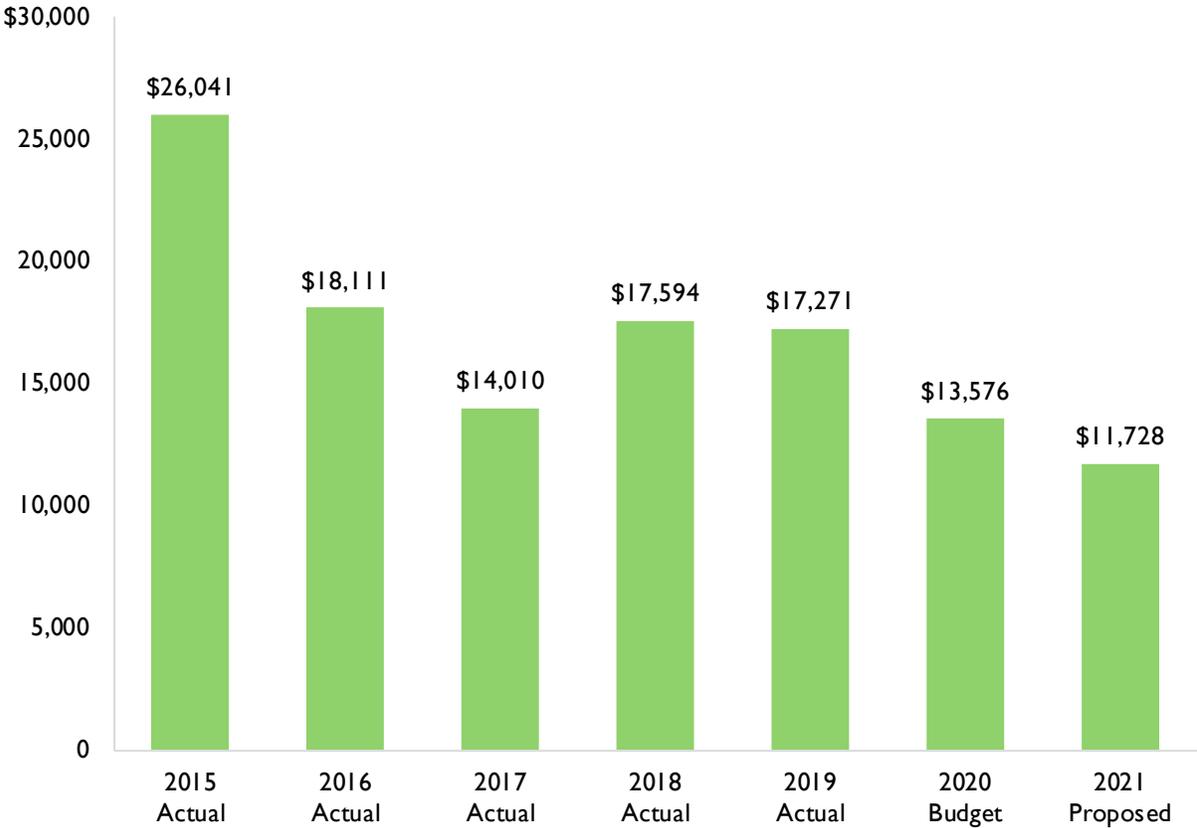


Note: Debt service expense is net of interfund transfers.

**DEBT SERVICE EXPENSE – GENERAL CONSTRUCTION BONDS**

The new issuance of General Construction bonds has greatly decreased over the years as funding for system extension projects is primarily paid for by developers. Correspondingly, the debt service requirements for the General Construction bonds has also been decreasing, from \$26.0 million in FY 2015 to an estimated \$11.7 million in FY 2021, a decrease of 55%. Principal and interest expense on General Construction bonds are paid through FFBC and other revenues. Debt service expenses for these bonds are not supported by WSSC Water rate payers.

**General Construction Debt Service**  
(\$ in Thousands)



Note: Debt service expense is net of interfund transfers.

**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 agency 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 by the agency’s Asset Management Program, 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 \$149.6 million included in the FY 2021 Proposed Budget which is attributable to meeting environmental regulations. These projects are mandated by the US Environmental Protection Agency (EPA) 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 agency’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 2021
S-1.01	Sewer Reconstruction Program	Ongoing	\$ 55,495
S-22.10	Blue Plains WWTP: ENR	Construction 96%	294
S-22.11	Blue Plains WWTP: Pipelines & Appurtenances	Ongoing	13,622
S-43.02	Broad Creek WWPS Augmentation	Construction 90%	166
S-131.10	Fort Washington Forest No. 1 WWPS Augmentation	Construction 25%	22
S-170.09	Trunk Sewer Reconstruction Program	Ongoing	69,491
W-73.33	Potomac WFP Consent Decree Program	Design 0%	10,500
W-139.02	Duckett & Brighton Dam Upgrades	Construction 57%	22
<b>Total Water Quality Projects</b>			<b>\$ 149,612</b>

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

## Water Filtration and Treatment - Turbidity

One of the WSSC Water’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. WSSC Water has never exceeded a maximum contaminant level (MCL) or failed to meet a treatment technique (TT) requirement established by the EPA in accordance with the Safe Drinking Water Act.

### Our Water Quality



**100-Year History:**  
No drinking water quality violations

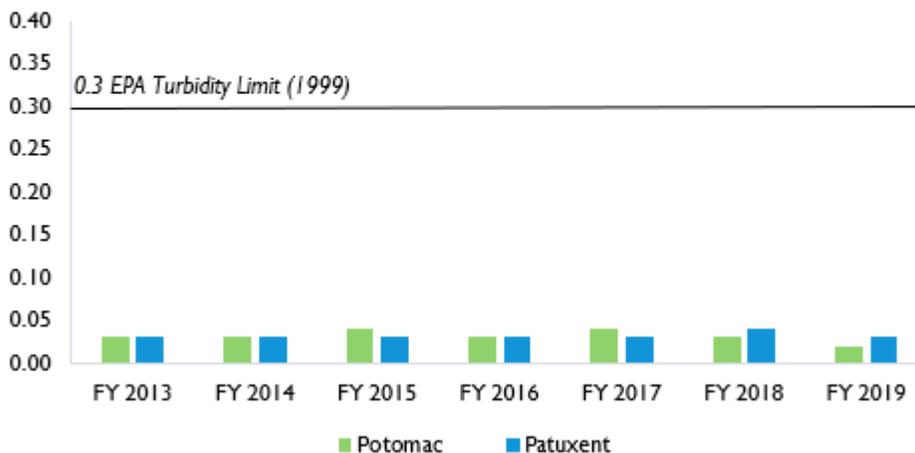
WSSC’s drinking water has **always met or surpassed strict** federal and state standards

WSSC conducts more than **100 tests daily** to constantly monitor water quality and safety



In addition to traditional approaches to ensuring drinking water quality, WSSC Water 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 agency 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.

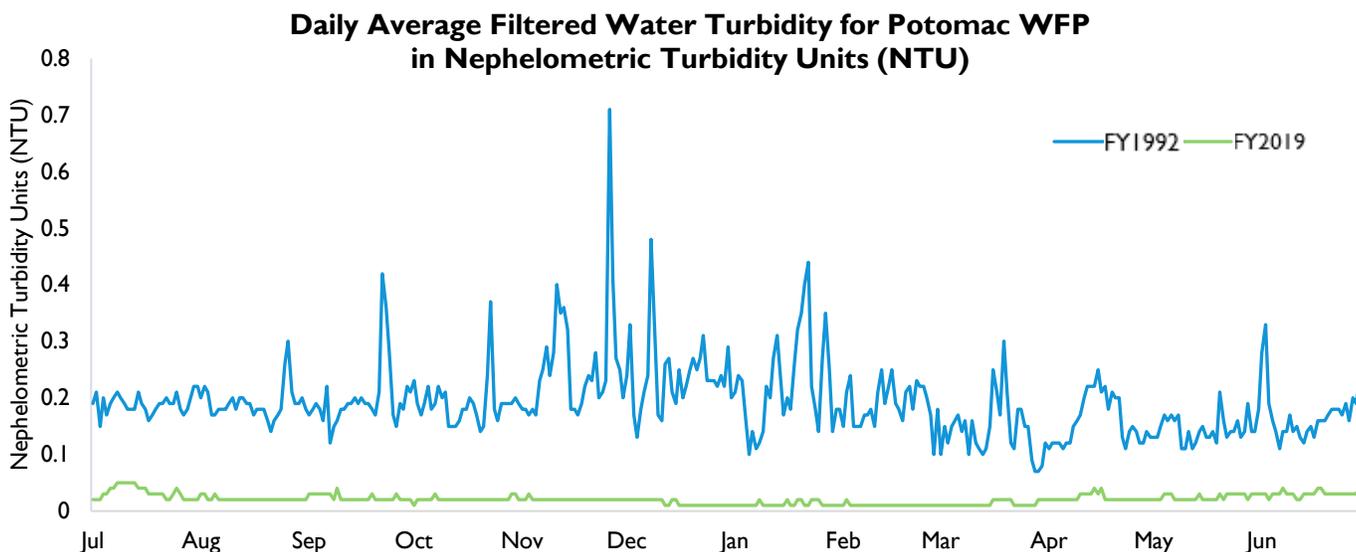
**Average Filtered Water Turbidity for Potomac and Patuxent Water Filtration Plants in Nephelometric Turbidity Units (NTU) (0.1 NTU Continuous Operating Goal)**



## PERFORMANCE OF KEY SERVICES (CONTINUED)

WSSC Water'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 WSSC Water 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 on the prior page shows the average turbidity for the Potomac and Patuxent Water Filtration Plants for FY 2013 through FY 2019. The EPA reduced the turbidity limit to 0.3 NTU in 1999, still well above the levels being achieved by WSSC Water. A maximum water turbidity of 0.1 NTU level has been and will continue to be a key objective for WSSC Water's Production Department.

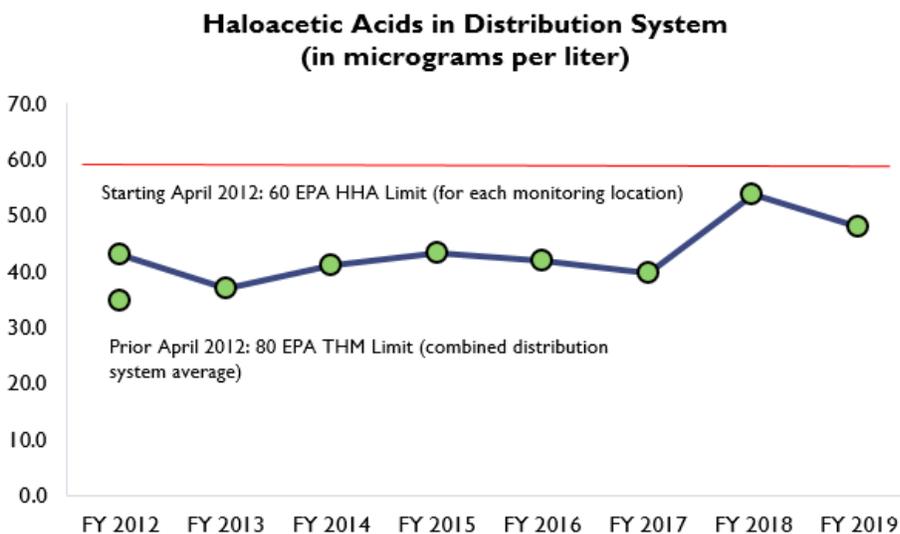
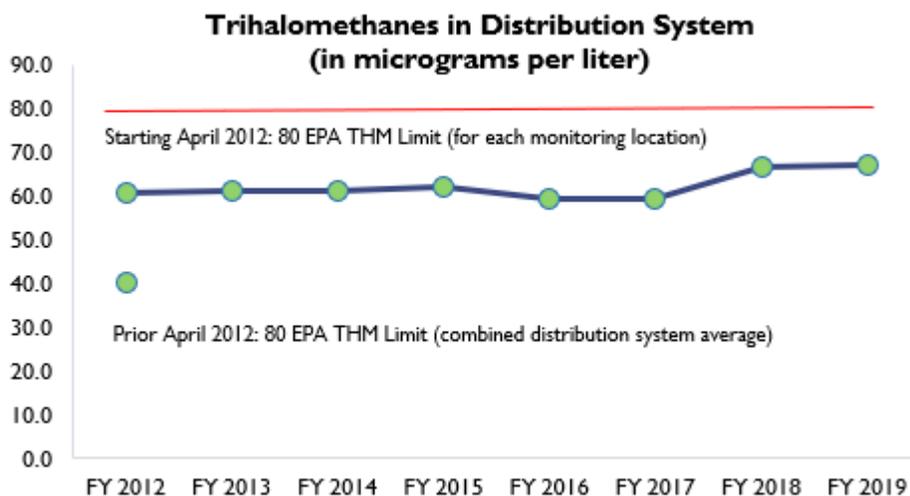
Not only has average turbidity been reduced, but also, as shown in the graph below for the Potomac Water Filtration Plant, the magnitudes of the daily peaks associated with variable raw water quality have been substantially reduced from FY 1992 peak levels. This latter measure is of particular importance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



## PERFORMANCE OF KEY SERVICES (CONTINUED)

### Water Filtration and Treatment – Trihalomethanes and Haloacetic

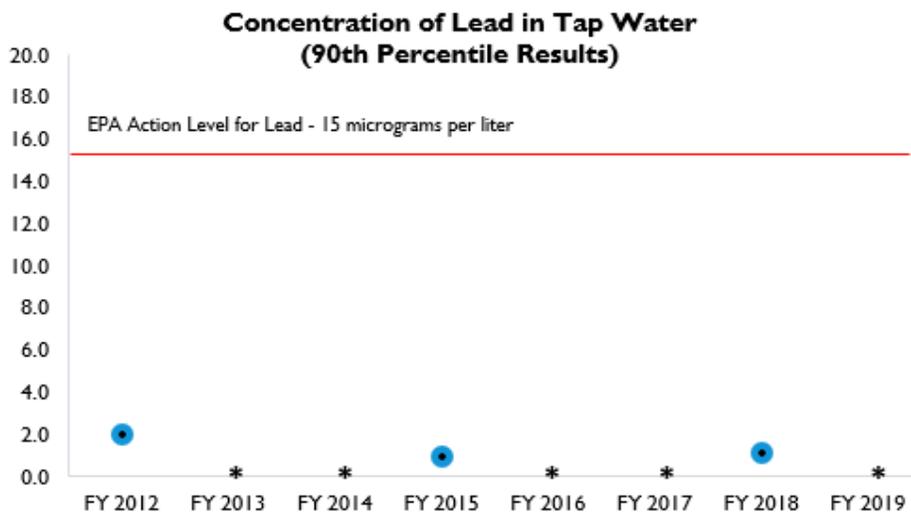
WSSC Water has also been aggressively pursuing enhanced coagulation (optimization of coagulant doses and pH levels to improve total organic carbon removal) to enhance disinfection byproduct precursor removal, thereby lessening the formation of potential carcinogens in the finished water. Effective January 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, WSSC Water 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 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.



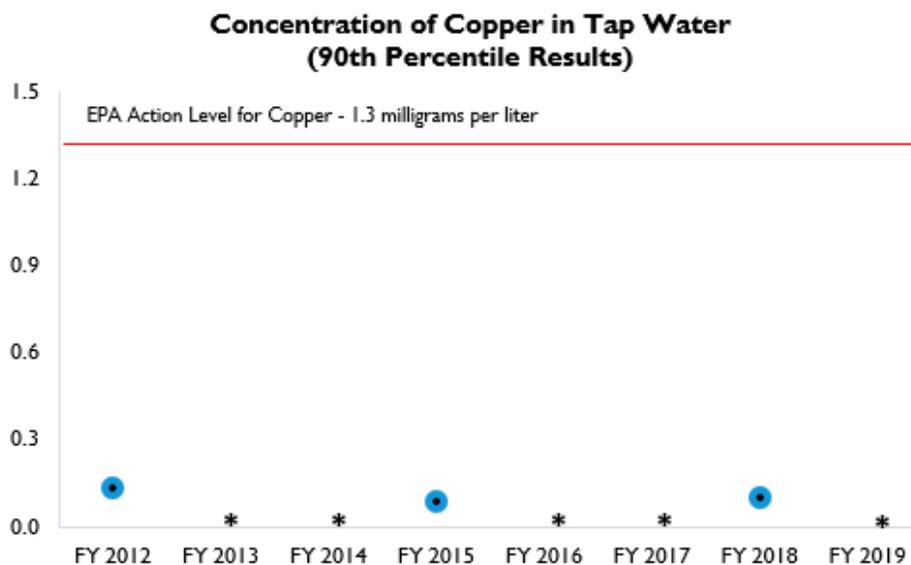
## PERFORMANCE OF KEY SERVICES (CONTINUED)

### Water Filtration and Treatment – Tap Water Lead and Copper

The agency 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 WSSC Water’s treatment is optimized for corrosion control against lead and copper. As a result of treatment optimization, the state has allowed WSSC Water 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 90<sup>th</sup> percentile lead and copper levels are well below the tap water action levels. The most recent round of monitoring was performed in FY 2019.



\*No sampling required in these years.

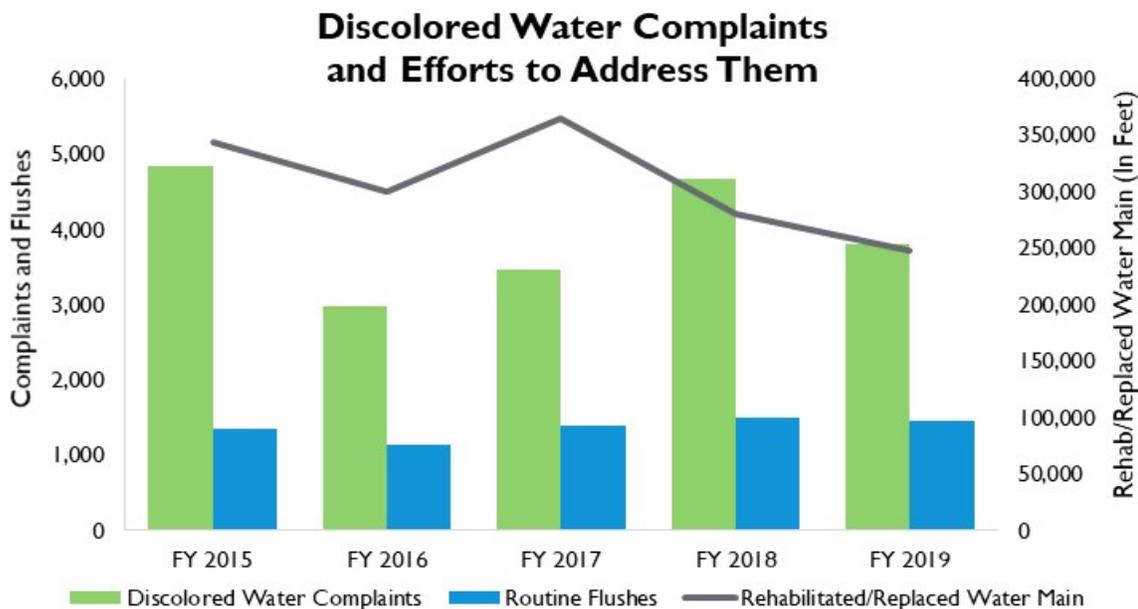


\*No sampling required in these years.

PERFORMANCE OF KEY SERVICES (CONTINUED)

**Discolored Water**

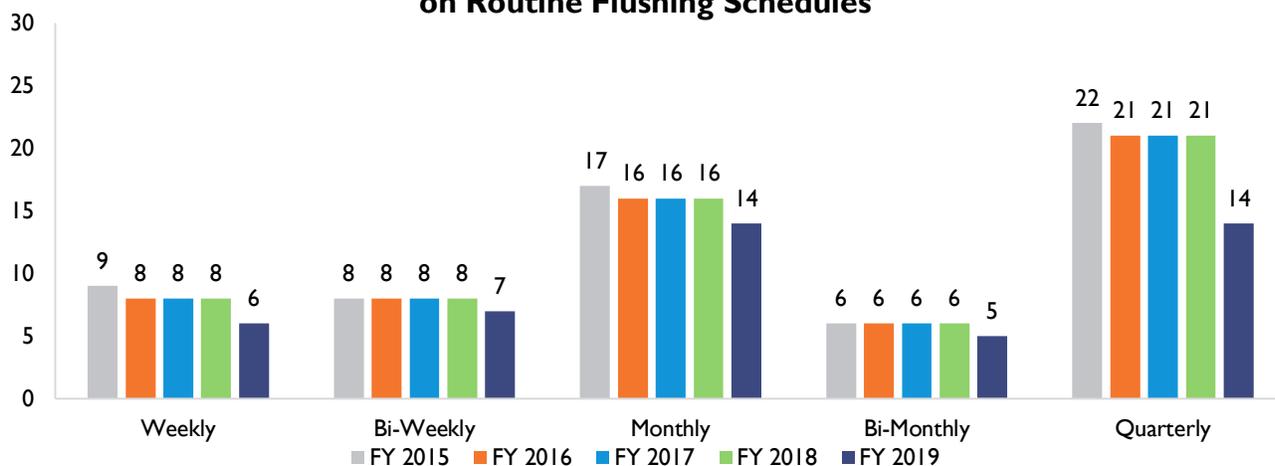
Unlined cast iron pipe eventually leads to discolored water in the distribution system as the water chemically reacts with the pipe to form iron oxides (rust) and accumulates deposits of iron and manganese that can become dislodged. This is a serious inconvenience for the affected customers, limiting 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, WSSC Water 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. In FY 2018, the number of discolored water complaints 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 WFP. The presence of high levels of manganese caused discoloration. The presence of sodium aggravated the corrosion of WSSC Water's aging water mains and contributed to increased discolored water complaints. The agency is now treating water for manganese reduction, which reduced discolored water complaints in FY 2019.

