



WASHINGTON SUBURBAN SANITARY COMMISSION

# PROPOSED BUDGET

Fiscal Year 2022  
July 1, 2021 – June 30, 2022



# **FISCAL YEAR 2022 PROPOSED BUDGET**

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

Carla A. Reid, General Manager/CEO

ATTEST: Julianne Montes De Oca, Corporate Secretary - Acting

## 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 2022 PROPOSED BUDGET

Public Hearings by the Commission (held as scheduled)	February 2 and February 3, 2021
Submission to County Executives	March 1, 2021
Approval by the County Councils	June 1, 2021
Adopted for the Fiscal Year	July 1, 2021

**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 2022 PROPOSED BUDGET DATED MARCH 1, 2021, WHICH REPLACED AND SUPERCEDES THE PREVIOUS JANUARY 15, 2021 EDITION.**

Some totals and percentages in this budget may not add due to rounding.

GOVERNMENT FINANCE OFFICERS ASSOCIATION



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished  
Budget Presentation  
Award*

PRESENTED TO

**Washington Suburban Sanitary Commission**

**Maryland**

For the Fiscal Year Beginning

**July 1, 2020**

*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, 2020. This is the 26<sup>th</sup> consecutive year that WSSC Water has received this award.



# Table of Contents

	<b>PAGE</b>
<b>Section 1 - WSSC Water Overview, Chair's Letter and Budget Summaries</b>	
General Information.....	1-1
Mission, Roadmap and Performance Report.....	1-2
WSSC Water Governance.....	1-10
Our Leadership and Organization.....	1-11
Chair's Letter.....	1-12
Comparative Expenses.....	1-18
FY 2022 Proposed Budget by Fund.....	1-19
Revenue and Expense Trends.....	1-20
<b>Section 2 - Proposed Rates, Fees and Charges</b>	
Combined Water and Sewer Operating Funds - Proposed Rate Impact.....	2-1
Water and Sewer Rate Schedules.....	2-2
Quarterly Customer Bills at Various Consumption Levels.....	2-3
Account Maintenance Fees.....	2-4
Infrastructure Investment Fees.....	2-5
System Development Charges.....	2-6
Miscellaneous Fees and Charges.....	2-7
<b>Section 3 - Customer Affordability</b>	
WSSC Water Financial Assistance Programs.....	3-1
WSSC Water Bill Affordability.....	3-6
Water and Sewer Bill Comparisons.....	3-9
<b>Section 4 - Spending Affordability and Long-Range Financial Plan</b>	
Major Assumptions, Workload Indices and Demand Projections.....	4-1
Long-Range Financial Plan for Water and Sewer Operating Funds.....	4-3
<b>Section 5 - Explanation of Budget and Summaries</b>	
Budget Formulation.....	5-1
WSSC Water Budget and Capital Improvements Program Process .....	5-3
Fund Structure.....	5-4
How Each Dollar of a Water and Sewer Bill is Spent.....	5-5
FY 2022 Proposed Budget - By Major Expense Categories.....	5-6
FY 2022 Proposed Budget - By Sources.....	5-7
FY 2022 Proposed Budget - By Fund Uses.....	5-8
Operating Revenue & Expense by Major Source Category and Fund Type.....	5-9
Capital Funding & Expense by Major Source Category and Fund Type.....	5-10
Projected Change in Fund Balance.....	5-11
Expense Trends by Fund.....	5-12



# Table of Contents

## Section 6 - Fiscal Guidelines

Fiscal Control.....	6-1
Expenditures and Allocation of Costs.....	6-2
Short-Term Fiscal and Service Guidelines.....	6-3
CIP Fiscal Guidelines.....	6-4
WSSC Water Management.....	6-7
Guidelines for Revenues and Program Funding.....	6-8
Water and Sewer Debt Service Guidelines.....	6-9

## Section 7 - Revenues

Economic Outlook.....	7-1
Ratepayer, Ready-to-Serve and Miscellaneous Revenues.....	7-5
Revenues and Transfers Impact on Debt Service.....	7-8
Revenue Trends.....	7-9

## Section 8 - Capital Budget

Expense Categories.....	8-1
Capital Budget Expense Summary.....	8-2
Map of Projects in Montgomery County.....	8-3
Map of Projects in Prince George`s County.....	8-4
Highlighted Projects.....	8-5
Funding Sources.....	8-8
Capital Budget Funding Summary.....	8-9
Impact of Capital Program on the Operating Budget.....	8-10

## Section 9 - Debt Service

Debt Service Program.....	9-1
Outstanding Debt.....	9-3
Borrowing Limitation.....	9-4
Debt Service Trends.....	9-5