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 to focus on water main replacement. This will reduce the amount of flushing that is required. WSSC Water replaced 47.04 miles of distribution mains, and 4.96 miles of transmission mains during FY 2019.

### Discolored Water Problem Areas on Routine Flushing Schedules



The graph above 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. Areas with weekly and quarterly flushings have decreased in number over the past few years. In FY 2019, 46 designated areas received regularly scheduled flushings, a decrease from FY 2018’s 59 recurring flushings. FY 2019 flushing reductions are attributable to both the impact of the water main replacement program and reduced water main breaks, resulting in reduced customer complaints.

### 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 Water’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 2019, the agency was successful in preventing a second backup in 100% of these cases. The Proactive Maintenance Program (PMP), along with technological advances such as the jet cam, has enabled the agency to pursue its objective more diligently.

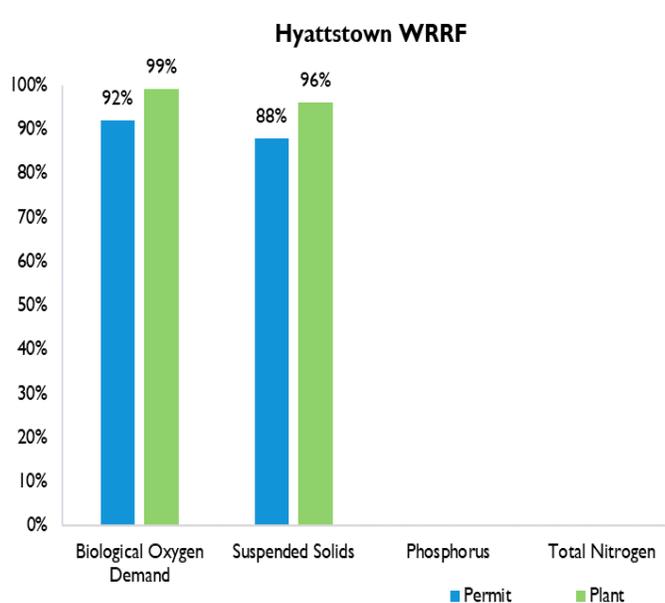
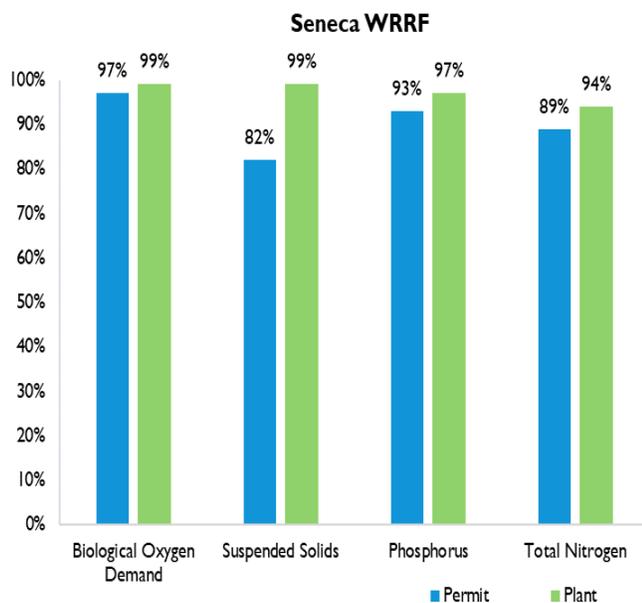
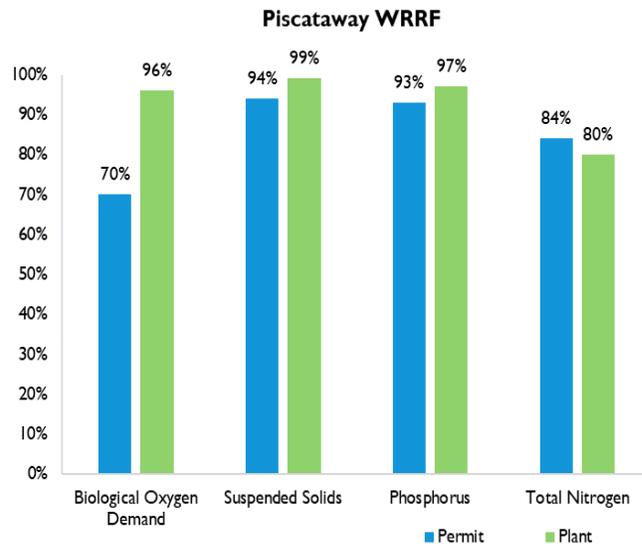
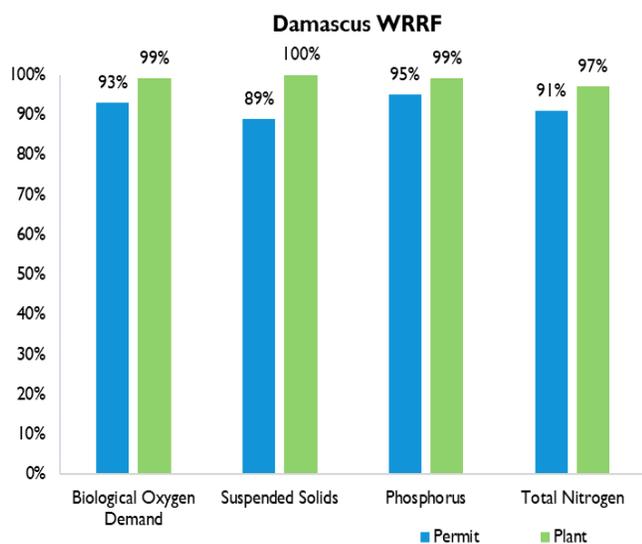
### Sewer House Connection Renewal

The sewer house connection renewal program replaces sewer house connections when structural problems have caused customer backup. 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 WSSC Water has confirmed there is a problem with the service.

PERFORMANCE OF KEY SERVICES (CONTINUED)

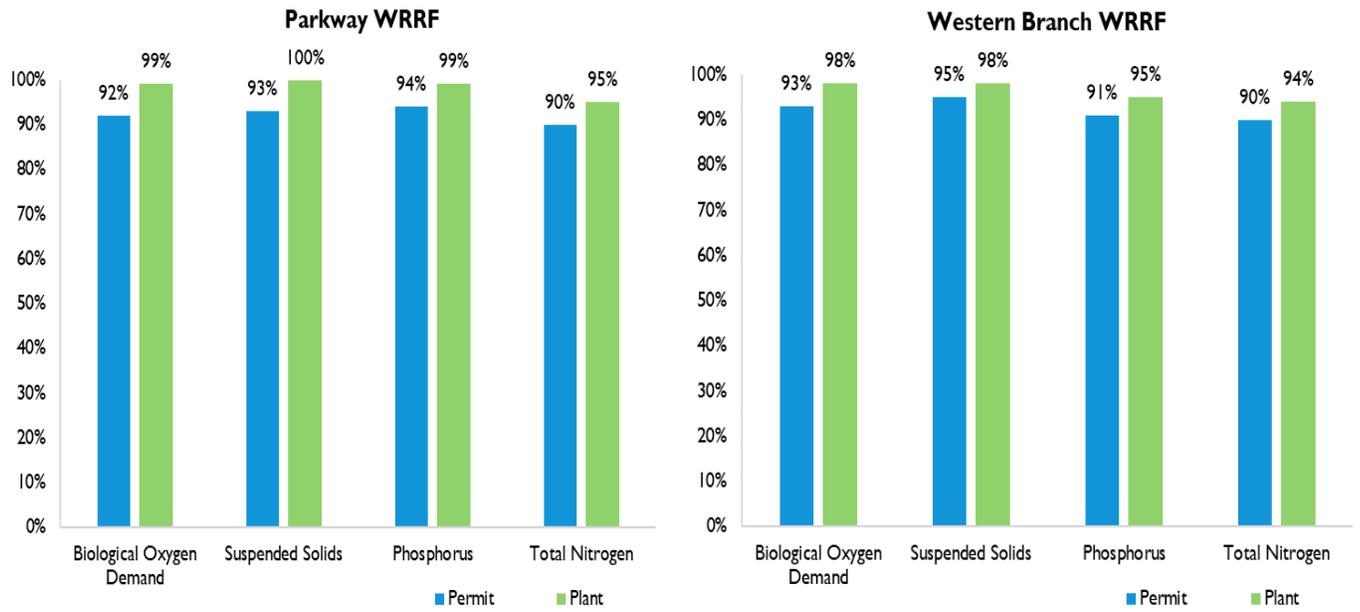
**FY 2019 Percentage Removal of Substances Regulated by Discharge Permits**

The following graphs present actual FY 2019 plant performance for WSSC Water’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 2021, the Production Department will continue to pursue its goal of meeting or surpassing the permit requirements for each plant.



PERFORMANCE OF KEY SERVICES (CONTINUED)

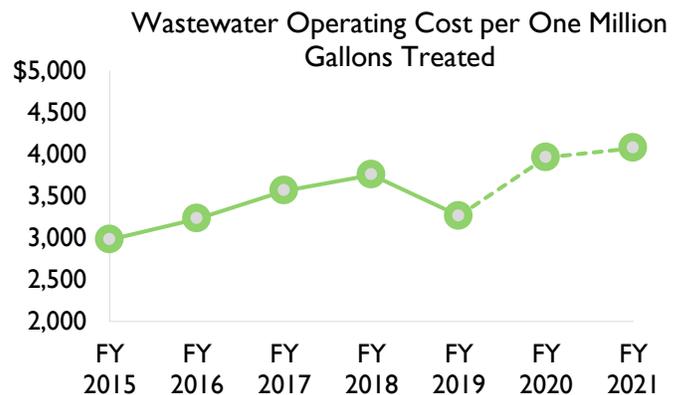
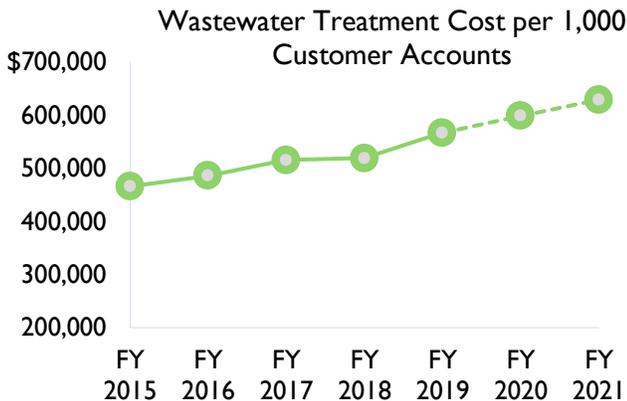
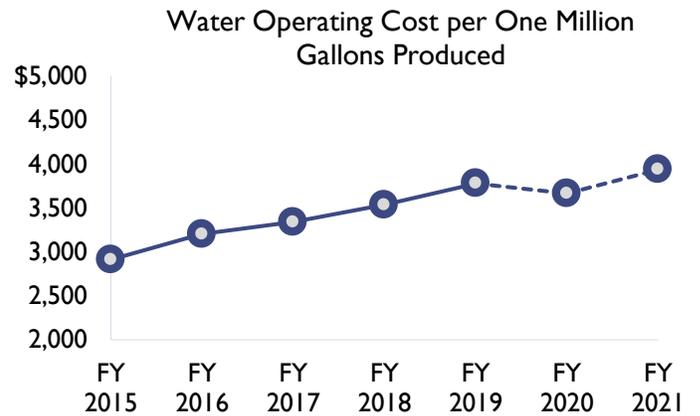
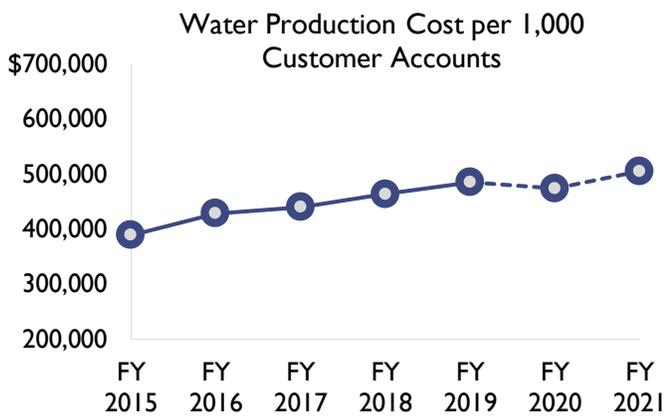
**FY 2019 Percentage Removal of Substances Regulated by Discharge Permits (Continued)**



PERFORMANCE OF KEY SERVICES (CONTINUED)

**Water & Wastewater Operations**

The agency’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 agency 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. In spite of inflation and the increased maintenance cost of our infrastructure systems, the agency continues to focus on being fiscally responsible with the water and wastewater operating costs. In the graph below showing the Wastewater Operating Cost per One Million Gallons of Sewage Treated, the FY 2019 result appears significantly lower than in prior years. The result appears lower due to the all-time-record-setting rainfall and associated Infiltration & Inflows into the sanitary sewer system over the period, which raised the volume treated while also lowering the point on the graph. Although the graph is correct, the actual treatment costs for FY 2019 were consistent with prior years.

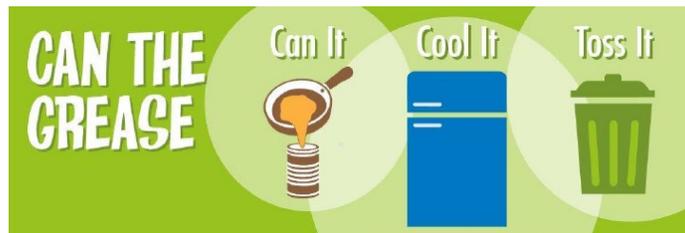


## WATER QUALITY CAMPAIGNS

### Fats, Oils, & Grease

Sanitary sewers are designed and constructed with enough 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. Get more information at <https://www.wsscwater.com/canthe grease>.

In addition to permitting and inspection efforts, WSSC Water 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 Water 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 Water reminds customers to use the trash can for trash.

### Pharmaceuticals and Other Hazardous Wastes

WSSC Water 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.

WSSC Water advises disposing pharmaceutical drugs in the trash, at a pharmacy or a police station. Additional information on disposal can be found on WSSC Water’s website under Water Quality or by visiting <https://www.fda.gov> and search for “disposal by flushing”.

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 discusses assumptions related to WSSC Water’s workforce and compensation, including retiree benefits. The workforce and compensation assumptions proposed for FY 2021 incorporate the policy and guideline recommendations discussed in the Fiscal Guidelines section.

## SALARY AND WAGES SUMMARY

	FY 2021 Proposed	
	Work Years	Amount
Base Positions Funded Full Year	1,776	\$ 159,221,957
Overtime		7,388,894
<b>Subtotal</b>		<b>166,610,851</b>
Lapse on Base Positions*		(9,852,702)
<b>Subtotal</b>		<b>156,758,149</b>
Salary Enhancements		6,109,750
Salary - 6 Commissioners		78,500
<b>Total</b>	<b>1,776</b>	<b>\$ 162,946,399</b>

\*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 WSSC Water’s FY 2021 Proposed Budget through a combination of lump sum or payroll-based contributions.

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 projected changes for FY 2021. 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 by the Human Resources Office. Contributions are set each year based on an actuarial valuation of exposures, past and projected claims experience and 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 (OPEB) trust and claims cost experience.

## EMPLOYEE BENEFITS (CONTINUED)

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

Retiree Health Benefits Trust – The trust is 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 Water 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 the unfunded liability.

Employee and retiree benefits and related expenses are budgeted in two non-departmental organizations for Human Resources and Finance.

# COMPARATIVE EXPENDITURES BY ORGANIZATIONAL UNIT – ALL OPERATING AND CAPITAL FUNDS

Organization	FY 2020 Approved		FY 2021 Proposed		Change
	Work Years	Budget	Work Years	Budget	
<b>Governance &amp; General Manager's Office</b>					
Commissioners'/Corporate Secretary's Office*	2	\$ 381,879	2	\$ 397,280	\$ 15,401
Office of the Inspector General*	10	1,572,084	10	1,605,564	33,480
General Manager's Office	8	1,448,190	8	1,491,433	43,243
General Counsel's Office	28	10,517,040	28	10,658,343	141,303
<b>Strategy &amp; Partnerships Branch</b>					
Intergovernmental Relations Office	4	753,746	4	783,107	29,361
Strategy & Innovation Office	18	2,755,779	19	3,254,244	498,465
Communications & Community Relations Office	19	3,071,397	19	3,135,611	64,214
Human Resources Office	36	7,921,259	36	8,101,249	179,990
Equal Employment Opportunities Office	1	226,400	1	242,584	16,184
Customer Service Department	86	11,584,913	86	13,677,103	2,092,190
<b>Operations Branch</b>					
Asset Management Office	5	2,385,924	5	1,752,588	(633,336)
Police & Homeland Security Office	40	6,050,620	40	6,063,378	12,758
Engineering & Construction Department	378	588,760,824	377	573,062,416	(15,698,408)
Production Department	330	139,093,978	330	145,060,403	5,966,425
Utility Services Department	512	138,619,476	512	139,591,679	972,203
<b>Administration Branch</b>					
Office of Supplier Diversity & Inclusion	9	1,461,900	9	1,555,739	93,839
Procurement Office	27	2,758,044	27	2,785,036	26,992
General Services Department	96	40,446,733	96	42,753,616	2,306,883
Finance Department	64	7,720,450	64	8,420,934	700,484
Information Technology Department	103	56,050,279	103	56,943,147	892,868
<b>Other</b>					
Non-Departmental - Human Resources	-	31,139,492	-	31,511,051	371,559
Non-Departmental - Finance					
Debt Service	-	319,882,700	-	325,593,000	5,710,300
PAYGO	-	31,016,000	-	31,016,000	-
Other (Social Security, Retirement, etc.)	-	51,056,378	-	54,206,352	3,149,974
Retirement Trust Charge Back	-	(756,355)	-	(750,043)	6,312
<b>Total</b>	<b>1,776</b>	<b>\$ 1,455,919,130</b>	<b>1,776</b>	<b>\$ 1,462,911,814</b>	<b>\$ 6,992,684</b>

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

# ORGANIZATIONAL UNIT AND FUND MATRIX – ALL OPERATING AND CAPITAL FUNDS

For each organizational unit, the Organizational Unit and Fund Matrix illustrates the funds to which costs are charged.

Budget: Fund Type:	Operating			Capital		
	Water Operating	Sewer Operating	General Bond Debt Service	Water Supply	Sewage Disposal	General Construction
<b>Governance &amp; General Manager's Office</b>						
Commissioners'/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
General Counsel's Office	X	X	X	X	X	X
<b>Strategy &amp; Partnerships Branch</b>						
Intergovernmental Relations Office	X	X	X	X	X	X
Strategy & Innovation 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
Customer Service Department	X	X				
<b>Operations Branch</b>						
Asset Management Office	X	X				
Police & Homeland Security Office	X	X	X	X	X	X
Engineering & Construction Department	X	X		X	X	X
Production Department	X	X			X	
Utility Services Department	X	X		X	X	X
<b>Administration Branch</b>						
Office of Supplier Diversity & Inclusion	X	X	X	X	X	X
Procurement Office	X	X	X	X	X	X
General Services Department	X	X	X	X	X	X
Finance Department	X	X	X	X	X	X
Information Technology Department	X	X	X	X	X	X
<b>Other</b>						
Non-Departmental - Human Resources	X	X	X	X	X	X
Non-Departmental - Finance						
Debt Service	X	X	X			
PAYGO	X	X				
Other (Social Security, Retirement, etc.)	X	X	X	X	X	X
Retirement Trust Charge Back	X	X				

## GOVERNANCE & GENERAL MANAGER'S OFFICE

Governance & General Manager's Office are comprised of the following: Commissioners/Corporate Secretary, Office of the Inspector General, General Manager and General Counsel offices.

### Budget Summary

Governance & General Manager's Office	FY 2019 Actual		FY 2020 Approved		FY 2021 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Commissioners/Corporate Secretary's Office*	1.6	\$ 340,628	2.0	\$ 381,879	2.0	\$ 397,280	-	\$ 15,401
Office of the Inspector General*	8.0	1,370,958	10.0	1,572,084	10.0	1,605,564	-	33,480
General Manager's Office	9.1	1,816,199	8.0	1,448,190	8.0	1,491,433	-	43,243
WSSC STAT Office**	4.2	1,152,555	-	-	-	-	-	-
General Counsel's Office	25.0	6,957,020	28.0	10,517,040	28.0	10,658,343	-	141,303
<b>Total</b>	<b>47.9</b>	<b>\$ 11,637,360</b>	<b>48.0</b>	<b>\$ 13,919,193</b>	<b>48.0</b>	<b>\$ 14,152,620</b>	<b>-</b>	<b>\$ 233,427</b>

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

\*\*As of FY 2020, the WSSC STAT Office moved to the new Strategy & Innovation Office.

### Explanation of Major Variances

None.

### COMMISSIONERS/CORPORATE SECRETARY'S OFFICE

WSSC Water 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 agency 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 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 Water's corporate functions, to include organizing and facilitating agency meetings, drafting and posting official meeting agendas, preparing official meeting minutes, maintaining the agency's corporate seal and certifying documents on behalf of the agency. 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 function as the official governing body of WSSC Water responsible for setting general policy for WSSC Water's operation, while providing leadership, guidance and oversight.

### Core Activities

Public Oversight & Corporate Functions – The Board of Commissioners provides public oversight of WSSC Water and conducts the corporate business of the agency, such as adopting rates and fees, reviewing management reports and approving contracts, in accordance with Division II of the Public Utilities Article of the Annotated Code of Maryland. The Corporate Secretary assists the Commissioners in conducting the corporate business, serves as WSSC Water's registered agent, serves as parliamentarian at the meetings of the Board of Commissioners and prepares official meeting minutes for public inspection.

## OFFICE OF THE INSPECTOR GENERAL

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

The OIG assesses the effectiveness and efficiency of WSSC Water operations and programs and serves to promote transparency for WSSC Water stakeholders, as well as serving as WSSC Water'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 Water's programs and operations. The OIG helps the agency 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 Water.

### **Mission Statement**

To help WSSC Water 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 preventing and detecting fraud, waste, abuse, mismanagement and misconduct within WSSC Water programs and operations.

### **Core Activities**

Performance Audits – This activity includes 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, to reduce costs, to facilitate decision making by parties with responsibility to oversee or initiate corrective action and to contribute to public accountability.

Assurance Audits – This activity provides 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 and WSSC Water management and 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.

Fraud, Waste and Abuse Hotline – This activity provides a centralized reporting vehicle for WSSC Water employees, customers, contractors and other stakeholders of the agency 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

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

### **Mission Statement**

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

### **Core Activities**

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

## GENERAL COUNSEL'S OFFICE

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

### **Mission Statement**

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

### **Core Activities**

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

Claims – This activity involves investigating claims made against WSSC Water 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 agency, within delegated levels of authority.

Billed Work – This activity involves investigation of damage to WSSC Water's property caused by others, or damage WSSC Water 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 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 WSSC Water's standards, policies and procedures to ensure compliance.

## STRATEGY & PARTNERSHIPS

Strategy & Partnerships oversees the people and partnerships of the agency. The Deputy General Manager for Strategy & 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 enhancing customer experience. The Deputy General Manager also oversees internal functions critical to employees, including human resources and fair practices. Strategy & Partnerships is comprised of the following: Intergovernmental Relations, Strategy & Innovation, Communications & Community Relations, Human Resources, Equal Employment Opportunities and Customer Service.

### Budget Summary

Strategy & Partnerships	FY 2019 Actual		FY 2020 Approved		FY 2021 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Intergovernmental Relations Office	3.3	\$ 580,091	4.0	\$ 753,746	4.0	\$ 783,107	-	\$ 29,361
Strategy & Innovation Office*	-	-	18.0	2,755,779	19.0	3,254,244	1.0	498,465
Communications & Community Relations Office	18.4	2,779,943	19.0	3,071,397	19.0	3,135,611	-	64,214
Human Resources Office	35.1	6,195,723	36.0	7,921,259	36.0	8,101,249	-	179,990
Equal Employment Opportunities Office	1.0	207,367	1.0	226,400	1.0	242,584	-	16,184
Customer Service Department	99.8	10,294,309	86.0	11,584,913	86.0	13,677,103	-	2,092,190
<b>Total</b>	<b>157.6</b>	<b>\$ 20,057,433</b>	<b>164.0</b>	<b>\$ 26,313,494</b>	<b>165.0</b>	<b>\$ 29,193,898</b>	<b>1.0</b>	<b>\$ 2,880,404</b>

\*As of FY 2020, the Strategy & Innovation Office was established.

### Explanation of Major Variances

The FY 2021 Proposed Budget increased for the branch by approximately 11% from the FY 2020 Approved Budget. This increase is primarily due to continued stabilization and system enhancement efforts in the Customer Service Department associated with the roll-out of the new Customer-to-Meter (C2M) billing system.

### INTERGOVERNMENTAL RELATIONS OFFICE

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

### Mission Statement

To analyze the impact of state and federal legislation on WSSC Water and act as the agency’s representative before legislative bodies.

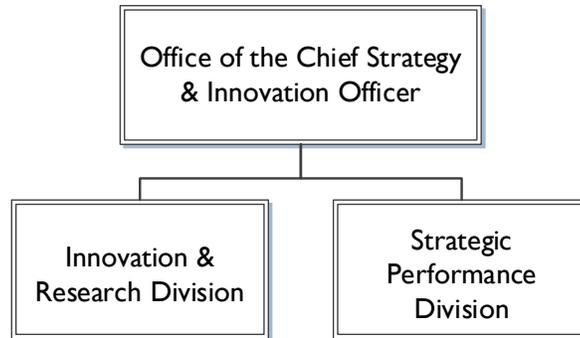
### Core Activities

Intergovernmental Relations – This activity focuses on the passage of WSSC Water’s legislative agenda, increasing communication with state and local governments and increasing the agency’s role in federal legislative issues.

## STRATEGY & INNOVATION OFFICE

The Strategy & Innovation Office looks across the entire organization to identify where we can work smarter, collaborate and use data to make informed decisions.

### Organizational Structure



### Mission Statement

The Strategy & Innovation Office develops, communicates, executes and sustains strategic initiatives, innovation and enterprise risk management. The office is accelerating organizational performance through cohesive strategy planning and execution, knowledge management and the implementation of an organizational dashboard for impact and organizational effectiveness.

### Budget Summary

Strategy & Innovation Office*	FY 2019 Actual		FY 2020 Approved		FY 2021 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Strategy & Innovation Officer	-	\$ -	1.0	\$ 192,285	2.0	\$ 383,775	1.0	\$ 191,490
Strategic Performance Division	-	-	11.0	1,334,431	11.0	1,411,028	-	76,598
Innovation & Research Division	-	-	6.0	1,229,064	6.0	1,459,441	-	230,377
<b>Total</b>	-	\$ -	<b>18.0</b>	<b>\$ 2,755,779</b>	<b>19.0</b>	<b>\$ 3,254,244</b>	<b>1.0</b>	<b>\$ 498,465</b>

\*As of FY 2020, the Strategy & Innovation Office was established.

### Explanation of Major Variances

The FY 2021 Proposed Budget for the office reflects an increase of approximately 18% over the FY 2020 Approved Budget. The increase is primarily due to professional services to assist with data governance and improve the value of data for decision-making across the agency; additional operational funding for the newly established Innovation & Research Division; and one additional workyear that was transferred from E&C.

### Highlights

- Leading Project Cornerstone organizational development to stabilize C2M billing system and processes
- Updating the Commission Dashboard to reflect the updated Strategic Plan and budget priorities
- Started pilot project for the automated flushing at two locations in Montgomery County. Additional pilot projects for the sewer blockage and pressure transient monitoring are expected to start soon.

## STRATEGY & INNOVATION OFFICE (CONTINUED)

### Highlights

- Started ammonia-based aeration control pilot at the Seneca water resource recovery facility (WRRF). Innovative nitrogen removal through Nitrite Shunt can reduce aeration and chemical costs using existing infrastructure
- Began work on two new product development projects to create tools for field workers; the fire hydrant repair device and dewatering flow meter. The fire hydrant repair device is designed to engage on the main valve seat ring, eliminating the complete replacement of a fire hydrant with a new hydrant. The dewatering flow device performs water removal and accurately tracks the amount of water lost during a dewatering/emptying a pipe

### Accomplishments

- With input from employees and Commissioners, facilitated the June 2019 approval of the updated WSSC Water Strategic Plan
- Facilitated target-setting and established reporting for C2M performance measures
- Led the response to the 2019 American Water Works Association (AWWA) utility benchmarking, advancing collection methods to include data quality checks and documentation
- Implemented training for employees on data visualization concepts
- Coordinated action plan responses to the employee engagement survey
- Completed the leak detection technical evaluation and recommended satellite leak detection
- Completed enhanced biological phosphorus removal pilot at the Seneca WRRF and started planning for a larger pilot at the Parkway WRRF

## OFFICE OF THE CHIEF STRATEGY & INNOVATION OFFICER

The Chief Strategy & Innovation Officer is responsible for leading and managing the Strategic Performance and Innovation & Research divisions.

### Core Activities

Management and Administration – This activity involves the management and supervision of the Strategy & Innovation Office. The Chief Strategy & Innovation Officer is responsible for creating an environment where innovative ideas and new ways of doing business are encouraged across the entire organization.

## STRATEGIC PERFORMANCE DIVISION

The Strategic Performance Division engages employees in strategic planning and facilitates alignment with the WSSC Water strategic priorities by using data to inform decision making. The division also provides internal consulting services, including data analysis, business planning, enterprise risk, strategic sourcing and process improvement.

### Core Activities

Strategic Planning – This activity supports the leadership team and Commissioners in charting WSSC Water's future. Key products include: Strategic Plan workshops and materials, Leaders on the Same Page meetings and employee outreach efforts.

## STRATEGIC PERFORMANCE DIVISION (CONTINUED)

### Core Activities

Enterprise Risk Management – This activity supports the leadership team in achieving the agency’s strategic objectives by designing and implementing the Enterprise Risk Management Plan. The program identifies, assesses, responds, monitors and reports risks and opportunities through regular activities, such as: risk management training, risk workshops, risk registers and enterprise risk reports.

Strategic Sourcing – This activity manages the agency’s cost savings operation; evaluates and manages current and potential sourcing opportunities; and 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.

Data Analysis – This activity identifies, collects and analyzes data to educate and inform business decisions. Key products include: the Commission Dashboard, WSSC Water internal dashboards, AWWA utility benchmarking, employee survey analysis and data visualization and analysis training.

## INNOVATION & RESEARCH DIVISION

The Innovation & Research Division focuses on finding new technologies and processes to save money, enhance operations, increase safe work practices and improve sustainability. This division also identifies, evaluates and pursues revenue opportunities created from innovative ideas and research.

### Core Activities

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

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.



## COMMUNICATIONS & COMMUNITY RELATIONS OFFICE

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, manages crisis communications, oversees the content on the WSSC Water website and provides graphic and photographic services.

### **Mission Statement**

To provide timely and accurate information that is designed to educate and inform the Communications & Community Relations Office's internal and external customers and enhance WSSC Water's image.

### **Core Activities**

Media and Public Relations – This activity includes numerous functions which inform our customers, improve relationships with the media and constituencies and enhance WSSC Water'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 agency'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 Water 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 agency 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 Water employees about company news, events, policies and benefits, and coordinates special events, service awards ceremonies and annual giving campaign. This activity also communicates WSSC Water's strategic priorities and values to company staff.

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

## COMMUNICATIONS & COMMUNITY RELATIONS OFFICE (CONTINUED)

### **Core Activities**

Web Content Administration – This activity includes overall management of content on the WSSC Water website and oversight of the web content publication process for each organization within the agency, including creating, updating and publishing Public Notices, Feature Tabs, News Releases, photo galleries and the events calendar. This activity also recommends, drafts and edits website content to provide user-friendly information to WSSC Water customers and stakeholders; manages the content on the internal website (intranet); assists other offices and divisions on their training and content needs; and provides content for agency-wide activities, need-to-know business and messages from senior leadership.

## HUMAN RESOURCES OFFICE

The Human Resources (HR) Office is responsible for planning, administering and evaluating the agency's personnel related programs. The office develops and maintains the employee benefit structures, 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 agency employees and administering safety and health programs to ensure compliance with all federal, state and local regulations.

### **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.

### **Core Activities**

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); Deferred Compensation and Employee Assistance Programs administration; 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 advises and guides departments and staff offices for resolution of employee relations issues and labor relations. This activity also provides support for collective bargaining; compliance with employment regulations; and agency-wide policy development, implementation and interpretation.

## HUMAN RESOURCES OFFICE (CONTINUED)

### Core Activities

Compensation & Human Resources Management System – This activity manages the agency’s compensation program in alignment with WSSC Water’s compensation philosophy, and the Human Resources 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; 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.

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 agency-wide programs to minimize the risk of injuries, accidents and damage to agency 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 agency facilities.

## EQUAL EMPLOYMENT OPPORTUNITIES OFFICE

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 related to the EEO, harassment, diversity and ADR programs. The EEO Office is responsible for developing a Diversity Program that enhances diversity by adopting and implementing a diversity strategy for WSSC Water.

### Mission Statement

To ensure WSSC Water’s compliance with EEO laws and practices, and address employee discrimination issues and complaints in accordance with the agency’s policies and procedures.

### Core Activities

Equal Employment Opportunities – This activity directs the application of WSSC Water’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 agency’s policy and procedures.

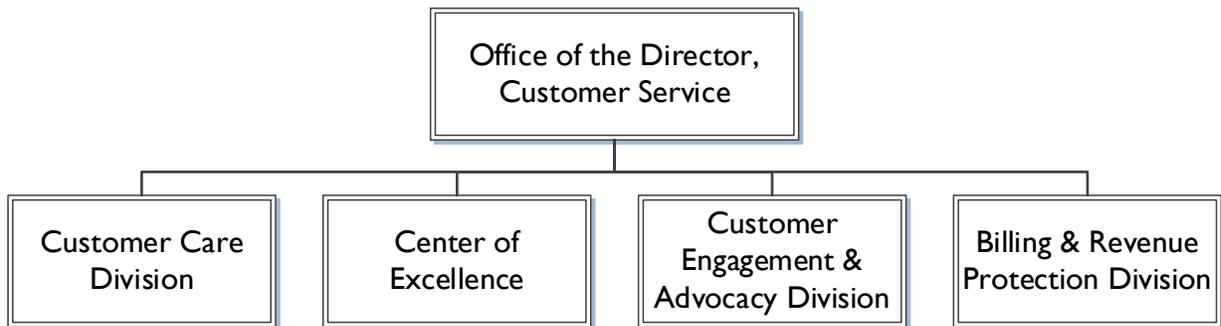
## CUSTOMER SERVICE DEPARTMENT

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 Customer Service Department also provides a variety of payment options and customer assistance solutions to help customers pay their water/sewer bills. The department supports the vision for customer service excellence through four divisions: Customer Care, Center of Excellence, Customer Engagement & Advocacy and Billing & Revenue Protection. Key priorities for the department include improving the overall customer experience and streamlining operations to improve customer satisfaction.

### 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 2019 Actual		FY 2020 Approved		FY 2021 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, Customer Service	2.5	\$ 410,587	4.0	\$ 624,121	4.0	\$ 746,918	-	\$ 122,797
Customer Care Division	55.7	\$ 5,682,326	51.0	\$ 5,117,945	50.0	\$ 6,079,383	(1.0)	\$ 961,438
Center of Excellence	3.9	\$ 457,488	6.0	\$ 670,427	6.0	\$ 736,271	-	\$ 65,844
Customer Engagement & Advocacy Division	5.7	\$ 678,257	5.0	\$ 562,311	5.0	\$ 622,021	-	\$ 59,710
Billing & Revenue Protection Division	32.0	\$ 3,065,650	20.0	\$ 4,610,109	21.0	\$ 5,492,510	1.0	\$ 882,401
<b>Total</b>	<b>99.8</b>	<b>\$ 10,294,308</b>	<b>86.0</b>	<b>\$ 11,584,913</b>	<b>86.0</b>	<b>\$ 13,677,103</b>	<b>-</b>	<b>\$ 2,092,190</b>

## CUSTOMER SERVICE DEPARTMENT (CONTINUED)

### Explanation of Major Variances

The FY 2021 Proposed Budget for the department reflects an increase of approximately 18% from the FY 2020 Approved Budget. This increase is primarily due to continued stabilization and system enhancement efforts associated with the roll-out of the new C2M billing system.

### Highlights

- Stabilization of departmental operations and business performance following replacement of the Customer Service Information System (CSIS) with the C2M billing system
- Continued funding for enhancements to customer affordability programs that will provide conservation kits, plumbing inspections for qualified customers and high bill leak adjustment assistance to qualified customers

## OFFICE OF THE DIRECTOR, CUSTOMER SERVICE

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 Customer Care, Center of Excellence, Customer Engagement & Advocacy and Billing & Revenue Protection divisions.

## CUSTOMER CARE DIVISION

The Customer Care Division serves as the voice of WSSC Water for customer oriented services and is comprised of the Customer Service Center (CSC) and Research & Communications 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 Water customers. Inquiries and communications received via letter, fax or electronic mail are entered into the C2M 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 C2M database such as inspections, field investigations

## CUSTOMER CARE DIVISION (CONTINUED)

and restoration of service; and educating customers on such topics as sources of water loss, 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

Objective	Outcome Measure	FY 2018 Actual/Target	FY 2019 Actual/Target	FY 2020 Target	FY 2021 Target
Respond to customer's telephone calls	Percentage of customer calls answered (non-emergency calls)	85.1% / 95.0%	82.8% / 92.0%	95.0%	73.0%*

\*The decrease in the target from 95.0% in FY 2020 to 73.0% in FY 2021 reflects revised performance expectations due to continued stabilization and system enhancement efforts associated with the roll-out of the new C2M billing system.

## CENTER OF EXCELLENCE

The Center of Excellence 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 workforce optimization, quality assurance, employee engagement, departmental performance and training.

Process & Technology – This activity includes developing and managing strategies via continuous process improvement and technological innovation.

## 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 Water priorities and projects, and promotes customer assistance programs and initiatives.

### Core Activities

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

## BILLING & REVENUE PROTECTION DIVISION

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

### 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 reconciles billing.

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 C2M 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 approximately 40% of WSSC Water's revenue. The activity also ensures that malfunctioning meters which inaccurately measure consumption are properly identified, investigated and either repaired or replaced.



## OPERATIONS

Operations refers to the departments critical to the planning, design, construction, operation and maintenance of the agency’s water and sewer services. The Deputy General Manager for Operations provides leadership, oversight and guidance regarding facility planning, construction, maintenance and operations, as well as maintenance and repair of the agency’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, Police & Homeland Security, Engineering & Construction Production and Utility Services.

### Budget Summary

Operations	FY 2019 Actual		FY 2020 Approved		FY 2021 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Asset Management Office	6.6	\$ 2,962,035	5.0	\$ 2,385,924	5.0	\$ 1,752,588	-	\$ (633,336)
Police & Homeland Security Office	37.0	4,397,701	40.0	6,050,620	40.0	6,063,378	-	12,758
Engineering & Construction Department	359.1	389,639,886	378.0	588,760,824	377.0	573,062,416	(1.0)	(15,698,408)
Production Department	316.1	159,828,915	330.0	139,093,978	330.0	145,060,403	-	5,966,425
Utility Services Department	476.3	91,711,486	512.0	138,619,476	512.0	139,591,679	-	972,203
<b>Total</b>	<b>1,195.1</b>	<b>\$ 648,540,023</b>	<b>1,265.0</b>	<b>\$ 874,910,822</b>	<b>1,264.0</b>	<b>\$ 865,530,464</b>	<b>(1.0)</b>	<b>\$ (9,380,358)</b>

### Explanation of Major Variances

The FY 2021 Proposed Budget reflects a decrease of approximately 1% from the FY 2020 Approved Budget. The decrease is primarily due to the annual update to the Capital Improvements Program (CIP) in the Engineering & Construction (E&C) Department. The decrease is partially offset by the transfer of business cases to the E&C Department, increased chemical and hauling costs in the Production Department and increased funding for the Advanced Meter Infrastructure (AMI) capital project and several Acoustic Fiber Optic (AFO) data acquisition computers in the Utility Services Department.

### ASSET MANAGEMENT OFFICE

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 agency; 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.

### 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.

### Core Activities

Asset Management Program – This activity involves the development and implementation of the WSSC Water Asset Management Program. The program includes the development of asset management plans, processes and procedures for all WSSC Water 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 Water’s Project Needs Validation

## ASSET MANAGEMENT OFFICE (CONTINUED)

Process, which focuses on identifying the most effective solution based upon lifecycle costs, risk and level of service.

## POLICE & HOMELAND SECURITY OFFICE

The Police & Homeland Security Office is responsible for safeguarding the agency's real property; providing for the safety of WSSC Water 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 agency property.

### **Mission Statement**

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

### **Core Activities**

Security Services – This activity provides security for employees and visitors to the agency-owned property and facilities. This involves conducting proactive patrols of all WSSC Water 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 Water facilities.

Investigative Services – This activity involves investigation into civil, criminal and administrative matters, and/or incidents involving the agency property or personnel. Also included are background investigations of contractors and potential agency 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 of Operations 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. 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.

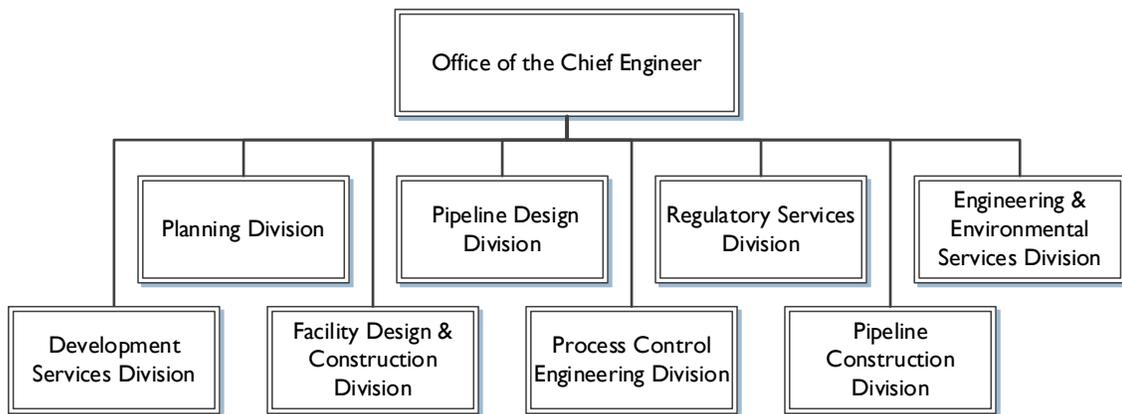
Risk and Threat Assessment and Mitigation – This activity involves conducting risk and resiliency assessments and revision of emergency response plans under the America's Water Infrastructure Act (S. 3021; Public Law 115-270, enacted October 23, 2018.) Utilities must also review and, if necessary, revise these documents at least every five years. The 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.