## Section 10 - Water Quality and Regulations

Water Quality Capital Projects.....	10-1
Water Quality Campaigns.....	10-2
Performance of Key Services.....	10-5



# Table of Contents

## Section II - Organizational Budgets and Measures

Comparative Expenses by Organizational Unit - All Operating and Capital Funds.....	II-1
Organizational Unit and Fund Matrix - All Operating and Capital Funds.....	II-2
Workforce and Compensation.....	II-3
Governance & General Manager's Office.....	II-4
Strategy & Partnerships.....	II-8
Operations.....	II-20
Administration.....	II-45
Other.....	II-60

## Appendices

Appendix A - Economic Indicators and Trends	
Top 20 Customers - Water and Sewer Usage Charges.....	A-1
Active Customer Accounts.....	A-2
Brief Economic Facts - Montgomery County.....	A-3
Brief Economic Facts - Prince George`s County.....	A-7
Appendix B - Glossary.....	B-1
Appendix C - Acronyms.....	C-1

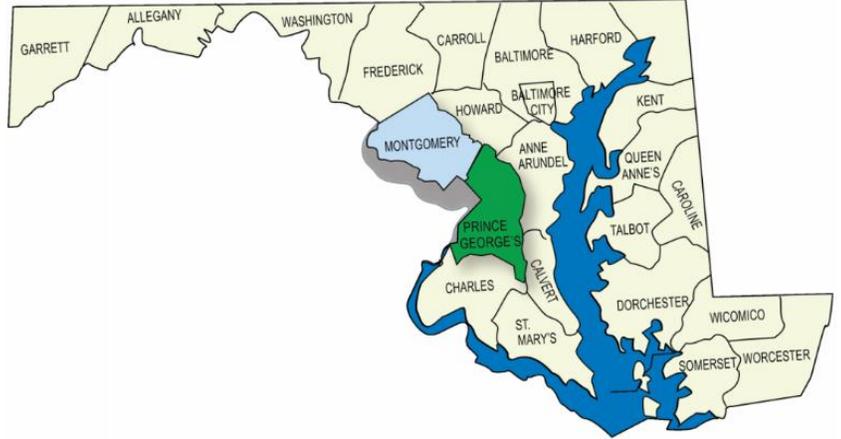
**SECTION I**  
**WSSC WATER OVERVIEW,**  
**CHAIR'S LETTER AND BUDGET**  
**SUMMARIES**

## WSSC WATER OVERVIEW

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, it was 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 1,400 square miles.

## GENERAL INFORMATION

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 163 million gallons of water per day in Fiscal Year (FY) 2022 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 6,000 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 11,700 miles of water and sewer pipeline



Sewage treatment is provided by six water resource recovery facilities (WRRFs) operated by the agency, and the Blue Plains Advanced Wastewater Treatment Plant (Blue Plains) operated by DC Water. In FY 2022, it is projected that an average of 192 million gallons of wastewater per day from Montgomery and Prince George's Counties will move to these facilities through over 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 DC Water, 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 gas-fitters and issues licenses to those qualified to perform plumbing and gas-fitting work.



## Our Mission

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



## Our Vision

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

## Our Values



### **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 agency 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



### Enhance Customer Experience

- Deliver safe, reliable and consistent service
- Provide timely response to customer queries
- Be a good citizen within our communities



### Spend Customer Dollars Wisely

- Improve operating efficiency
- Improve fixed asset utilization
- Improve financial process efficiency and fiscal sustainability



### Optimize Infrastructure

- Achieve industry-leading reliability and asset integrity
- Expand resilience and balance risk



### 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 agency's critical infrastructure



### Transform Employee Engagement

- Acquire the best people
- Retain top performers
- Develop and grow talent
- Communicate effectively

# Journey to World Class

## WSSC Water's Strategic Roadmap

The men and women of WSSC Water work 24/7/365 to fulfill our clean water mission. Throughout FY 2022, 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 163 MGD of safe, clean reliable drinking water and safely process an average of 192 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



### Spend Customer Dollars Wisely

- Continue efforts to control costs and save money through strategic sourcing, reducing overtime, freezing positions, limiting growth in the cost of group insurance plans, conserving energy and focusing on employee safety to reduce lost work days
- Improve contract lifecycle management to ensure deliverables are provided on-time, on-budget and within scope
- Maintain AAA bond rating through strong financial policies and planning



### Optimize Infrastructure

- Implement the first year of the Fiscal Years 2022-2027 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



### 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 (SSO) and Potomac WFP consent decrees
- 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



### Transform Employee Engagement

- Infuse innovation and creativity throughout the workforce to address the new normal
- 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

*\*Note: Due to the ongoing COVID-19 pandemic and corresponding economic uncertainty, WSSC Water Commissioners voted on November 18, 2020 to indefinitely defer all activities related to the AMI project. WSSC Water will continue to closely monitor the economic conditions in both Counties and revisit the project at the appropriate time.*