## ENGINEERING & CONSTRUCTION DEPARTMENT

The Engineering & Construction (E&C) Department 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 emphasizes continuous improvement through the development and management of its people, the efficient use of existing and emerging technologies, and the use of scientific, engineering and business knowledge to proactively solve practical problems. The E&C Department, led by the Chief Engineer, is comprised of eight divisions: Development Services, Planning, Facility Design & Construction, Pipeline Design, Process Control Engineering, Regulatory Services, Pipeline Construction, and Engineering & Environmental Services.



### 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.

## ENGINEERING & CONSTRUCTION DEPARTMENT (CONTINUED)

### Budget Summary

Engineering & Construction Department	FY 2019 Actual		FY 2020 Approved		FY 2021 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Engineer	1.9	\$ 309,897	2.0	\$ 3,780,315	1.0	\$ 4,692,721	(1.0)	\$ 912,406
Development Services Division	52.7	5,374,136	52.0	5,850,235	52.0	6,071,527	-	221,292
Planning Division	12.5	48,106,104	17.0	72,761,428	17.0	71,981,462	-	(779,966)
Facility Design & Construction Division	33.0	99,213,510	34.0	174,933,412	34.0	144,190,394	-	(30,743,018)
Pipeline Design Division	33.8	18,299,978	39.0	25,557,836	39.0	28,946,039	-	3,388,203
Process Control Engineering Division	13.6	2,596,342	14.0	2,712,489	14.0	2,802,836	-	90,347
Regulatory Services Division	73.9	7,106,921	76.0	7,237,096	76.0	7,416,971	-	179,875
Pipeline Construction Division	76.8	195,676,093	81.0	282,038,113	82.0	293,521,807	1.0	11,483,694
Engineering & Environmental Services Division	60.9	12,956,903	63.0	13,889,899	62.0	13,438,659	(1.0)	(451,240)
<b>Total</b>	<b>359.1</b>	<b>\$ 389,639,885</b>	<b>378.0</b>	<b>\$ 588,760,824</b>	<b>377.0</b>	<b>\$ 573,062,416</b>	<b>(1.0)</b>	<b>\$ (15,698,408)</b>

### Explanation of Major Variances

The FY 2021 Proposed Budget for the E&C Department reflects an overall decrease of almost 3% from the FY 2020 Approved Budget. The overall decrease is primarily driven by the annual update to the Capital Improvements Program (CIP), which is \$31.8 million lower in FY 2021 as discussed in the Capital Budget section and results in the significant decrease in the Facility Design & Construction Division. This decrease is partially offset by increases in other divisions. The increase shown for the Pipeline Design Division is predominantly the result of increases in the design work related to the Water Reconstruction Program and the Large Diameter Water Pipe & Large Valve Rehabilitation Program. The Pipeline Construction Division increase is principally related to the holistic rehabilitation efforts to address infiltration and inflow in the Piscataway Basin.

### Highlights

- WSSC Water continues to comply with all aspects of the Sanitary Sewer Overflow (SSO) Consent Decree
- For the distribution and transmission mains reconstruction programs, the E&C Department completed 49 miles of water main rehabilitation in FY 2019
- The final phase (close-out) of the Broad Creek Wastewater Pumping Station (WWPS) Augmentation project should be complete in FY 2021
- WSSC Water received approval from the Maryland Department of the Environment (MDE) for the Potomac Water Filtration Plant Consent Decree Program long-term upgrade plan on May 6, 2019; Improvements will be in design and construction in FY 2021; Construction started for the short-term improvements, leak mitigation and valve replacements in FY 2020
- The Piscataway Bioenergy project started construction in FY 2020 and will continue in FY 2021

### 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.

## OFFICE OF THE CHIEF ENGINEER (CONTINUED)

### Core Activities

Management and Administration – This activity involves the management and supervision of the E&C 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 Water has to proceed with development.

## DEVELOPMENT SERVICES DIVISION

The Development Services Division is responsible for the integrity of WSSC Water's water and sewer system through oversight of the planning, design and construction of developer-built water and sewer extensions, WWPS and relocations. 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 land development projects. Planning includes hydraulic analysis, determining adequacy of existing mains, service requirements for the size and alignment of new water/sewer mains, easements and coordination with other jurisdictions. Design review encompasses the review and approval of construction plans of new and/or relocated developer-built water/sewer mains for both WSSC Water and privately-owned 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 Water divisions to close-out and store as-built data for completed projects.

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 responsibilities are four-fold. First, it is responsible to ensure adequate capacity of the water treatment, transmission, distribution and storage systems, as well as the wastewater treatment, collection and conveyance systems for both existing and future customers. Secondly, it is responsible to develop projects and perform preliminary engineering before they are transferred to the design teams in order to expedite the project delivery process. Part of this effort includes several infrastructure replacement programs including water mains, sewer mains, force mains and pre-stressed concrete cylinder pipe (PCCP). Additionally, it is responsible to develop new, and manage existing, regional cooperative agreements with adjoining jurisdictions and other agencies with whom WSSC Water shares resources, and to provide technical resources that advise the agency concerning any proposed state and federal policy initiatives, laws and regulations that may impact its activities. This includes review and approval of all invoices related to WSSC Water's relevant share of the wastewater CIP projects for the District of Columbia Water and Sewer Authority (DC Water) and Charles County. Lastly, it is responsible to execute business cases that are recommended by the Asset Management Program's Project Needs Validation Process. The business cases

## PLANNING DIVISION (CONTINUED)

evaluate feasible alternatives for a given need and perform a lifecycle cost and business risk exposure evaluation to develop a recommended solution.

### **Core Activities**

Need Analysis & Facility Planning – This activity identifies and develops water and sewer system capacities through computerized hydraulic modelling and identifies deficiencies and solutions to mitigate them. This work is limited to CIP-sized facilities and can include development-related needs. It also develops long-range flow projections, provides technical support for county 10-year water and sewer plan revisions and prepares quarterly reports on available capacity.

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 Water.

Regional Water & Wastewater Management – This activity oversees payments to DC Water for WSSC Water's share of construction at the Blue Plains Advanced Wastewater Treatment Plant (Blue Plains) and other wastewater collection and conveyance facilities located in Washington, DC. The division also oversees capital billing and reviews the preparation of Blue Plains and Mattawoman WRRF (located in Charles County) CIP projects. This activity also includes developing new and managing existing agreements with adjoining jurisdictions such as Howard County, the City of Bowie and the City of Rockville, as well as regional water supply cooperative agreements and planning activities through the Interstate Commission on the Potomac River Basin (ICPRB).

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 replacement program.

Business Case Evaluations – This activity performs evaluations to determine the most effective solutions to validated needs based upon lifecycle cost, business risk exposure and level of service.

## 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.

## FACILITY DESIGN & CONSTRUCTION DIVISION (CONTINUED)

### Core Activities

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

Facility Construction – This activity includes funding and managing 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 designs in the CIP and water and sewer main reconstruction programs; pipeline 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 Water guidelines.

### Core Activities

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

Water and Sewer Relocations – This activity reviews and approves construction plans for road and streetscape improvements and other WSSC Water, 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 design 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: Optimize Infrastructure

Objective	Outcome Measure	FY 2018 Actual/Target	FY 2019 Actual/Target	FY 2020 Target	FY 2021 Target
Design the number of miles for the Water Reconstruction Program as planned	Miles of water mains designed	58.2 / 67.0	26.0 / 25.0	27.0	25.0
Design the number of miles for the Sewer Reconstruction Program as planned	Miles of sewer mains designed	21.2 / 20.0	25.8 / 20.0	25.0	25.0*

\*This figure does not include the additional work in FY 2021 related to the holistic rehabilitation efforts to address infiltration and inflow in the Piscataway Basin.

## PROCESS CONTROL ENGINEERING DIVISION

The Process Control Engineering Division designs, procures, configures and installs process control systems for new and existing facilities; improves automation for existing facilities; and maintains and repairs automation and Supervisory Control and Data Acquisition (SCADA) systems.

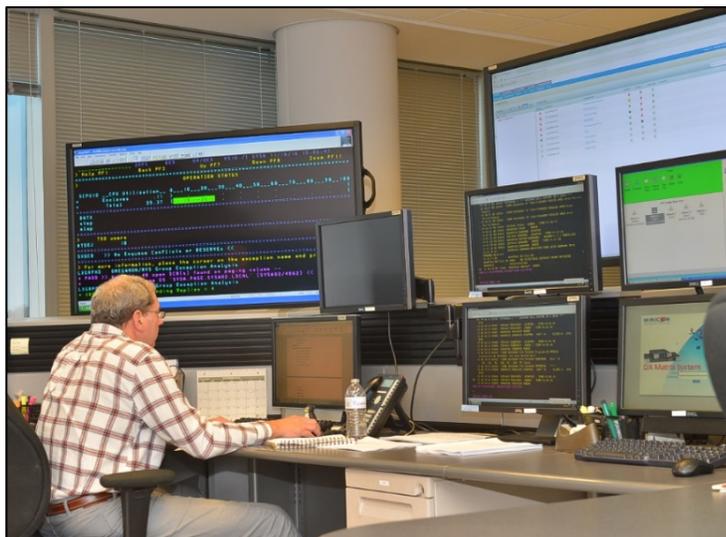
### Core Activities

Corrective Maintenance – This activity provides corrective maintenance of all process control systems at WSSC Water 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 (industrial discharge control) program; the Fats, Oils and Grease (FOG) Program; and the implementation 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

## REGULATORY SERVICES DIVISION (CONTINUED)

hazardous materials entering the sewer system; monitors/inspects cross connections to prevent backflow contamination; reviews and approves plumbing/gas-fitting engineering designs; and inspects the installation of commercial and residential plumbing and gas-fitting systems, plumbing and gas fixtures/appliances, and grease abatement systems.

### **Core Activities**

Code Planning and Plans Review – This activity plans, develops and maintains the technical aspects of WSSC Water’s plumbing and gas-fitting code along with performing all plumbing and gas-fitting engineering design reviews and approvals.

Cross Connection – This activity includes inspection of backflow prevention devices, maintenance of inspection records and all activities associated with the WSSC Water backflow prevention program.

Plumbing Inspections – This activity inspects for proper permitting and installations, in compliance with WSSC Water’s Plumbing and Fuel Gas Code, of installed commercial and residential plumbing and gas-fitting systems and grease abatement systems for new construction projects.

Industrial Discharge Control Program – This activity monitors and controls industrial/non-domestic and hauled waste discharged into WSSC Water’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; 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.

## PIPELINE CONSTRUCTION DIVISION (CONTINUED)

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).

### Goals, Objectives and Outcome Measures

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

Strategic Priority: Optimize Infrastructure

Objective	Outcome Measure	FY 2018 Actual/Target	FY 2019 Actual/Target	FY 2020 Target	FY 2021 Target
Replace the number of miles for the Water Reconstruction Program as planned	Miles of water mains replaced	44.3 / 43.0	43.8 / 43.0	23.0	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	20.7 / 55.0	16.4 / 35.0	38.0	38.0*

\*This figure does not include the additional work in FY 2021 related to the holistic rehabilitation efforts to address infiltration and inflow in the Piscataway Basin.

## 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 the Geographic Information System (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.

GIS Services – This activity develops and maintains the web-based EGIS including: development, installation and programmatic oversight; collaboration with government agencies and other entities; and providing GIS data access to WSSC Water employees and other entities.

Electrical / Mechanical Support – This activity provides electrical and mechanical support including: asset management, ongoing 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 includes the Dam Safety and Inspection Program and the Corrosion Management Program. The Dam Safety and Inspection Program includes monthly water supply dam inspections and repair recommendations, piezometer readings, silt measurements and preparation of the annual dam report submitted to the State. The Corrosion Management Program 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 Water's FileNet.

Process Engineering and Water Quality Studies – This activity provides treatment process expertise and services for in-house projects and 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 Water 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 Water 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 Water'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 Water regulations for utility construction erosion and sediment control.

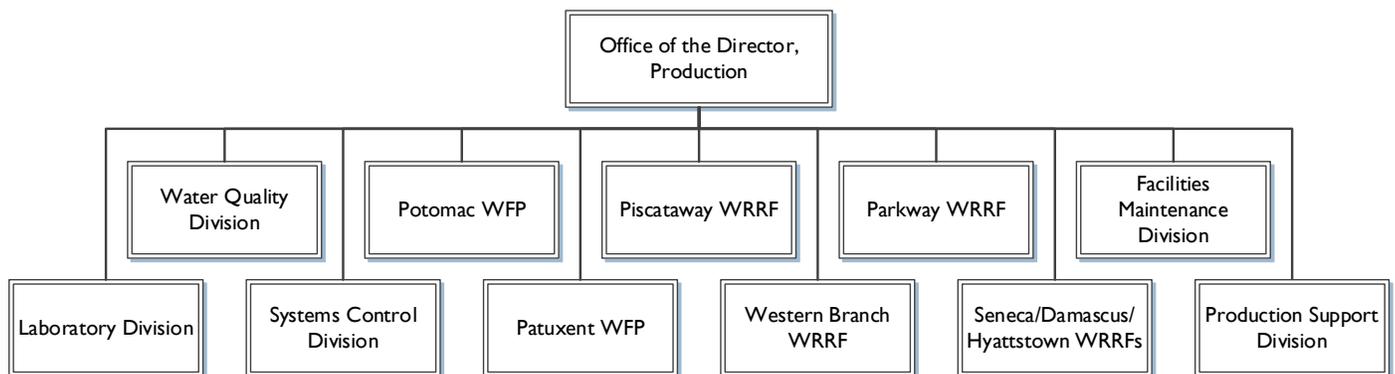
Electronic As-Built Prep – This activity prepares pipeline rehabilitation as-built contracts using AutoCad, including integrating the GPS units to transmit digital appurtenance locations to AutoCad. The AutoCad results are then transmitted to EGIS.

## 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 Water'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 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 agency'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.

## PRODUCTION DEPARTMENT (CONTINUED)

### Budget Summary

Production Department	FY 2019 Actual		FY 2020 Approved		FY 2021 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, Production	3.4	\$ 535,755	4.0	\$ 594,136	4.0	\$ 625,754	-	\$ 31,618
Laboratory Division	28.8	4,150,170	29.0	4,331,170	29.0	4,397,392	-	66,222
Water Quality Division	7.0	897,404	8.0	1,804,249	8.0	1,729,413	-	(74,836)
Systems Control Division	31.4	4,680,541	32.0	4,786,272	32.0	4,802,240	-	15,968
Potomac WFP	32.3	10,717,836	35.0	10,591,464	35.0	10,147,055	-	(444,409)
Patuxent WFP	23.0	4,762,566	24.0	4,298,998	26.0	4,855,307	2.0	556,309
Piscataway WRRF	24.8	7,947,797	26.0	7,449,496	26.0	11,605,597	-	4,156,101
Western Branch WRRF	30.9	8,617,520	32.0	7,039,887	32.0	9,519,110	-	2,479,223
Parkway WRRF	22.0	3,742,316	23.0	4,390,023	22.0	3,750,005	(1.0)	(640,018)
Seneca/Damascus/Hyattstown WRRFs	33.0	6,428,397	33.0	6,429,861	32.0	6,090,126	(1.0)	(339,735)
Facilities Maintenance Division	62.5	17,403,174	68.0	17,483,847	68.0	17,816,893	-	333,046
Energy Management Division*	-	19,897,561	-	-	-	-	-	-
Production Support Division	17.0	70,047,878	16.0	69,894,575	16.0	69,721,511	-	(173,064)
<b>Total</b>	<b>316.1</b>	<b>\$ 159,828,915</b>	<b>330.0</b>	<b>\$ 139,093,978</b>	<b>330.0</b>	<b>\$ 145,060,403</b>	<b>-</b>	<b>\$ 5,966,425</b>

\*As of FY 2020, the Energy Management Division moved to the Sustainability & Support Services Division within the General Services Department.

### Explanation of Major Variances

The Production Department FY 2021 Proposed Budget reflects an increase of approximately 4% over the FY 2020 Approved Budget. The increase is primarily due to the increased chemicals cost associated with the high flow mitigation requirements in the Piscataway Water Resource Recovery Facility (WRRF); increased hauling costs at the Western Branch WRRF and Patuxent WFP; and increased funding for maintenance projects in the Facilities Maintenance Division. The increase is partially offset by decreased chemical and hauling costs at several of the other facilities.

### Highlights

- Fiscal Year 2019 marks our 101st year without a drinking water violation
- Both Potomac and Patuxent WFPs earned the prestigious Partnership for Safe Water Presidents Award, the only two water filtration plants in Maryland to win the award
- All six of our WRRFs earned National Association of Clean Water Agencies (NACWA) Peak Performance Awards in 2019. Four earned Platinum, one earned Gold, and one earned Silver.

### OFFICE OF THE DIRECTOR, PRODUCTION

The Production Director is responsible for the oversight and operation of two WFPS, six WRRFs, and the Laboratory, Water Quality, Systems Control, Facilities Maintenance 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 agency's lab facilities and for providing high quality analytical data to the agency and other organizations for the benefit of public health and environmental quality.

### 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 WSSC Water 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; analyzes 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 (SDWA) and other federal and state regulations.



## WATER QUALITY DIVISION

This division establishes a unified, central structure in which all water quality issues are managed, so the agency'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 SCADA systems through the Control Center and monitors 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.

## SYSTEMS CONTROL DIVISION (CONTINUED)

### 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.

**Maintenance** – This activity maintains and operates the agency'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 agency's electrical costs. In addition, this activity supports project planning, project design and project construction of new facilities within the WSSD. When necessary, the agency's Emergency Operating Center is directed within this area.

### POTOMAC AND PATUXENT WFPs

These two WFPs are responsible for the operation and maintenance of their respective facilities, providing high-quality, cost-effective maintenance and continual operation of the agency'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 agency'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 2018 Actual	FY 2019 Actual	FY 2020 Approved	FY 2021 Proposed
Average daily filtered water to the distribution system (MGD)	163.9	161.7	164.0	164.0

Organizational Budgets and Measures

These WRRFs are responsible for the operation and maintenance of their respective facilities, providing high quality, cost effective maintenance and continual operation of the agency’s wastewater collection facilities and water resource recovery facilities. The facilities produce effluent that meets all requirements for discharging into 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 agency’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, processes or safety concerns in order for the facilities to meet permit requirements.

**Activity Indicators**

WORKLOAD DATA	Wastewater Treated Flow (MGD)			
	FY 2018 Actual	FY 2019 Actual	FY 2020 Approved	FY 2021 Proposed
Piscataway WRRF	23.9	32.4	26.2	26.2
Western Branch WRRF	20.7	25.8	22.2	22.2
Parkway WRRF	6.3	7.0	6.5	6.5
Seneca/Damascus/Hyattstown WRRFs	15.9	17.7	17.8	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 Water facilities.

### Core Activities

Maintenance Support Services – This activity provides operational support and maintenance services for all of the agency’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.

## PRODUCTION SUPPORT DIVISION

The primary focus of this division is on utilities cost control, bio-solids management, asset management competitive action efforts, safety, training and security.

### Core Activities

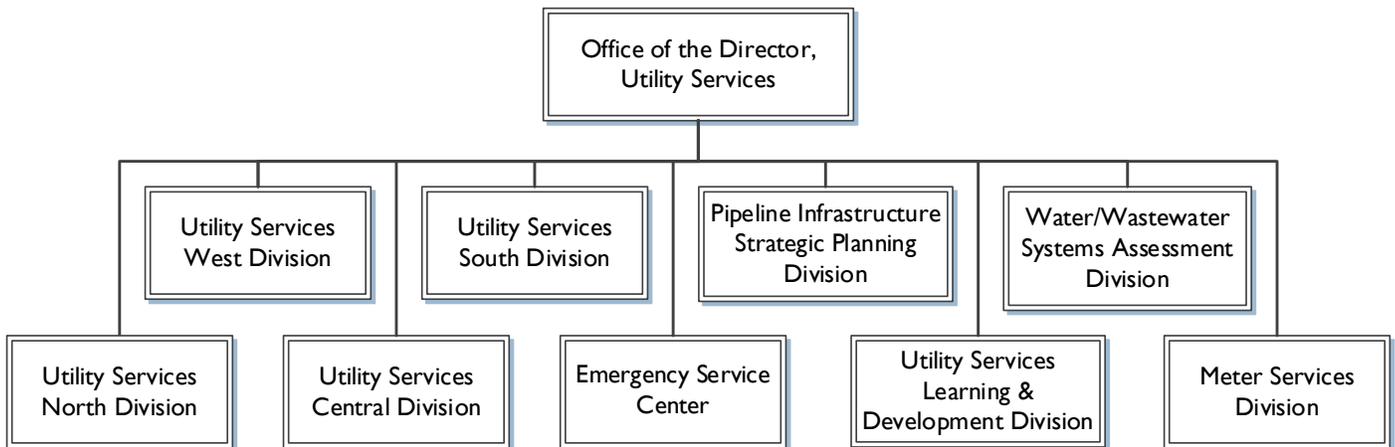
Operations Support – This activity includes facility support through asset management, contract management, training and WSSC Water biosolids management. It also includes management of the shared operation and maintenance costs for utilities in other jurisdictions, and shared costs to support coordination of regional water supply issues and water system emergencies.

## UTILITY SERVICES DEPARTMENT

The Utility Services Department is directly responsible for maintaining the distribution and collection systems including all of the WSSC Water's water and sewer mains, thus ensuring the consistent flow of water and outflow of wastewater within the WSSD 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, Emergency Service Center, 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.

## UTILITY SERVICES DEPARTMENT (CONTINUED)

### Budget Summary

Utility Services Department	FY 2019 Actual		FY 2020 Approved		FY 2021 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, Utility Services	22.1	\$ 7,209,898	9.0	\$ 20,931,314	12.0	\$ 21,057,185	3.0	\$ 125,871
Utility Services North Division	59.7	6,952,918	60.0	9,474,526	59.0	9,876,822	(1.0)	402,296
Utility Services West Division	57.7	8,400,678	60.0	10,338,395	60.0	10,714,613	-	376,218
Utility Services Central Division	60.8	10,229,500	62.0	11,755,870	62.0	11,990,225	-	234,354
Utility Services South Division	56.1	10,520,323	58.0	11,599,272	58.0	10,766,892	-	(832,380)
Emergency Service Center*	-	-	19.0	1,492,854	16.0	1,537,382	(3.0)	44,528
Pipeline Infrastructure Strategic Planning Division	27.4	3,557,274	39.0	5,319,295	39.0	5,383,876	-	64,581
Utility Services Learning & Development Division	8.0	823,079	8.0	820,222	8.0	858,520	-	38,298
Water/Wastewater Systems Assessment Division	75.1	32,955,996	82.0	39,408,016	82.0	38,533,711	-	(874,305)
Meter Services Division	109.4	11,061,820	115.0	27,479,711	116.0	28,872,453	1.0	1,392,742
<b>Total</b>	<b>476.3</b>	<b>\$ 91,711,486</b>	<b>512.0</b>	<b>\$ 138,619,476</b>	<b>512.0</b>	<b>\$ 139,591,679</b>	<b>-</b>	<b>\$ 972,203</b>

\*As of FY 2020, the Emergency Service Center was established.

### Explanation of Major Variances

The FY 2021 Proposed Budget is approximately 1% greater than the FY 2020 Approved Budget. A majority of the overall increase relates to an increase in funding for the Advanced Meter Infrastructure (AMI) capital project and funding for several Acoustic Fiber Optic (AFO) data acquisition computers. These increases are offset by a reduction in required funding for watermain condition assessment support.

### Highlights

- Expanding large water meter testing, repair and replacement in support of ramping up the Advanced Metering Infrastructure program
- Implementing pilot leak detection satellite monitoring technology

### 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, the Emergency Service Center, 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 the operation, maintenance and repair of the water and sewer mains throughout the WSSD.

### Core Activities

PCCP Program Management – This activity provides for the engineering, design, construction, inspection, investigation and analysis/assessment of PCCP.

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, dispatch emergency work orders to maintenance crews, cleaning companies, plumbers and other agency personnel as required.

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

These divisions maintain WSSC Water’s distribution and collection systems, including all of the agency’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 the agency’s 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.

**Capital Project Support** – This activity involves the maintenance crews’ 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, including 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 scheduling water main shutdowns.

### Goals, Objectives and Outcome Measures

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

**Strategic Priority:** Optimize Infrastructure

Objective	Outcome Measure	FY 2018 Actual / Target*	FY 2019 Actual / Target*	FY 2020 Target*	FY 2021 Target
Reduce service interruptions due to water main breaks	Number of breaks per 100 miles of water main	39 / 35	29 / 33	34	34

\*FY 2018 through FY 2020 Targets assumed breaks only

**Emergency Response**

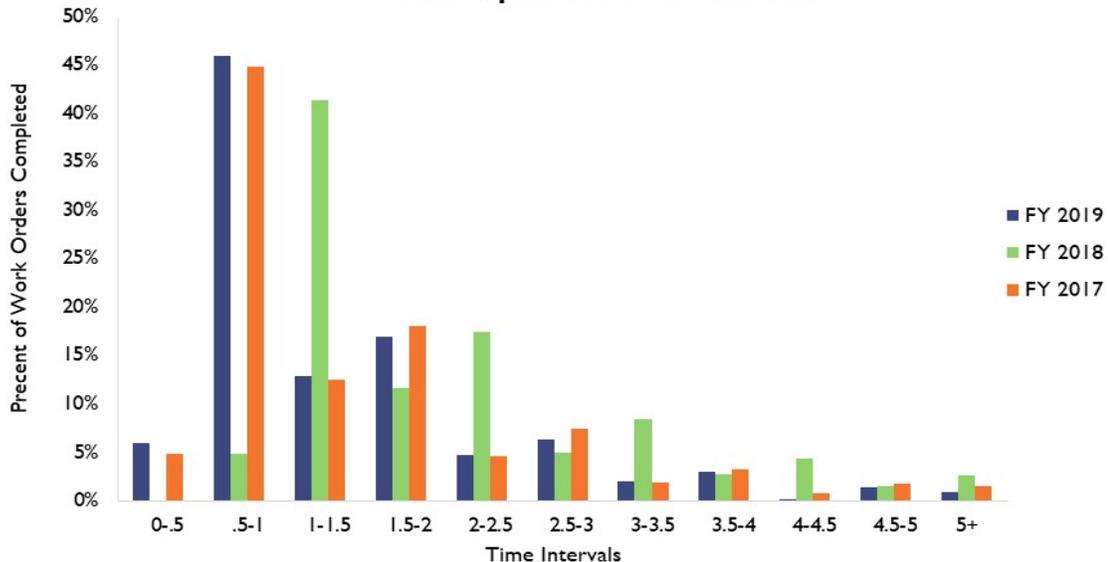
During FY 2019, 33,884 emergency work orders were initiated in response to customer or system emergencies, a 18.7% decrease from FY 2018. WSSC Water's objective is to provide a first response to these emergencies in less than 2 hours, a reasonable and necessary response time based upon feedback from customers. As illustrated in the graph to the right, WSSC Water responded to approximately 52.0% of emergency calls in less than 1 hour and to 81.9% in less than 2 hours with an average response time of 1.3 hours. Most emergency work orders required less than 2 hours to complete. The percentage of calls responded to within the 2-hour goal increased primarily due to the reduction in the number of emergency work orders in FY 2019 over FY 2018. FY 2018 included record low temperatures, resulting in a larger number of water main breaks and colored water complaints.

**Percentage of Emergency Responses within Specified Times**



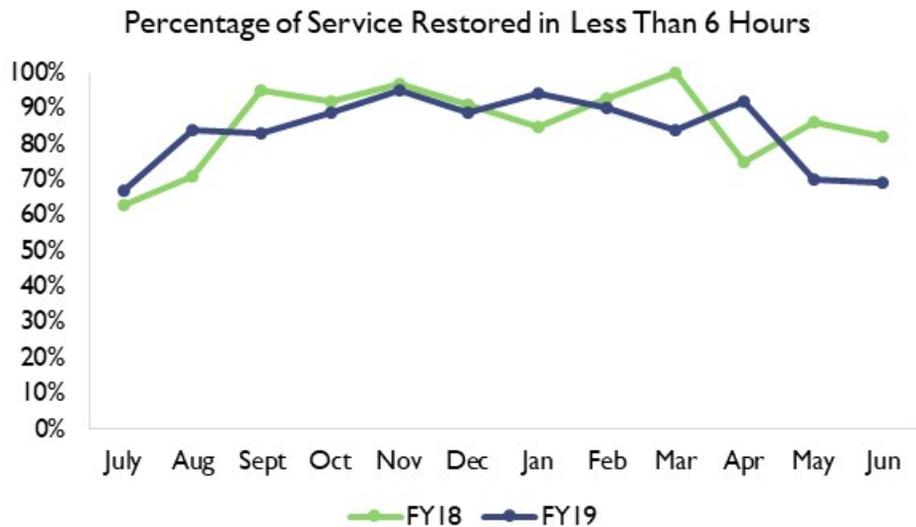
The graph below shows the distribution of emergency work order completion times in FY 2019. Most emergency work orders required less than 2.0 hours to complete.

**Percent of Emergency Work Orders Completed within Specified Time Intervals**



**Restoration of Water Service**

The WSSC Water's objective is to restore normal service to our customers within 24 hours from the time the agency is notified of an emergency, and to limit the actual time a customer is without water service to less than 6 hours. During FY 2019, 11,592 customers, or approximately 4.0% of WSSC Water's customers, experienced a temporary suspension in water service while a water main was shut down following a water main break or other emergency. The graph 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 2019, the average time customers were without water service was 3.8 hours, with 83.9% having water service restored within the targeted 6-hour goal.

**Sewer Line Blockages**

The goal of the Line Blockage Analysis program is to prevent a customer who experiences a sewer backup due to a problem in the WSSC Water’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 a Line Blockage Analysis 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 95.0% of the cases processed. For FY2019, the agency was successful in preventing a second backup in 100% of these cases. The Proactive Maintenance Program (PMP), along with technological advances such as the jet cam, has enabled WSSC Water 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 WSSC Water has confirmed there is a problem with the service. During FY 2019, 381 house connections met the criteria for sewer renewal.

## EMERGENCY SERVICE CENTER

The Emergency Service Center is a 24/7 emergency call center to assist customers with water and sewer related emergencies. The center also dispatches work to field deployed maintenance staff to ensure the work is completed and accurately captured in WSSC Water’s maintenance management system. The Emergency Service Center supports several departments within the agency such as Customer Service, Production, Engineering & Construction and Communications.

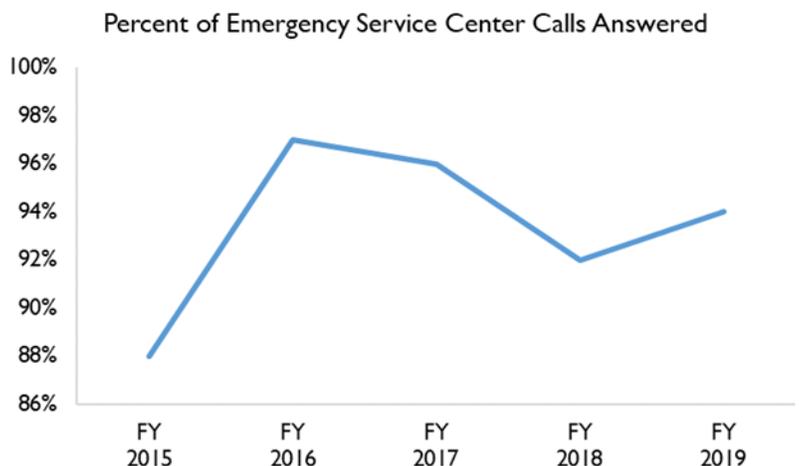
### Core Activities

Emergency Calls- The center accepts water and sewer related calls from customers within the WSSD.

Dispatch Services- The center dispatches work to field inspectors and WSSC Water crews responding to emergencies 24/7.

### Customer Calls to the Emergency Service Center

During FY 2019, WSSC Water answered 94% of customer calls for emergency maintenance assistance, as shown in the graph to the right. This is an increase from 92% calls answered in FY2018, which had unusually cold weather that resulted in a record number of calls into the Emergency Service Center (Center). The agency’s goal continues to be a 95% response rate.



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 emergency 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.

The Center also utilizes C2M and Mobile Workforce Management (MWM) systems to create and coordinate meter calls with both the Customer Service Department and the applicable divisions. The Center uses the Customer Notification System (CNS) for mass notifications to customers, internal and external representatives.

## PIPELINE INFRASTRUCTURE STRATEGIC PLANNING DIVISION

This division collects quality data to assist managing and administering predictive and preventive maintenance activities impacting WSSC Water’s 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 Services Department.

## PIPELINE INFRASTRUCTURE STRATEGIC PLANNING DIVISION (CONTINUED)

### 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 in-house staff replacing water mains that are undersized or aged past their useful life. This function contributes to the reduction of discolored water complaints and service interruptions due to frequent main breaks, and increased fire protection.

### Goals, Objectives and Outcome Measures

**Goal:** Complete planned water main replacement miles      **Strategic Priority:** Optimize Infrastructure

Objective	Outcome Measure	FY 2018 Actual / Target	FY 2019 Actual / Target	FY 2020 Target	FY 2021 Target
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	3.9 / 12.0	3.3 / 2.0	2.0	2.0

## UTILITY SERVICES LEARNING & DEVELOPMENT DIVISION

This division trains Utility Services employees and ensures 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 divisions of the Utility Services Department.

### Core Activities

Research and Development – This activity identifies 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 processes, 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 Water’s effort to execute the Enterprise Asset Management Plan; 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 SSO Consent Decree requirements; management of PCCP inspections; and oversight of AFO monitoring of major pipelines.

### Core Activities

Planning – This activity provides the necessary management and administration related to compliance with the requirements of the federal SSO Consent Decree, and execution of the Line Blockage Analysis program, which provides for review of sewer lines and service stoppage data, and recommendations for preventive

## WATER/WASTEWATER SYSTEMS ASSESSMENT DIVISION (CONTINUED)

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 PMP; 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. The analysis of related videos to provide a recommendation for preventive or corrective maintenance is also included.

**Condition Assessment** – The purpose of this activity is to provide condition assessment of the agency’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; 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 WSSC Water’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 2 replacements.

### Goals, Objectives and Outcome Measures

**Goal:** Identify deteriorating infrastructure through inspection, testing and monitoring      **Strategic Priority:** Optimize Infrastructure

Objective	Outcome Measure	FY 2018 Actual / Target	FY 2019 Actual / Target	FY 2020 Target	FY 2021 Target
Inspect the number of PCCP miles as planned	Miles of PCCP inspection performed vs. planned	21.2 / 18.0	19.1/ 19.1	18.0	18.0
Install acoustical fiber optic line to monitor PCCP water transmission mains as planned	Miles of AFO line installed vs. planned	13.4 / 6.0	1.3 / 3.4	3.5	10.0

### Activity Indicators

WORKLOAD DATA	FY 2018 Actual	FY 2019 Actual	FY 2020 Approved	FY 2021 Proposed
Miles of sewer mains cleaned for preventive maintenance	609	691	650	650
Miles of mainline sewer televised for preventative maintenance program (WSSC Crews)	56	48	60	60
Miles of mainline sewer televised for proactive maintenance program (by contract)	213	158	225	200
Manholes inspected (by contract)	9,931	4,790	6,000	5,500*

\*This figure does not include the additional work in FY 2021 related to the holistic rehabilitation efforts to address infiltration and inflow in the Piscataway Basin.

## METER SERVICES DIVISION

This division is responsible for the water meter evaluation, testing, and replacement/repair program for large and small meters; and for reading the agency's water meters to ensure accurate customer billing. Additional support services include fire hydrant meter leasing; warehousing, transporting and issuing of meters to customers; and research and development.

### Core Activities

Temporary Fire Hydrant Meter Leasing and Maintenance – This activity involves administering WSSC Water'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.

Small and Large Meter Testing, Repair & Replacement – This activity involves testing, repairing, and replacing small and large meters to ensure billing accuracy. Meters 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 become necessary to replace them to ensure accurate registration for WSSC Water's customers.

New Meters – This activity involves processing requests for both small and large meters from external customers and installing new meters as part of the Advanced Metering Infrastructure (AMI) project. The primary function of this activity is to ensure that all activated meters are assigned an account number and properly billed. For more information about the AMI project, refer to the Capital Budget section.

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



## ADMINISTRATION

Administration refers to the departments and offices providing centralized advisory and support services to WSSC Water. The Deputy General 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 Supplier Diversity & Inclusion, Procurement, General Services, Finance and Information Technology.

### Budget Summary

Administration	FY 2019 Actual		FY 2020 Approved		FY 2021 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of Supplier Diversity & Inclusion	7.5	\$ 972,894	9.0	\$ 1,461,900	9.0	\$ 1,555,739	-	\$ 93,839
Procurement Office	29.2	2,947,928	27.0	2,758,044	27.0	2,785,036	-	26,992
General Services Department	85.7	15,846,260	96.0	40,446,733	96.0	42,753,616	-	2,306,883
Finance Department	64.1	7,797,609	64.0	7,720,450	64.0	8,420,934	-	700,484
Information Technology Department	91.0	72,731,820	103.0	56,050,279	103.0	56,943,147	-	892,868
<b>Total</b>	<b>277.5</b>	<b>\$ 100,296,511</b>	<b>299.0</b>	<b>\$ 108,437,406</b>	<b>299.0</b>	<b>\$ 112,458,472</b>	<b>-</b>	<b>\$ 4,021,066</b>

### OFFICE OF SUPPLIER DIVERSITY & INCLUSION

The Office of Supplier Diversity & Inclusion (OSDI) assists with the development of WSSC Water’s Minority Business Enterprise (MBE) and Small, Local Business Enterprise (SLBE) policies. The office seeks products and services from minority and women-owned businesses to ensure that the agency has a vendor base that is reflective of the community it serves.

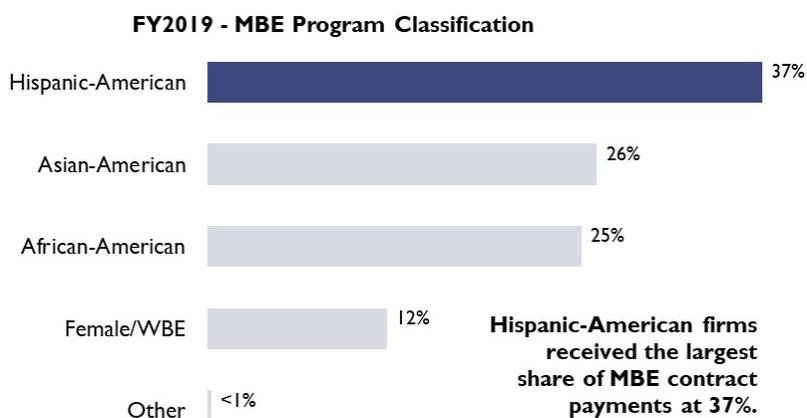
#### Mission Statement

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

#### Core Activities

Small, Local and Minority Business Enterprise – This activity plans, manages, coordinates and monitors WSSC Water’s MBE and SLBE programs, in accordance with state law.

In FY 2019, WSSC Water’s contract payments by business classification to MBE firms, including Women Business Enterprise (WBE), totaled \$152 million (29%) compared to \$146 million (28%) in FY 2018. The breakdown of the FY 2019 MBE program is shown below:



## PROCUREMENT OFFICE

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

### 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.

### Core Activities

Procurement Services – This activity involves purchasing all commodities, supplies, equipment and services necessary to support WSSC Water'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 agency's 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 prospective suppliers.

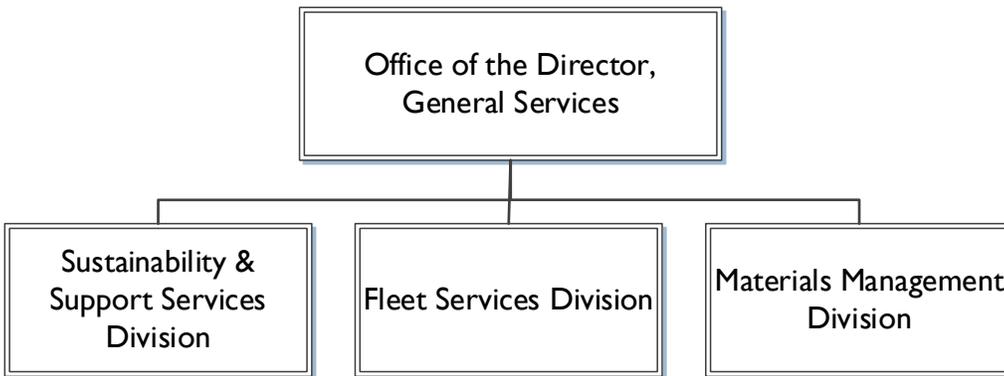
Contracting Officer Representatives (CORs) – This activity involves CORs who are responsible for managing all pre-award and post-award contracting functions, including procurement forecasting, Statement(s) of Work (SOW) and specification development support, change orders, task orders and cure notices. 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.

# GENERAL SERVICES DEPARTMENT

The General Services Department, led by the Office of the Director, is comprised of the Sustainability & 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; sustainability services including energy management; property development; and space planning and management.



## Organizational Structure



## Mission Statement

To plan, direct and coordinate the activities of a number of vital support services at WSSC Water including fleet management, warehousing and inventory management, mail and messenger services, printing and reprographic services, property development, space planning and records management.

## Budget Summary

General Services Department	FY 2019 Actual		FY 2020 Approved		FY 2021 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, General Services	4.1	\$ 850,412	5.0	\$ 721,642	5.0	\$ 675,793	-	\$ (45,849)
Sustainability & Support Services Division	11.0	4,035,176	16.0	25,449,229	16.0	26,802,575	-	1,353,346
Fleet Services Division	43.1	7,439,146	47.0	10,783,451	47.0	11,514,447	-	730,996
Materials Management Division	27.5	3,521,524	28.0	3,492,412	28.0	3,760,801	-	268,389
<b>Total</b>	<b>85.7</b>	<b>\$ 15,846,259</b>	<b>96.0</b>	<b>\$ 40,446,733</b>	<b>96.0</b>	<b>\$ 42,753,616</b>	<b>-</b>	<b>\$ 2,306,883</b>

\*As of FY 2020, the Energy Management Division move to the Sustainability & Support Services Division within the General Services Department

## GENERAL SERVICES DEPARTMENT (CONTINUED)

### Explanation of Major Variances

The FY 2021 Proposed Budget reflects an increase of approximately 6% over the FY 2020 Approved Budget. The increase is primarily due to a projected increase in the renewable energy premium and wind power prices, increased funding for facility renovations and replacement of fleet machinery and equipment. The increase is partially offset by the completion of the FY 2020 multi-site lighting project.