# WSSC Water Performance Report

WSSC Water's Performance Report contains Key Performance Indicators (KPIs) 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

— FY 2019  
— FY 2020

### Provide Safe and Reliable Water

### Return Clean Water to Our Environment

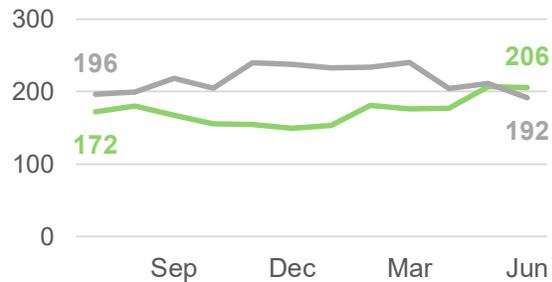
#### Water Production

Average gallons of water produced in millions per day



#### Wastewater Treatment

Average gallons of wastewater treated in millions per day



## Enhance Customer Experience

— FY 2019  
— FY 2020  
— Expected Target

### Deliver Safe, Reliable and Consistent Service

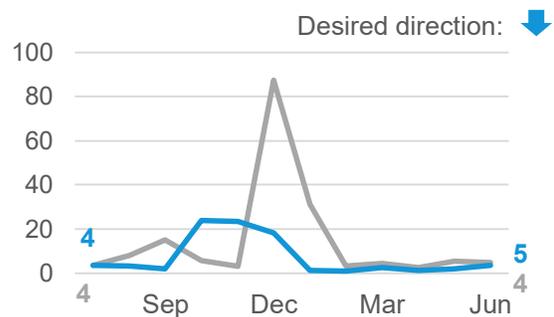
#### Accounts Billed On-Time\*

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



#### Water Service Restoration Time

# of outage hours / # of housing units impacted



\*Only FY 2020 data presented for these KPIs as the Customer-to-Meter (C2M) system was introduced at the start of FY 2020 (July 2019). For Accounts Billed On-Time, first month data available in C2M was August 2019.

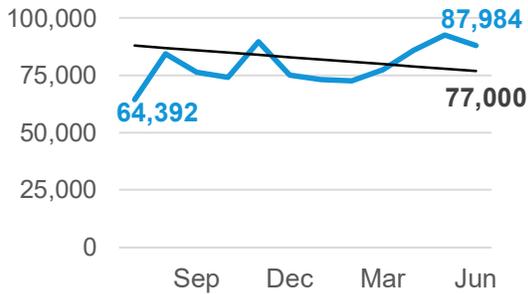
# WSSC Water Performance Report

## Enhance Customer Experience

— FY 2019  
— FY 2020  
— Expected Target

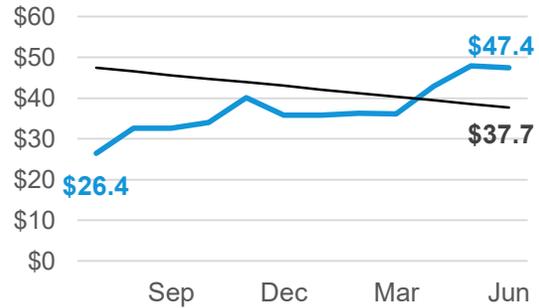
### Past Due Accounts\*

# of accounts more than 30 days past the bill date



### Past Due Amount\*

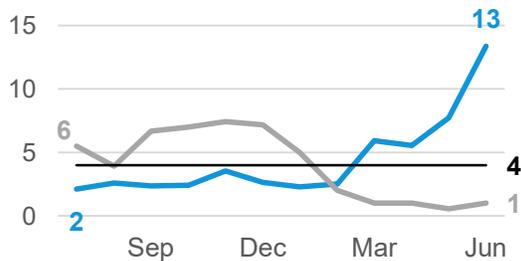
\$ of accounts (millions) more than 30 days past the bill date



## Provide Timely Response to Customer Queries

### Average Answer Speed

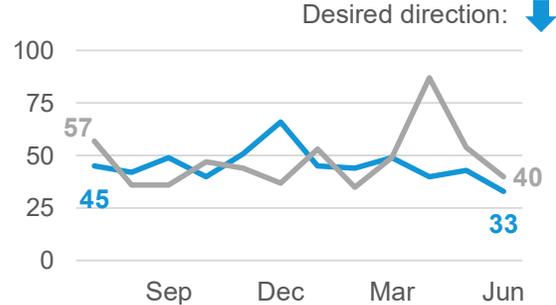
Average minutes customer waits for customer care call center agent