### Highlights

- Bar coding technology is being implemented at WSSC Water's warehouses to develop a robust system supply chain application (Oracle Warehouse Management)
- Automated Vehicle Location Services (AVL) technology was added to all vehicles and is being used to enhance safety, drive efficiencies and reduce costs
- AVL is being added to heavy equipment and trailers. This will assist with tracking utilization as well as assist with the recovery of equipment stolen from jobsites
- Improved print shop capabilities are being implemented. It is expected that over 99% of the internal printing needs will be completed inhouse. Internal printing costs across all WSSC Water organizations are expected to decrease by 20%
- A complete space utilization study for all WSSC Water facilities is underway 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

## OFFICE OF THE DIRECTOR, GENERAL SERVICES

The General Services Director oversees the Sustainability & Support Services, Fleet 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 Water 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 and space planning initiatives across the agency.

## SUSTAINABILITY & SUPPORT SERVICES DIVISION

The Sustainability & Support Services Division manages real estate, sustainability services, energy management, space planning and records management for WSSC Water.

### **Core Activities**

Property Development and Interior Sustainable Planning Services – This activity provides sustainability services for WSSC Water, which includes space planning and design and greening of infrastructure. The agency is working towards Leadership in Energy and Environmental Design (LEED) certification for agency facilities and lowering the environmental impact of the work.

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

Property Development Activities – This activity involves the development, review and implementation of opportunities to generate non-rate related revenues through the sale or joint development of real estate properties, including surplus property.

Records Management – This activity provides records management for WSSC Water, 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 agency.

Energy Management – This activity includes the management and procurement of wholesale electricity, natural gas and other fuels; the development of renewable energy sources such as wind, solar, hydro and biogas; the replacement of energy inefficient equipment and systems at WSSC Water WRRFs, WFPs, and pumping stations; and the development and maintenance of the Climate Change program.

## FLEET SERVICES

Fleet Services provides vehicles and work site equipment that is safe and reliable and facilitates the achievement of the mission of WSSC Water.

### **Core Activities**

Vehicle and Equipment Maintenance and Repair – This activity involves the distribution, inspection, maintenance, repair and quality control of a wide variety of vehicles, light and heavy equipment.

Fleet Contracting and Purchases – This activity involves developing specifications for the purchase of vehicles and equipment, major garage equipment and specialized field service units; purchase and inventory of parts and supplies.

Fuel – This activity involves the purchase of fuel, the maintenance of underground fuel storage tanks and monitoring WSSC Water's carbon emissions.

## FLEET SERVICES (CONTINUED)

### Activity Indicators

WORKLOAD DATA	FY 2018 Actual	FY 2019 Actual	FY 2020 Approved	FY 2021 Proposed
Equipment fleet managed (pieces of equipment)	724	726	724	737
Vehicle fleet managed (number of vehicles)	961	935	961	950
Scheduled preventive maintenance completed on vehicles and equipment	3,852	3,384	3,756	3,374
Other (non-preventative maintenance) vehicle and equipment repairs	5,761	6,632	4,877	4,893

## MATERIALS MANAGEMENT

The Materials Management Division warehouses and provides the required materials to support the maintenance, repair and operations of the agency’s infrastructure systems and facilities.

### 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.



Materials Management – This activity involves the acquisition and management of materials stocked at WSSC Water’s warehouses, and used by employees and contractors in the maintenance and repair of the distribution and collection systems.

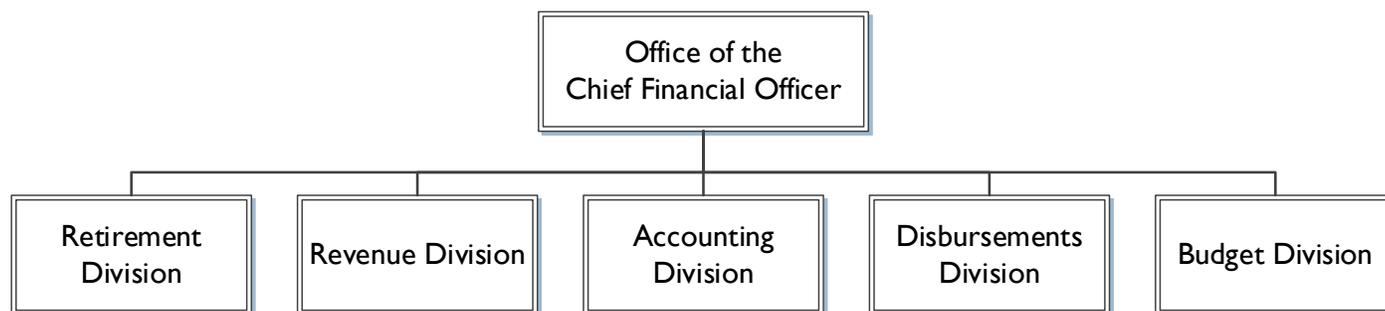
This includes receiving, storing and issuing materials; inspecting, testing and evaluating materials; developing new material specifications; and certifying the manufacturing processes, materials, and plants.

## FINANCE DEPARTMENT

The Finance Department maintains the fiscal integrity of WSSC Water and helps ensure that the available resources are efficiently allocated and productively used to provide value to agency 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 WSSC Water by providing leadership and guidance on financial services and activities to a wide range of stakeholders in an ethical and responsible manner.

### Budget Summary

Finance Department	FY 2019 Actual		FY 2020 Approved		FY 2021 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Financial Officer	2.8	\$ 896,692	4.0	\$ 1,239,544	4.0	\$ 1,337,560	-	\$ 98,016
Retirement Division	6.0	920,578	6.0	922,989	6.0	948,326	-	25,337
Revenue Division	13.7	1,406,833	14.0	1,397,561	14.0	1,499,690	-	102,129
Accounting Division	18.1	1,946,343	17.0	1,735,579	17.0	1,796,790	-	61,211
Disbursements Division	14.8	1,460,045	14.0	1,301,714	14.0	1,371,268	-	69,554
Budget Division	8.7	1,167,118	9.0	1,123,063	9.0	1,467,300	-	344,238
<b>Total</b>	<b>64.1</b>	<b>\$ 7,797,609</b>	<b>64.0</b>	<b>\$ 7,720,450</b>	<b>64.0</b>	<b>\$ 8,420,934</b>	<b>-</b>	<b>\$ 700,484</b>

### Explanation of Major Variances

The FY 2021 Proposed Budget reflects an increase of approximately 9% from the FY 2020 Approved Budget. A majority of the increase reflects the transfer of the corporate Water Resource Foundation membership from the Engineering & Construction Department to the Budget Division.

## FINANCE DEPARTMENT (CONTINUED)

### Highlights

- WSSC Water successfully retained its AAA bond rating from all three major credit rating agencies in the fall of 2019
- The agency successfully issued \$390 million in General Obligation Bonds (GO) in FY 2019 with an interest rate of (True Interest Cost) 3.6%
- \$39.3 million in GO bonds were refunded for a total savings of \$3.0 million
- WSSC Water was presented with the GFOA Distinguished Budget Presentation award for the 25th consecutive year
- Strong investment performance throughout FY 2019 resulted in asset increases totaling \$30 million for the Pension fund and \$30 million for the OPEB fund (June 2018 through November 2019)

### OFFICE OF THE CHIEF FINANCIAL OFFICER

The Office of the Chief Financial Officer is responsible for maintaining the fiscal integrity of WSSC Water through leadership, oversight and management of the Finance Department, keeping the agency 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 EPA and the MDE. 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 WSSC Water's Employees' Retirement Plan (Plan) for employees and retirees in accordance with the Plan and Internal Revenue Service regulations. The division also supports the Retirement and OPEB Plan's Board of Trustees in managing and investing Plan assets. The division is also responsible for investing WSSC Water's available funds in accordance with the agency's Investment Policy and applicable State laws.

#### Core Activities

Retirement Administration – This activity administers WSSC Water'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 agency's funds in accordance with Maryland law.

### REVENUE DIVISION

The Revenue Division is responsible for receiving, processing, depositing and recording all funds received by WSSC Water, in an accurate and timely manner. The division also recovers the agency'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.

## REVENUE DIVISION (CONTINUED)

### Core Activities

Revenue Operations – This activity includes processing, depositing and recording all revenue received by the agency, 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 WSSC Water and preparing financial statements that fairly present the fiscal position of the agency’s debt service and health care records.

### Core Activities

General Ledger – This activity maintains the agency’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).

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 agency 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 WSSC Water’s vehicle fleet.

Invoicing and Delinquent Accounts – This activity compiles WSSC Water reimbursable costs, prepares invoices and monitors collections. Billings include damages to agency 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 WSSC Water’s debt service records and schedules, manages employee benefit plans’ financial records and reconciles the agency’s bank accounts.

### Core Activities

Accounts Payable – This activity processes supplier and procurement card (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 I099-Miscellaneous reporting.

## DISBURSEMENTS DIVISION (CONTINUED)

Maintenance of Debt Service Records – This activity prepares, maintains and reconciles WSSC Water’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 agency’s benefit plans, including health care, dental and life insurance.

Bank Account Reconciliations – This activity prepares timely reconciliations of all WSSC Water 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 WSSC Water’s Operating and Capital Budgets, and the six-year 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 agency’s budget performance Monthly Status Report.

### Core Activities

CIP and Budget Preparation and Administration – This activity prepares and transmits a proposed CIP budget by October 1<sup>st</sup>, and an operating and CIP budget by March 1<sup>st</sup> 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 agency’s Monthly Status Report and provides support to the Spending Affordability Group.

BUDGET DIVISION (CONTINUED)

**Goals, Objectives and Outcome Measures**

Goal: Produce a sound, affordable capital spending program.

Strategic Priority: Spend Customer Dollars Wisely

Objective	Outcome Measure	FY 2018 Actual / Target	FY 2019 Actual / Target	FY 2020 Target	FY 2021 Target
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	36.5% / 34.0%	36.3% / 36.3%	38.2%	37.3%

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

Strategic Priority: Spend Customer Dollars Wisely

Objective	Outcome Measure	FY 2018 Actual / Target	FY 2019 Actual / Target	FY 2020 Target	FY 2021 Target
Maintain a debt service coverage ratio greater than 110%	Ratio of debt service coverage	106% / N/A*	97% / 101%	100%	101%

\* New measure effective FY 2019.

Goal: Minimize borrowing costs.

Strategic Priority: Spend Customer Dollars Wisely

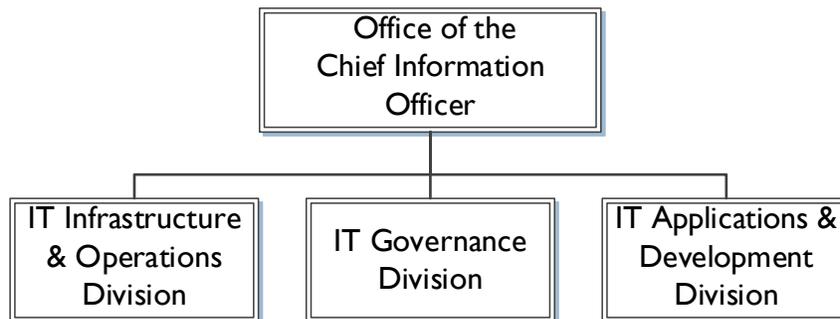
Objective	Outcome Measure	FY 2018 Actual / Target	FY 2019 Actual / Target	FY 2020 Target	FY 2021 Target
Maintain Fitch Ratings, Moody's, and/or Standard and Poor's bond ratings of AAA/Aaa/AAA	Bond ratings: (Fitch Ratings / Moody's / Standard and Poor's)	AAA/Aaa/ AAA / AAA/Aaa/ AAA	AAA/Aaa/ AAA / AAA/Aaa/ AAA	AAA/Aaa/ AAA	AAA/Aaa/ AAA

## 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 (CIO), is comprised of the following divisions: Information Technology Infrastructure & Operations, Governance and Application Development.



### Organizational Structure



### Mission Statement

WSSC Water’s IT Department focus is to lead technology efforts to support the strategic goals of the agency. 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 the agency’s information and services.

### Budget Summary

Information Technology Department	FY 2019 Actual		FY 2020 Approved		FY 2021 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Information Officer	11.8	\$ 2,744,181	10.0	\$ 3,795,187	6.0	\$ 3,347,889	(4.0)	\$ (447,298)
IT Infrastructure & Operations Division	33.9	12,195,499	37.0	16,796,443	34.0	18,335,288	(3.0)	1,538,845
IT Governance Division	11.6	35,066,098	16.0	14,526,879	21.0	12,766,912	5.0	(1,759,967)
IT Application Development Division	33.7	22,726,043	40.0	20,931,770	42.0	22,493,058	2.0	1,561,288
<b>Total</b>	<b>91.0</b>	<b>\$ 72,731,820</b>	<b>103.0</b>	<b>\$ 56,050,279</b>	<b>103.0</b>	<b>\$ 56,943,147</b>	<b>-</b>	<b>\$ 892,868</b>

## INFORMATION TECHNOLOGY DEPARTMENT (CONTINUED)

### Explanation of Major Variances

The FY 2021 Proposed Budget reflects a 2% increase from the FY 2020 Approved Budget. The increase is primarily due to new network storage/archiving and file server refresh projects.

### Highlights

- The Project Cornerstone initiative has improved WSSC Water's ability to deliver leading customer service across all customer interactions. This initiative includes a new C2M application which handles various aspects of the customer lifecycle, from service connection to payments processing and improves processes and performance
- The larger Project Cornerstone initiative also includes a Work and Asset Management (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
- The Office of the CIO (OCIO) is developing an Enterprise Architecture documenting the As-Is Architecture, and a strategic view of the To-Be Architecture in order to aid in understanding the roadmaps for improvement initiative for the IT services provided to the entire agency. The portfolio of approved projects will be mapped to these roadmaps for creating best value
- The OCIO is also developing enhanced cybersecurity plans to properly protect WSSC Water's high value digital assets and customer information. These plans will be in the IT FY 2021 Strategic Plan

### Accomplishments

- Facilitated the development of an online dashboard which provides WSSC Water's 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 IT Department and the agency through implementation of the standard project management methodology and through use of an agency-wide new project and portfolio management tool
- Established Information Technology/Contracting Officer Representative (COR) Working Group to improve procurement planning, reduce emergency procurements and bring more scrutiny to each purchase. As a result, IT was able to recognize increased savings, lessen ratifications and ensure WSSC Water's assets remain compliant

## OFFICE OF THE CHIEF INFORMATION OFFICER

The OCIO develops, maintains and supports the IT Strategic Plan while assessing technology solutions and implementation priorities to meet WSSC Water'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 Water's enterprise information technology security framework and activities. It encompasses all IT projects or initiatives directly supporting the agency's cyber security programs.

## OFFICE OF THE CHIEF INFORMATION OFFICER (CONTINUED)

IT Finance and Contract Administration – This activity provides 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 WSSC Water and its stakeholders and supports the procurement – convenient, timely and cost-effective acquisition – of goods and services in order to provide readily accessible IT services to the agency.

### IT INFRASTRUCTURE & OPERATIONS DIVISION

The IT 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 internal 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 WSSC Water’s information technology users through the IT Solution Center (ITSC) and platform technologies. ITSC is responsible for monitoring, maintaining and supporting all agency desktop, laptop and mobile workforce initiatives and operations. Platform technologies are primarily responsible for the agency's server and storage infrastructure. This includes assessing, implementing and maintaining server and storage technologies; and developing an IT strategic plan to ensure the stability and availability of these foundational elements.

Network Operations Center – This activity provides day-to-day oversight and management of WSSC Water’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.

## IT GOVERNANCE DIVISION

The IT 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 Water'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 WSSC Water'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.

Technical Writing – The core activities of the team include gathering, developing and publishing clear, high-quality documentation for business partners across WSSC Water. 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 . Working in conjunction with various development teams to set objectives, scope and strategies for IT quality assurance at the agency, 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 accepted and adopted .

## IT APPLICATIONS & DEVELOPMENT DIVISION

The IT Applications & Development Division is responsible for refining and implementing WSSC Water's strategic technical vision and leading significant aspects of the agency's IT 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 Permit Processing Information System, Assessment Information System, Maintenance Management Information System, Fat Oil and Grease Program and Primavera/Analytics.

Innovation & Advanced Analytics – This activity supports the implementation of the agency-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 WSSC Water.

Application & Database Services – 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 WSSC Water 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.

Geographic Information Systems – This activity manages WSSC Water'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 works with external teams and collaborates with local, state and federal resources to strategize WSSC Water's overall GIS approach; supports initiatives to consolidate and centralize data repositories; and researches, initiates and supports all GIS-related projects.

Procurement & Logistics – This activity maintains all the Procure-to-Pay modules, retirement systems and several other applications used throughout WSSC Water. 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, and Questica applications.

Human Resource Management System – This activity supports the General Ledger, Human Resources, Payroll, Time and Labor, Advanced Benefits and Self Service systems. WSSC Water's business units access these systems through the intranet network to accomplish agency 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 Water and outside vendors.

## OTHER

Other refers to expenditures essential to the operation of WSSC Water that are related to more than one department/office or those which do not fall within the functional assignment of any department/office. These expenses are related to items such as insurance premiums, Social Security, debt service, PAYGO and retirement benefits.

### Budget Summary

Other	FY 2019 Actual		FY 2020 Approved		FY 2021 Proposed		Increase/(Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Non-Departmental - Human Resources	-	29,476,055	-	31,139,492	-	31,511,051	-	371,559
Non-Departmental - Finance								
Debt Service	-	293,727,822	-	319,882,700	-	325,593,000	-	5,710,300
PAYGO	-	15,753,878	-	31,016,000	-	31,016,000	-	-
Other (Social Security, Retirement, etc.)	-	45,757,010	-	51,056,376	-	54,206,352	-	3,149,976
Retirement Trust Charge Back	-	-	-	(756,355)	-	(750,043)	-	6,312
<b>Total</b>	-	<b>\$ 384,714,765</b>	-	<b>\$ 432,338,213</b>	-	<b>\$ 441,576,360</b>	-	<b>\$ 9,238,147</b>

### Explanation of Major Variances

The FY 2021 Proposed Budget increase for Non-Departmental – Finance is primarily due to increased debt service on the agency’s bonds and notes as a result of the capital intensive investments WSSC Water is making in its infrastructure, such as the water and sewer reconstruction, SSO Consent Decree and Potomac WFP Consent Decree programs.

#### NON-DEPARTMENTAL – HUMAN RESOURCES

Non-Departmental – Human Resources budgets for payments associated with group life insurance, accidental death & dismemberment insurance, accidents and sickness, health care programs and Maryland Unemployment Insurance.

#### NON-DEPARTMENTAL – FINANCE

Non-Departmental – Finance budgets for payments associated with insurance premiums, Social Security, the WSSC Water Employees’ Retirement Plan and the health care trust for OPEB. Debt service, along with all bond sales expenses and bond coupon payment redemption expenses, is also included under this organization.

#### RETIREMENT TRUST CHARGE BACK

Retirement Trust Charge Back accounts for Retirement Division expenses related to the operations of the retirement trust that will be paid by the trust.

# **APPENDICES**

## ECONOMIC INDICATORS AND TRENDS

### Top 20 Customers - Water and Sewer Usage Charges

Name of Customer	Total Collected Amount	Annual Consumption*
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
<b>Total</b>	<b>\$ 56,109,067</b>	<b>6,680,913</b>

\*Rounded to the nearest thousands

Total collected data represents only water and sewer usage charges at FY 2018 rate.

## ECONOMIC INDICATORS AND TRENDS (CONTINUED)

### Active Customer Accounts

WSSC Water 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	2019
Customer Accounts both counties	439,805	441,480	443,827	445,385	448,061	451,904	456,078	459,821
Percent Change (%)		0.4%	0.5%	0.4%	0.6%	0.9%	0.9%	0.8%

By Type of Customer								
Residential	415,200	416,781	418,982	420,458	422,965	426,611	430,552	434,085
Percent Change (%)		0.4%	0.5%	0.4%	0.6%	0.9%	0.9%	0.8%
Commercial and Industrial	21,122	21,200	21,333	21,415	21,566	21,721	21,922	22,101
Percent Change (%)		0.4%	0.6%	0.4%	0.7%	0.7%	0.9%	0.8%
Government	3,482	3,499	3,512	3,511	3,530	3,572	3,605	3,634
Percent Change (%)		0.5%	0.4%	0.0%	0.5%	1.2%	0.9%	0.8%

By Type of Property								
Single-Family Residence	326,176	326,978	328,274	328,234	329,593	333,911	336,995	339,761
Townhouse	81,156	81,894	82,775	84,290	85,424	84,635	85,417	86,118
General Commercial	21,122	21,200	21,333	21,415	21,566	21,721	21,922	22,101
Garden Apartment	4,155	4,174	4,176	4,167	4,171	4,246	4,285	4,320
Multi-Unit (individually metered)	3,147	3,140	3,135	3,123	3,122	3,191	3,221	3,247
High-Rise Apartment	421	432	444	448	455	448	452	456
Other	3,628	3,663	3,690	3,708	3,730	3,752	3,786	3,818
	<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>	<u>459,821</u>

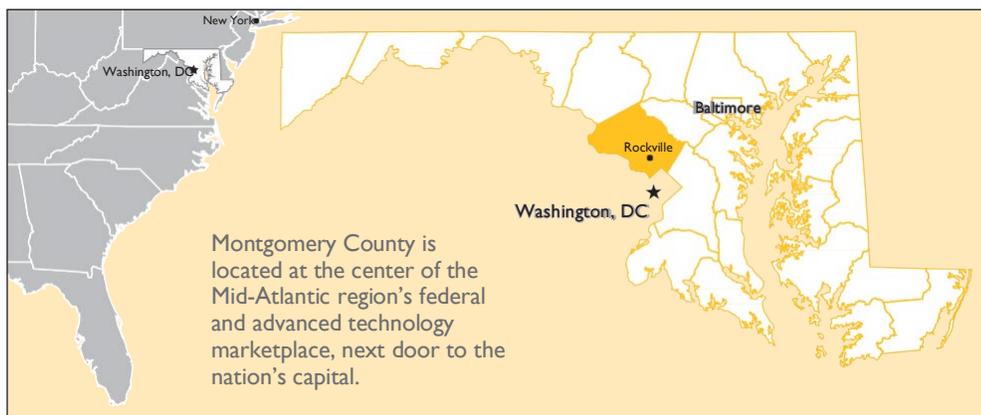
The following pages include economic facts for Montgomery County and Prince George's County, published by the Maryland Department of Commerce.

# Brief Economic Facts

## MONTGOMERY COUNTY, MARYLAND

Montgomery County is Maryland's most populous jurisdiction and one of its most affluent, has a stable and significant office market, and is a major economic engine for the state. It is home to an array of ground breaking innovations such as mapping the human genome, developing life-saving therapies, building premier cybersecurity defenses, and driving world-class IT advancements. Federal facilities in the county include the National Institutes of Health, the National Institute of Standards and Technology, and the Food and Drug Administration. The county is also home to educational and research organizations such as the Johns Hopkins University's Montgomery County Campus, the Howard Hughes Medical Institute, the Henry M. Jackson Foundation, and the Universities at Shady Grove.

Montgomery County's private sector industries generate \$75.1 billion in economic output in areas including information technology, telecommunications, biotechnology, software development, aerospace engineering, professional services and



government/federal contractors. Leading private employers include Adventist, Choice Hotels, Emergent BioSolutions, GEICO, Giant Food, HMSHost, Kaiser Permanente, Lockheed Martin, Marriott Intl., AstraZeneca, Supernus, Verizon, and WeddingWire.

Recent developments include the start of construction for the Purple Line, a 16-mile light rail from Montgomery County to Prince George's County, and a new mixed-use development in the heart of the Wheaton Triangle called the Wheaton Revitalization Project with completion scheduled for 2020.

### LOCATION

Driving distance from Rockville:	Miles	Kilometers
Atlanta, Georgia	624	1,005
Baltimore, Maryland	38	61
Boston, Massachusetts	436	702
Chicago, Illinois	670	1,078
New York, New York	225	363
Philadelphia, Pennsylvania	136	219
Pittsburgh, Pennsylvania	207	333
Richmond, Virginia	118	190
Washington, DC	16	26

### CLIMATE AND GEOGRAPHY<sup>1</sup>

Yearly Precipitation (inches)	43.5
Yearly Snowfall (inches)	24.9
Summer Temperature (°F)	74.4
Winter Temperature (°F)	35.1
Days Below Freezing	86.3
Land Area (square miles)	495.4
Water Area (square miles)	10.1
Elevation (feet)	10 to 880

### POPULATION<sup>2,3</sup>

	Montgomery County Households	Montgomery County Population	Maryland part of Washington DC metro*	Maryland
2000	324,565	873,341	2,065,242	5,296,486
2010	357,086	971,777	2,303,870	5,773,552
2020**	391,401	1,052,050	2,490,650	6,141,900

\*Calvert, Charles, Frederick, Montgomery and Prince George's counties

\*\*Projections

Selected places population (2010): Germantown 86,395; Silver Spring 71,452; Rockville 61,209; Bethesda 60,858; Gaithersburg 59,933; Aspen Hill 48,759; Wheaton 48,284

### POPULATION DISTRIBUTION<sup>2,3</sup> (2018)

Age	Number	Percent
Under 5	65,806	6.3
5 - 19	201,186	19.1
20 - 44	338,122	32.1
45 - 64	283,937	27.0
65 and over	163,516	15.5
Total	1,052,567	100.0
Median age		39.4 years

# Brief Economic Facts MONTGOMERY COUNTY, MARYLAND

## LABOR AVAILABILITY<sup>3,4,5</sup> (BY PLACE OF RESIDENCE)

Civilian Labor Force (2018 avg.)	County	Labor Mkt. Area*
Total civilian labor force	554,989	1,594,853
Employment	537,429	1,529,652
Unemployment	17,560	65,201
Unemployment rate	3.2%	4.1%

Residents commuting outside the county to work (2013-2017)	Number	Percent
	213,809	39.2%

### Employment in selected occupations (2013-2017)

Occupation	Number	Percent
Management, business, science and arts	310,808	56.1%
Service	85,142	15.4%
Sales and office	100,206	18.1%
Production, transp. and material moving	26,114	4.7%

\* Montgomery, Frederick and Prince George's counties, MD and Washington, D.C.

## MAJOR EMPLOYERS<sup>6,7</sup> (2018-2019)

Employer	Product/Service	Employment
National Institutes of Health*	HQ / medical research	17,580
U.S. Food and Drug Admin.*	HQ / R&D and standards	13,855
Naval Support Activity Bethesda*	Medical services	12,000
Marriott International	HQ / hotels and motels	5,800
Adventist HealthCare	HQ / medical services	4,290
Montgomery College	Higher education	3,155
National Oceanic and Atmospheric Admin.*	HQ / weather analysis and reporting	2,920
National Institute of Standards and Technology*	HQ / testing and standards; R&D	2,835
Tricare	Medical services	2,725
Kaiser Foundation Hlth. Plan	Medical services	2,640
U.S. Nuclear Reg. Comm.*	HQ / utilities regulation	2,340
AstraZeneca	HQ / pharmaceuticals, R&D, manufacturing	2,320
GEICO	HQ / insurance	2,270
Holy Cross Hospital	Medical services	2,000
Verizon	Telecommunications	2,000
Westat	HQ / research, surveys	2,000
Suburban Hospital	Medical services	1,815
Henry M. Jackson Found. for the Adv. of Military Medicine	HQ / R&D in the social sciences and humanities	1,780
Lockheed Martin	HQ / defense, aerospace	1,610
Leidos	IT, technical services	1,100

Excludes post offices, state and local governments, national retail and national foodservice; includes higher education

\* Employee counts for federal and military facilities exclude contractors to the extent possible; embedded contractors may be included

## EMPLOYMENT<sup>4</sup> (2018, BY PLACE OF WORK)

Industry	Estab-lishments	Annual Avg. Empl.	Avg. Emp. %	Avg. Wkly. Wage
Federal government	105	47,494	10.1	\$2,276
State government	12	1,258	0.3	905
Local government	243	41,855	8.9	1,280
Private sector	32,614	380,855	80.8	1,376
Natural resources and mining	55	337	0.1	793
Construction	2,489	23,568	5.0	1,397
Manufacturing	422	12,720	2.7	2,563
Trade, transportation and utilities	3,908	56,389	12.0	901
Information	564	10,288	2.2	2,183
Financial activities	3,057	28,856	6.1	2,260
Professional and business services	8,387	106,262	22.5	1,832
Education and health services	4,411	76,074	16.1	1,054
Leisure and hospitality	2,359	44,210	9.4	512
Other services	6,957	22,035	4.7	1,008
<b>Total</b>	<b>32,975</b>	<b>471,349</b>	<b>100.0</b>	<b>1,457</b>

Includes civilian employment only

## HOURLY WAGE RATES<sup>4</sup> (2018)

Selected Occupations	Median	Entry	Experienced
Accountants	\$37.65	\$25.84	\$49.21
Biochemists and biophysicists	44.31	32.63	54.29
Biological technicians	29.04	20.82	35.21
Bookkeeping/accounting clerks	23.91	15.79	28.32
Computer systems analysts	46.63	30.59	54.93
Computer user support specialists	27.11	18.37	33.10
Customer service representatives	18.29	11.93	23.22
Electrical engineers	56.06	36.95	68.56
Electronics engineering technicians	34.61	23.99	40.90
Freight, stock and material movers, hand	13.89	11.25	16.60
Industrial truck operators	17.76	14.68	20.97
Inspectors, testers, sorters	27.48	18.66	32.05
Network administrators	47.82	32.90	58.31
Packers and packagers, hand	12.64	10.81	14.62
Secretaries	20.71	13.51	24.32
Shipping/receiving clerks	16.99	12.65	20.66
Team assemblers	16.53	10.94	20.25

Wages are an estimate of what workers might expect to receive in Montgomery County and may vary by industry, employer and locality

# Brief Economic Facts MONTGOMERY COUNTY, MARYLAND

## SCHOOLS AND COLLEGES<sup>3,8</sup>

### Educational Attainment - age 25 & over (2013-2017)

High school graduate or higher	91.1%
Bachelor's degree or higher	58.3%

### Public Schools

Number: 134 elementary; 40 middle; 26 high
Enrollment: 162,680 (Sept. 2018)
Cost per pupil: \$15,829 (2017-2018)
Students per teacher: 14.5 (Oct. 2018)
High school career / tech enrollment: 12,958 (2017)
High school graduates: 10,970 (July 2018)

### Nonpublic Schools Number: 311 (Sept. 2018)

Higher Education (2018)	Enrollment	Degrees
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#### 2-year institution

Montgomery College	21,720	2,577
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#### Major 4-year institutions

Uniformed Services University of the Health Sciences	NA	NA
Washington Adventist University	1,131	216

Universities at Shady Grove - Degree programs offered by 9 University System of Maryland institutions including UMCP, UMB, UB, UMBC, UMES, UMUC, Bowie, Salisbury and Towson.  
 Johns Hopkins Univ. - Offers coursework and graduate degree programs at the university's Montgomery County Campus.

## TAX RATES<sup>9</sup>

	Montgomery Co.	Maryland
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<b>Corporate Income Tax (2019)</b>	none	8.25%
Base – federal taxable income		

<b>Personal Income Tax (2019)</b>	3.20%	2.0%-5.75%*
Base – federal adjusted gross income		
*Graduated rate peaking at 5.75% on taxable income over \$300,000		

<b>Sales &amp; Use Tax (2019)</b>	none	6.0%
Exempt – sales for resale; manufacturer's purchase of raw materials; manufacturing machinery and equipment; purchases of materials and equipment used in R&D and testing of finished products; purchases of computer programs for reproduction or incorporation into another computer program for resale		

<b>Real Property Tax (FY 20)</b>	\$0.7166	\$0.112
Effective rate per \$100 of assessed value		
In addition to this rate, there are some miscellaneous taxes and/or special taxing areas in the county; in an incorporated area, a municipal rate may also apply		

<b>Business Personal Prop. Tax (FY 20)</b>	\$1.7915	none
Rate per \$100 of depreciated value		
Exempt – manufacturing and R&D machinery, equipment, materials and supplies; manufacturing, R&D and warehousing inventory		
In an incorporated area, a municipal rate may also apply; municipal exemptions may be available		

### Major Tax Credits Available

Enterprise Zone, Job Creation, More Jobs for Marylanders, R&D, New Jobs, Biotechnology and Cybersecurity Investment, A&E District

## INCOME<sup>3</sup> (2013-2017)

Distribution	Montgomery Co.	Percent Households Maryland	U.S.
Under \$25,000	9.4	14.2	21.3
\$25,000 - \$49,999	13.0	17.1	22.5
\$50,000 - \$74,999	13.9	16.5	17.7
\$75,000 - \$99,999	12.1	13.1	12.3
\$100,000 - \$149,999	19.6	18.7	14.1
\$150,000 - \$199,999	12.3	9.7	5.8
\$200,000 and over	19.8	10.7	6.3
Median household	\$103,178	\$78,916	\$57,652
Average household	\$140,141	\$103,845	\$81,283
Per capita	\$51,162	\$39,070	\$31,177
Total income (millions)	\$51,746	\$226,495	\$9,658,475

## HOUSING<sup>3,10</sup>

<b>Occupied Units (2013-2017)</b>	369,242 (65.6% owner occupied)
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### Housing Transactions (2018)\*

Units sold	11,809
Median selling price	\$438,521

\*All multiple listed properties; excludes auctions and FSBO

## BUSINESS AND INDUSTRIAL PROPERTY<sup>6</sup>

Already home to over 300 biotech companies, the county is planning additional development along the I-270 and Rt. 29 corridors, adding to its global reputation as a technology center. Over 1.5 million sf of urban, transit-oriented office space is under construction in downtown Bethesda including Marriott's new corporate headquarters.

**Viva White Oak** - Broke ground in 2018 on a 300-acre mixed-use devt. focusing on advanced technologies, adjacent to the new U.S. FDA HQ campus.

**Montgomery College Germantown Campus Science and Technology Park** - Up to one million sf planned, including an academic and training facility tied in with the college's biotech program, a business incubator, and build-to-suit facilities.

**Great Seneca Science Corridor** - 17.5 million sf is being developed into one of the nation's premier areas for scientific research and development.

### Business Incubators

Alexandria LaunchLabs (Gaithersburg); Bethesda Green; BioHealth Innovation (Rockville); Germantown Innovation Center; GovCon (Rockville); Rockville Innovation Center; Silver Spring Innovation Center

Market Profile Data (2018)	Low	High	Average
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<b>Land – cost per acre</b>			
Industrial	\$146,200	\$2,500,000	\$972,430
Office	\$350,000	\$7,323,262	\$2,494,334

### Rental Rates – per square foot

Warehouse / Industrial	\$9.75	\$18.60	\$12.72
Flex / R&D / Technology	\$8.00	\$34.50	\$17.41
Class A Office	\$19.81	\$55.00	\$31.25

# Brief Economic Facts MONTGOMERY COUNTY, MARYLAND

## TRANSPORTATION

**Highways:** I-270 (“The Technology Corridor”), I-370, I-495, U.S. Route 29 and the ICC (MD 200); ten-minute access to I-95

**Rail:** 12 Metrorail stations, including three of the system’s busiest; 11 future Purple Line rail stops; Amtrak, MARC and CSX Transportation offer long-distance passenger and commuter service as well as freight rail service

**Bus:** 234 Metrobuses operating on 41 routes in the county, plus extensive service via the county’s Ride-On bus system

**Truck:** More than 130 local and long-distance trucking establishments

**Water:** Served by the Port of Baltimore with a 50’ channel; a leading U.S. automobile and break-bulk port; seven public terminals including the state-of-the-art Intermodal Container Transfer Facility

**Air:** Commercial passenger and air cargo services are available through Baltimore/Washington International Thurgood Marshall, Washington Dulles International, and Ronald Reagan Washington National Airports; commuter and corporate air service is available at the Montgomery County Airpark (4200’ runway)

## RECREATION AND CULTURE

**Parks and Recreation:** More than 410 different parks, including national, state, regional and neighborhood, featuring tennis courts, ball fields and totalling 34,600 acres; more than 100 miles of trails provide recreational opportunities

**Golf:** Nine public golf courses, 22 private golf courses, and more than a dozen country clubs, including the Tournament Players Club at Avenel; county hosted the 2011 US Open at Congressional Country Club

**Sports:** 11 public pools and 50 private community pools; public and private tennis courts throughout the county; year-round amateur and professional sports as well as thoroughbred racing

**Cultural:** The Music Center at Strathmore’s 1,978-seat concert hall and adjacent education center; Olney Theatre Center in Olney; American Film Institute’s Silver Theatre, the Round House Theatre, Bethesda Blues and Jazz Supper Club, and the Fillmore featuring Live Nation in Silver Spring

**Arts & Entertainment Districts:** Bethesda, Silver Spring, Wheaton

**Attractions:** Clara Barton National Historic Site, National Capital Trolley Museum, Chesapeake & Ohio Canal National Historical Park, Sugarloaf Mountain Vineyard and Brookside Gardens

**Events:** Sugarloaf Craft Festival, Montgomery County Agricultural Fair, SILVERDOCS Film Festival, Quicken Loans National Golf Tournament, and Seneca Creek State Park Light Festival

## UTILITIES

**Electricity:** Potomac Electric Power Company, Baltimore Gas and Electric and the Allegheny Power System; customers of investor-owned utilities and major cooperatives may choose their electric supplier

**Gas:** Natural gas supplied by Washington Gas; BGE serves the northern section of the county; customers may purchase gas from other natural gas suppliers

**Water and Sewer:** Washington Suburban Sanitary Commission (WSSC) maintains and operates the county’s water and sewer system; the City of Rockville operates its own water and sewer system

**Telecommunications:** Verizon Maryland, Comcast and RCN provide cable television, high-speed wired and wireless internet and telephone services in the county; services available include Ethernet, VoIP, and Verizon FiOS

## GOVERNMENT<sup>11</sup>

**County Seat:** Rockville

**Government:** County executive and nine county council members elected for four-year terms; charter form of government allows for the separation of the executive from the legislative branch; lawmaking powers are vested in an elected legislative body

Marc B. Elrich, County Executive 240.777.2500

Nancy Navarro, President, County Council 240.777.7964

**Website:** [www.montgomerycountymd.gov](http://www.montgomerycountymd.gov)

**County Bond Rating:** AAA (S&P); Aaa (Moody’s); AAA (Fitch)

**Montgomery County Economic Development Corporation**

David Petr, President and CEO

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### Sources:

- 1 National Oceanic and Atmospheric Administration (1981-2010 normals); Maryland Geological Survey
- 2 Maryland Department of Planning
- 3 U.S. Bureau of the Census
- 4 Maryland Department of Labor, Office of Workforce Information and Performance
- 5 U.S. Bureau of Labor Statistics
- 6 Montgomery County Economic Development Corporation
- 7 Maryland Department of Commerce
- 8 Maryland State Department of Education; Maryland Higher Education Commission
- 9 Maryland State Department of Assessments and Taxation; Comptroller of the Treasury
- 10 Maryland Association of Realtors
- 11 Maryland State Archives; Maryland Association of Counties

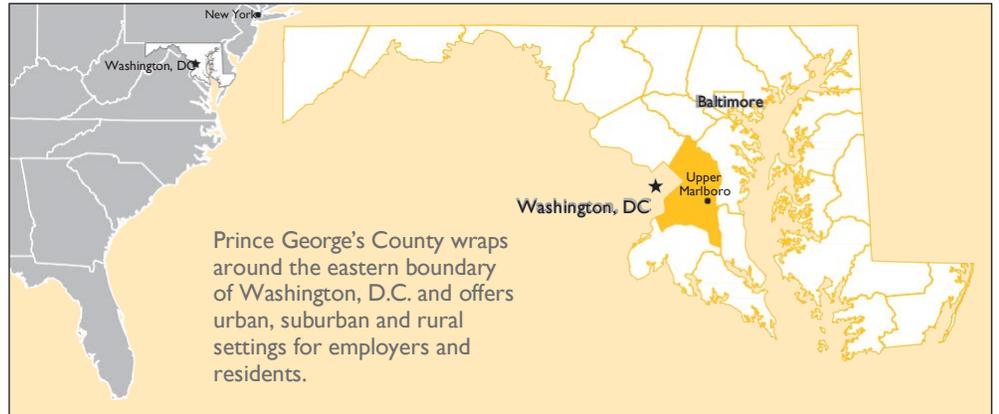
# Brief Economic Facts

## PRINCE GEORGE'S COUNTY, MARYLAND

Prince George's County wraps around the eastern boundary of Washington, D.C. and offers urban, suburban and rural settings. The region is served by three international airports and the Port of Baltimore. The county boasts a friendly business climate, skilled workers and an outstanding quality of life.

Prince George's has one of the largest technology and aerospace sectors in the state and a growing hospitality sector. Major private employers include SGT, Inovalon, Verizon, and MGM National Harbor, with private sector industries generating \$25.6 billion in economic output. Woodmore Towne Centre and National Harbor are recent, high-quality mixed-use developments, and Westphalia Town Center and Towne Square at Suitland Federal Center are currently under development.

Prince George's County has significant federal facilities, such as Joint Base Andrews, NASA Goddard Space Flight Center, FDA, NOAA, USDA Beltsville Agricultural Research Center, and



the U.S. Citizenship and Immigration Services headquarters currently under construction. Academic facilities include the University of Maryland College Park, the state's flagship public university, and other major institutions. The county's commitment to business growth is reflected by the recent location or expansion of 2U and Kaiser Permanente of the Mid-Atlantic. The county's healthcare sector is also growing, led by the UM Capital Region Medical Center currently under construction.

### LOCATION

Driving distance from Upper Marlboro:	Miles	Kilometers
Atlanta, Georgia	626	1,007
Baltimore, Maryland	37	60
Boston, Massachusetts	433	697
Chicago, Illinois	703	1,131
New York, New York	222	357
Philadelphia, Pennsylvania	133	214
Pittsburgh, Pennsylvania	239	385
Richmond, Virginia	107	173
Washington, DC	18	29

### CLIMATE AND GEOGRAPHY<sup>1</sup>

Yearly Precipitation (inches)	44.1
Yearly Snowfall (inches)	13.9
Summer Temperature (°F)	75.8
Winter Temperature (°F)	36.0
Days Below Freezing	92.0
Land Area (square miles)	487.0
Water Area (square miles)	12.2
Shoreline (miles)	119
Elevation (feet)	sea level to 440

### POPULATION<sup>2,3</sup>

	Prince George's County Households	Prince George's County Population	Maryland part of Washington DC metro*	Maryland
2000	286,610	801,515	2,065,242	5,296,486
2010	304,042	863,420	2,303,870	5,773,552
2020**	321,691	916,150	2,490,650	6,141,900

\*Calvert, Charles, Frederick, Montgomery and Prince George's counties

\*\*Projections

Selected places population (2010): Bowie 54,727; Clinton 35,970; Chillum 33,513; College Park 30,413; South Laurel 26,112; Suitland 25,825; Laurel 25,115

### POPULATION DISTRIBUTION<sup>2,3</sup> (2018)

Age	Number	Percent
Under 5	59,457	6.5
5 - 19	169,455	18.6
20 - 44	316,076	34.8
45 - 64	243,720	26.8
65 and over	120,600	13.3
Total	909,308	100.0
Median age		37.5 years

# Brief Economic Facts PRINCE GEORGE'S COUNTY, MARYLAND

## LABOR AVAILABILITY<sup>3,4,5</sup> (BY PLACE OF RESIDENCE)

	County	Labor Mkt. Area*
Civilian Labor Force (2018 avg.)		
Total civilian labor force	504,423	1,773,625
Employment	483,850	1,702,679
Unemployment	20,573	70,946
Unemployment rate	4.1%	4.0%

Residents commuting outside the county to work (2013-2017)	Number	Percent
	284,654	60.6%

Employment in selected occupations (2013-2017)		
Management, business, science and arts	184,439	38.7%
Service	98,360	20.6%
Sales and office	105,938	22.2%
Production, transp. and material moving	41,404	8.7%

\* Prince George's, Anne Arundel and Montgomery counties, MD and Washington, D.C.

## MAJOR EMPLOYERS<sup>6,7</sup> (2018-2019)

Employer	Product/Service	Employment
University System of Maryland*	Higher education	20,250
Joint Base Andrews Naval Air Facility Washington**	Military installation	17,500
U.S. Internal Revenue Svc.**	Revenue collection	4,735
U.S. Census Bureau**	Demographic research	4,605
NASA - Goddard Space Flight Center**	Space research	3,000
United Parcel Service (UPS)	Mail and package delivery	3,000
MGM National Harbor	Casino gaming	2,785
Marriott International	Hotels and motels	2,200
Prince George's Community College	Higher education	2,045
Natl. Maritime Intelligence-Integration Office**	Maritime intelligence analysis	1,890
University of Maryland Capital Region Health	Medical services	1,800
Verizon	Telecommunications	1,800
U.S. Dept. of Agriculture**	Agricultural research	1,725
Melwood	Social services	1,400
National Oceanic and Atmospheric Admin.**	Weather analysis and reporting	1,375
Doctors Community Hospital	Medical services	1,300
MedStar Southern Maryland Hospital Center	Medical services	1,240
Adelphi Laboratory Center**	Military installation	1,235

Excludes post offices, state and local governments, national retail and national foodservice; includes higher education

\*Includes UMCP, UMUC and Bowie State University

\*\*Employee counts for federal and military facilities exclude contractors to the extent possible; embedded contractors may be included

## EMPLOYMENT<sup>4</sup> (2018, BY PLACE OF WORK)

Industry	Estab-lishments	Annual Avg. Empl.	Avg. Emp. %	Avg. Wkly. Wage
Federal government	114	26,762	8.3	\$2,055
State government	15	22,001	6.9	1,025
Local government	298	41,073	12.8	1,233
Private sector	15,760	231,228	72.0	998
Natural resources and mining	19	103	0.0	929
Construction	1,757	26,703	8.3	1,360
Manufacturing	335	7,649	2.4	1,201
Trade, transportation and utilities	3,457	60,430	18.8	803
Information	151	3,499	1.1	1,438
Financial activities	1,306	11,674	3.6	1,110
Professional and business services	3,250	40,726	12.7	1,399
Education and health services	2,337	34,977	10.9	1,048
Leisure and hospitality	1,625	35,696	11.1	484
Other services	1,515	9,767	3.0	791
<b>Total</b>	<b>16,187</b>	<b>321,065</b>	<b>100.0</b>	<b>1,118</b>

Includes civilian employment only

## HOURLY WAGE RATES<sup>4</sup> (2018)

Selected Occupations	Median	Entry	Experienced
Accountants	\$38.16	\$25.13	\$48.26
Bookkeeping/accounting clerks	22.15	15.61	26.55
Computer systems analysts	45.13	31.76	52.95
Computer user support specialists	25.68	16.37	31.06
Customer service representatives	16.65	11.99	20.96
Electronics engineering technicians	34.35	26.69	41.95
Freight, stock and material movers, hand	12.30	10.99	15.75
Industrial truck operators	20.38	14.71	24.18
Maintenance workers, machinery	27.05	19.30	31.40
Mechanical engineers	48.75	33.28	71.57
Network administrators	50.74	35.93	61.09
Packaging and filling machine operators	11.14	10.83	11.80
Packers and packagers, hand	12.04	10.87	14.52
Secretaries	20.72	14.55	24.51
Shipping/receiving clerks	18.22	12.32	21.40
Team assemblers	17.10	11.75	21.34
Telemarketers	13.54	11.58	15.91

Wages are an estimate of what workers might expect to receive in Prince George's County and may vary by industry, employer and locality

# Brief Economic Facts PRINCE GEORGE'S COUNTY, MARYLAND

## SCHOOLS AND COLLEGES<sup>3,8</sup>

### Educational Attainment - age 25 & over (2013-2017)

High school graduate or higher	86.1%
Bachelor's degree or higher	31.9%

### Public Schools

Number: 121 elem.; 36 middle/combined; 24 high; 9 charter
Enrollment: 132,667 (Sept. 2018)
Cost per pupil: \$14,850 (2017-2018)
Students per teacher: 14.0 (Oct. 2018)
High school career / tech enrollment: 7,574 (2017)
High school graduates: 7,898 (July 2018)

### Nonpublic Schools Number: 135 (Sept. 2018)

Higher Education (2018)	Enrollment	Degrees
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#### 2-year institution

Prince George's Community College	11,890	1,057
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#### Major 4-year institutions

Bowie State University	6,320	1,034
Capitol Technology University	743	157
University of Maryland, College Park	41,200	11,160
Univ. of Maryland University College	60,270	12,665

Undergraduate and graduate courses are offered at the Laurel College Center through 6 Maryland public colleges/universities. Central Michigan and Embry-Riddle Aeronautical Universities offer courses at Joint Base Andrews.

## TAX RATES<sup>9</sup>

	Prince George's Co.	Maryland
<b>Corporate Income Tax (2019)</b>	none	8.25%
Base – federal taxable income		
<b>Personal Income Tax (2019)</b>	3.20%	2.0%-5.75%*
Base – federal adjusted gross income		
*Graduated rate peaking at 5.75% on taxable income over \$300,000		
<b>Sales &amp; Use Tax (2019)</b>	none	6.0%
Exempt – sales for resale; manufacturer's purchase of raw materials; manufacturing machinery and equipment; purchases of materials and equipment used in R&D and testing of finished products; purchases of computer programs for reproduction or incorporation into another computer program for resale		
<b>Real Property Tax (FY 20)</b>	\$1.00	\$0.112
Effective rate per \$100 of assessed value		
In addition to this rate, there are some miscellaneous taxes and/or special taxing areas in the county; in an incorporated area, the county rate will vary and a municipal rate will also apply		
<b>Business Personal Property Tax (FY 20)</b>	\$2.50	none
Rate per \$100 of depreciated value		
Exempt – manufacturing and R&D machinery, equipment, materials and supplies; manufacturing, R&D and warehousing inventory		
In an incorporated area, the county rate will vary and a municipal rate may apply; municipal exemptions may be available		

### Major Tax Credits Available

Enterprise Zone (incl. Focus Area), Job Creation, More Jobs for Marylanders (Tier I), R&D, Biotechnology and Cybersecurity Investment, Revitalization, Arts & Entertainment Dist.

## INCOME<sup>3</sup> (2013-2017)

Distribution	Pr. George's Co.	Maryland	U.S.
Under \$25,000	11.6	14.2	21.3
\$25,000 - \$49,999	17.3	17.1	22.5
\$50,000 - \$74,999	18.8	16.5	17.7
\$75,000 - \$99,999	14.6	13.1	12.3
\$100,000 - \$149,999	20.0	18.7	14.1
\$150,000 - \$199,999	9.5	9.7	5.8
\$200,000 and over	8.2	10.7	6.3
Median household	\$78,607	\$78,916	\$57,652
Average household	\$95,699	\$103,845	\$81,283
Per capita	\$34,391	\$39,070	\$31,177
Total income (millions)	\$29,350	\$226,495	\$9,658,475

## HOUSING<sup>3,10</sup>

Occupied Units (2013-2017) 306,694 (61.8% owner occupied)

### Housing Transactions (2018)\*

Units sold	9,956
Median selling price	\$286,098

\*All multiple listed properties; excludes auctions and FSBO

## BUSINESS AND INDUSTRIAL PROPERTY<sup>6</sup>

The county offers a range of business locations, including urban mixed-use developments at Metro stations, suburban office parks, a Foreign Trade Zone countywide, State Enterprise Zone, Opportunity Zones, and distribution and manufacturing parks with rail and highway access. The **University of Maryland Discovery District** provides opportunities for direct collaboration with one of the top universities in the nation. Class A office space with great access is available in Laurel, Calverton, Bowie, College Park, Beltsville, Greenbelt, Hyattsville, Largo, and many other locations.

Prince George's County enacted landmark legislation establishing a \$50 million **Economic Development Incentive Fund (EDIF)** that provides loans, guarantees and conditional loans for projects in the county that create jobs and investment.

### Business Incubators

Bowie Business Innovation Center, Bowie  
 Maryland International Incubator, College Park  
 Prince George's County Innovation Station, Largo  
 Technology Advancement Prog., Univ. of MD at College Park

Market Profile Data (2018)	Low	High	Average
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### Land – cost per acre

Industrial	\$40,000	\$800,000	\$250,000
Office	\$125,000	\$2,000,000	\$300,000

### Rental Rates – per square foot

Warehouse / Industrial	\$3.75	\$14.48	\$7.31
Flex / R&D / Technology	\$6.00	\$19.00	\$11.14
Class A Office	\$16.00	\$36.00	\$21.14

# Brief Economic Facts PRINCE GEORGE'S COUNTY, MARYLAND

## TRANSPORTATION

**Highways:** I-95, I-495, U.S. 1, U.S. 50, U.S. 301, Baltimore-Washington Parkway (MD 295), and Intercounty Connector (MD 200)

**Mass Transit:** MARC (MD Area Regional Commuter) serves the Baltimore-Washington corridor, with nine locations in the county; WMATA (Washington Metro Area Transit Authority) provides 70 bus routes and rail service; 15 stations on the Blue, Orange and Green Metro rail lines; local bus system with 28 routes

**Rail:** CSX Transportation and Norfolk Southern Railway; Amtrak Metroliner passenger service from D.C. to New York with intermediate stops, including the Capital Beltway Station at New Carrollton; and the 16 mile/21 station Purple Line light rail transit system under construction, connecting Prince George's and Montgomery counties

**Truck:** All major motor freight common carriers serve the county

**Water:** Served by the Port of Baltimore, a leading U.S. automobile and break-bulk port, with a 50' channel and seven public terminals including the state-of-the-art Intermodal Container Transfer Facility; one of only four ports on the East Coast able to accommodate Neo-Panamax ships

**Air:** Baltimore/Washington International Thurgood Marshall Airport, accessible by bus, train and shuttle van; Ronald Reagan Washington National Airport, minutes from the Capital Beltway and accessible by bus and metro; and Washington Dulles International Airport, accessible by bus and car

## RECREATION AND CULTURE

**Parks and Recreation:** Maryland-National Capital Park and Planning Commission manages nearly 26,000 acres of parkland with over 90 miles of paved hiker/biker/equestrian trails; 127 neighborhood parks; 39 community centers; 27 recreational buildings; 10 aquatic facilities; three ice rinks; four golf courses; 214 tennis courts and an indoor/outdoor tennis facility; the Prince George's Equestrian Center and the Show Place Arena; an airport (the oldest in operation); a marina; and the Prince George's Sports and Learning Complex

**Sports:** Comcast Center, Maryland Stadium, Samuel Riggs IV Alumni Center, FedEx Field (home of the Washington Redskins), and a 10,000 seat AA baseball stadium

**Cultural and Historical:** Clarice Smith Performing Arts Center at the University of Maryland; many historical sites and museums; the Smithsonian Institutions, the Kennedy Center, and the National Gallery of Art are just across the county line in the nation's capital

**Arts & Entertainment District:** Gateway Arts District

**Attractions:** Six Flags America theme park; MGM National Harbor, a luxury waterfront dining, retail, entertainment and gaming resort on the Potomac River; and Tanger Outlets with 80 designer and name brand stores

## UTILITIES

**Electricity:** Baltimore Gas and Electric, Potomac Electric Power Company, and Southern Maryland Electric Cooperative, Inc.; customers may choose their electric supplier

**Gas:** Natural gas supplied by Baltimore Gas and Electric and Washington Gas; customers may choose their gas supplier

**Water and Sewer:** Washington Suburban Sanitary Commission

**Telecommunications:** Verizon, Comcast, Level 3 Communications and others have significant fiber throughout the county; AT&T, Sprint, Cavalier, Cox, and other carriers and resellers also offer services on proprietary and leased lines

## GOVERNMENT<sup>11</sup>

**County Seat:** Upper Marlboro

**Government:** County executive elected at large and nine county council members elected by district for four-year terms; charter form of government allows for the separation of the executive from the legislative branch; lawmaking powers are vested in an elected legislative body

Angela D. Alsobrooks, County Executive 301.952.4131

Todd M. Turner, Chair, County Council 301.952.3060

**Website:** [www.princegeorgescountymd.gov](http://www.princegeorgescountymd.gov)

**County Bond Rating:** AAA (S&P); Aaa (Moody's); AAA (Fitch)

**Prince George's County Economic Development Corporation**

David Iannucci, President and CEO

1801 McCormick Drive, Suite 350

Largo, Maryland 20774

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[www.pgcedc.com](http://www.pgcedc.com)

### Sources:

- 1 National Oceanic and Atmospheric Administration (1981-2010 normals); Maryland Geological Survey
- 2 Maryland Department of Planning
- 3 U.S. Bureau of the Census
- 4 Maryland Department of Labor, Office of Workforce Information and Performance
- 5 U.S. Bureau of Labor Statistics
- 6 Prince George's County Economic Development Corporation
- 7 Maryland Department of Commerce
- 8 Maryland State Department of Education; Maryland Higher Education Commission
- 9 Maryland State Department of Assessments and Taxation; Comptroller of the Treasury
- 10 Maryland Association of Realtors
- 11 Maryland State Archives; Maryland Association of Counties

## 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.
American Water Works Association	(Also referred to as AWWA) An international, nonprofit, scientific and educational organization providing water management solutions.
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.
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. WSSC Water's 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 Water) 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.
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 WSSC Water over a six-year period.
Capital Project	A WSSC Water 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.
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.

## GLOSSARY

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 Water 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 WSSC Water 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 WSSC Water facilities. The program stipulates a reduction in energy usage and costs greater than, or equal to, the annual capital costs to be incurred.
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 WSSC Water. 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.

## GLOSSARY

Enterprise Resource Planning	(Also referred to as ERP) An automated system that integrates all data and processes of a 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.
Fiscal Policy	WSSC Water's policies with respect to revenues, spending, and debt management as the policies relate to WSSC Water 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. WSSC Water'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.

## GLOSSARY

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 WSSC Water to help underwrite the agency'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's 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.
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 WSSC Water's general construction and administrative and support facility construction program; and for administering the agency's front foot benefit assessment activities.
General Construction 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 WSSC Water'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.

## GLOSSARY

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.
Green Bond	Bond instrument whose proceeds are exclusively applied to projects such as green buildings, pollution prevention and control, renewable energy, water quality, and climate change adaptation.
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.
House Connection Charge	(Also referred to as H/C) A fee set annually by WSSC Water 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.

## GLOSSARY

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 WSSC Water's water and sewer pipe reconstruction programs.
Labor Market Area	Prince George's, Anne Arundel and Montgomery counties, and Washington, DC.
Level of Service	The services, programs, and facilities provided by WSSC Water 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.
Metropolitan Washington Council of Governments	(Also referred to as MWCOG) Non-profit association of 24 Washington DC area local governments focused on housing, economic competitiveness and the Metro system.
Miscellaneous	Revenue derived from charges for late payment of bills and Front Foot charges; charges for repair of WSSC Water property (e.g., fire hydrants, water mains, sewer lines) damaged by individuals; charges for relocation of WSSC Water's 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 WSSC Water's sewerage system; antenna lease fees collected; and fees charged for the use of recreational facilities in WSSC Water's watershed areas.

## GLOSSARY

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.”
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.
Non-Departmental	Expenditure items essential to the operation of WSSC Water 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 WSSC Water’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 WSSC Water, 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 WSSC Water’s inspection of all plumbing and gas fixtures installed in residential and commercial structures to ensure that such installations are in compliance with WSSC Water’s Plumbing and Gasfitting Code.

## GLOSSARY

Potomac WFP Consent Decree	A court-enforced legal document that was negotiated between WSSC Water, 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 WSSC Water to take certain actions in order to reduce the amount of solids discharged back into the Potomac River.
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 WSSC Water 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 WSSC Water’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.
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 Water ratepayers on a long-term basis.
Regional Sewage Disposal	WSSC Water’s share of the maintenance and operating costs of the District of Columbia Water and Sewer Authority’s Blue Plains Wastewater Treatment Plant.
Rockville Sewer Use	Revenue derived from payment by the City of Rockville for the city’s share of the Regional Sewage Disposal charges.
Salaries & Wages	A budget expenditure category for monetary compensation in the form of annual or hourly pay for work performed.

## GLOSSARY

### Sanitary Sewer Overflow Consent Decree

A court-enforced legal document that was negotiated between WSSC Water, 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 WSSC Water 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 WSSC Water'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 WSSC Water'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.

### 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.

## GLOSSARY

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 WSSC Water on the basis that the industrial user has a reasonable potential for adversely affecting the operation of WSSC Water'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 WSSC Water's budget preparation. This process started with the FY'96 budget.
Strategic Sourcing	Strategic planning and priority alignment to foster informed decision making using fact-based, data-driven processes.
Supervisory Control and Data Acquisition System	(Also referred to as SCADA) The technological system enabling WSSC Water 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 Water-issued permit for extensions to WSSC Water's system. This permit is required for the Applicant to build water and sewer systems that WSSC Water 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 Water’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 Water or agency) The agency 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 WSSC Water, 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 Water 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 WSSC Water’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 WSSC Water'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 workyear is the equivalent of 2,080 work hours or 260 work days.

## ACRONYMS

ADC	Average Daily Consumption	FFBC	Front Foot Benefit Charge
ADR	Alternative Dispute Resolution	FICA	Social Security & Medicare
AFO	Acoustic Fiber Optic	FOG	Fats, Oils, and Grease
AMF	Account Maintenance Fee	FOMC	Federal Open Market Committee
AMI	Advanced Metering Infrastructure	FSE	Food Service Establishment
AVL	Automated Vehicle Location Services	FY	Fiscal Year
AWWA	American Water Works Association	GAAP	Generally Accepted Accounting Principles
C2M	Customer-to-Meter	GBDS	General Bond Debt Service
CAP	Customer Assistance Program	GFOA	Government Finance Officers Association
CCTV	Closed Circuit Television	GIS	Geographic Information System
CEO	Chief Executive Officer	GO	General Obligation (bonds)
CFR	Code of Federal Regulations	GPD	Gallons per Day
CIO	Chief Information Officer	GPS	Global Positioning System
CIP	Capital Improvements Program	HAA	Haloacetic Acid
CIU	Categorical Industrial User	H/C	House Connection
CLF	Consolidated Lab Facility	ICPRB	Interstate Commission on the Potomac River Basin
COOP	Continuity of Operations Plans	IIF	Infrastructure Investment Fee
CPI	Consumer Price Index	IT	Information Technology
CPI-W	Consumer Price Index for Urban Wage Earners & Clerical Workers	ITSC	IT Solution Center
DBA	Database Administration	LBA	Line Blockage Analysis
DCWASA	Refer to DC Water	MBE	Minority Business Enterprise
DC Water	District of Columbia Water and Sewer Authority	MDE	Maryland Department of the Environment
DSCR	Debt Service Coverage Ratio	MG	Million Gallons
DSP	Development Services Process	MGD	Million Gallons per Day
E&C	Engineering & Construction Department	MHI	Median Household Income
EBS	E-Business Suite	MOU	Memorandum of Understanding
EEO	Equal Employment Opportunity	MVR	Meter, Vertical Turbine
EGIS	Enterprise Geographic Information System	MWCOG	Metropolitan Washington Council of Governments
ENR	Enhanced Nutrient Removal	MWQ	Maryland Water Quality
EPA	Environmental Protection Agency	NTU	Nephelometric Turbidity Units
ERP	Enterprise Resource Planning	OCIO	Office of the Chief Information Officer
ESP	Engineering Support Program		

## ACRONYMS

OIG	Office of the Inspector General
OPEB	Other Post-Employment Benefits
OSDI	Office of Supplier Diversity & Inclusion
PAYGO	“Pay-As-You-GO” Financing
PCCP	Pre-stressed Concrete Cylinder Pipe
PCI	Per Capita Income
PMO	Project Management Office
PMP	Proactive Maintenance Program
REDO	Reconstruction Debt Service Offset
SAG	Spending Affordability Guidelines
SCADA	Supervisory Control and Data Acquisition
SDC	System Development Charge
SDWA	Safe Drinking Water Act
SEP	System Extension Permit
SIU	Significant Industrial User
SLBE	Small, Local Business Enterprise
SSES	Sewer System Evaluation Survey
SSO	Sanitary Sewer Overflow
UT	Ultrasonic
WFP	Water Filtration Plant
WRRF	Water Resource Recovery Facilities
WSSC	Washington Suburban Sanitary Commission
WSSD	Washington Suburban Sanitary District
WWPS	Wastewater Pumping Station
WWTP	Wastewater Treatment Plant



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