## Be a Good Citizen within Our Community

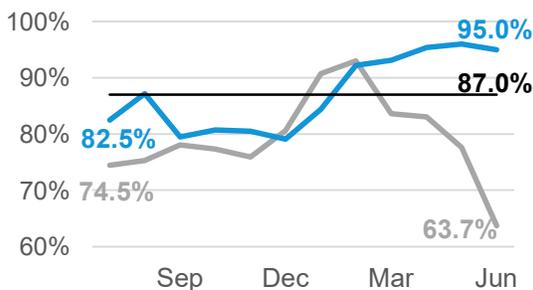
### Basement Backups

# of basement backups



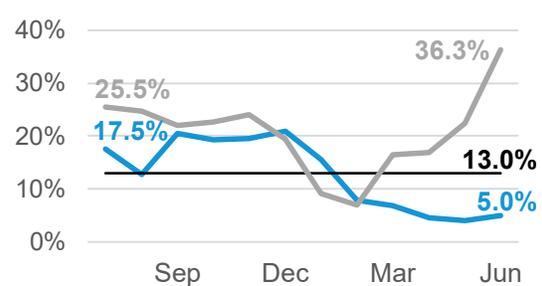
### Calls Answered

# of calls answered by a customer care agent / total calls



### Calls Not Answered

# of calls not answered by a customer care agent / total calls



\*Only FY 2020 data presented for these KPIs as the Customer-to-Meter (C2M) system was introduced at the start of FY 2020 (July 2019).

# WSSC Water Performance Report

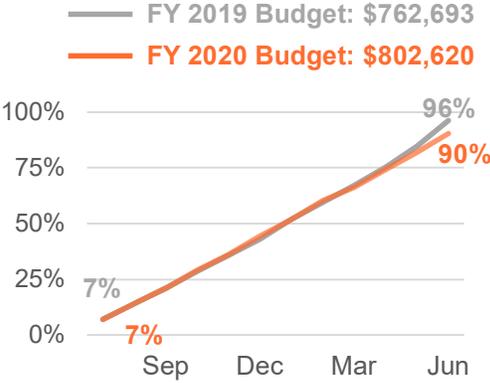
## Optimize Infrastructure

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 Section 8 for highlighted projects.

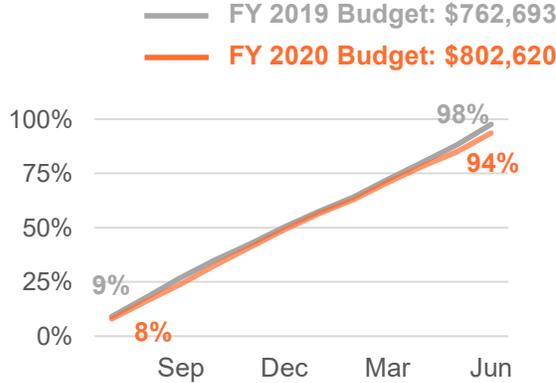
## Spend Customer Dollars Wisely

### Improve Financial Process Efficiency and Fiscal Sustainability

**Water and Sewer Operating Expenses**



**Water and Sewer Operating Revenue**



# WSSC Water Performance Report

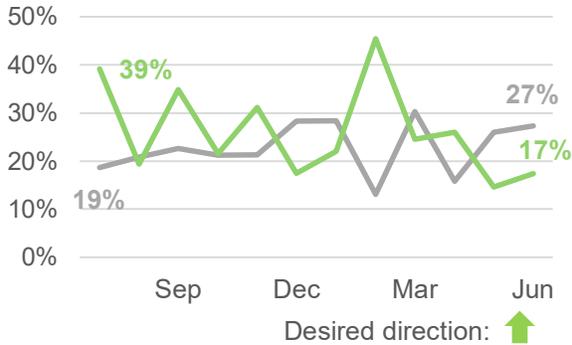
## Transform Employee Engagement

— FY 2019  
— FY 2020

### Acquire the Best People

#### Monthly Positions Filled

# of positions filled / # of actively recruited positions



### Retain Top Performers

#### Monthly Turnover Rate

# of employee separations / # of FTEs

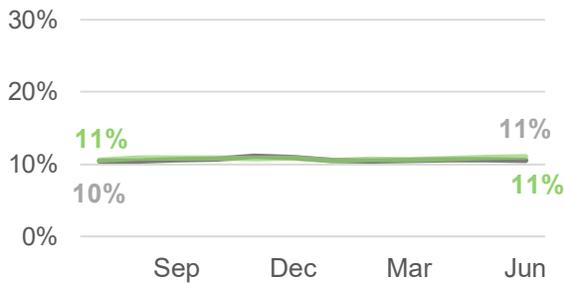


### Develop and Grow Talent

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

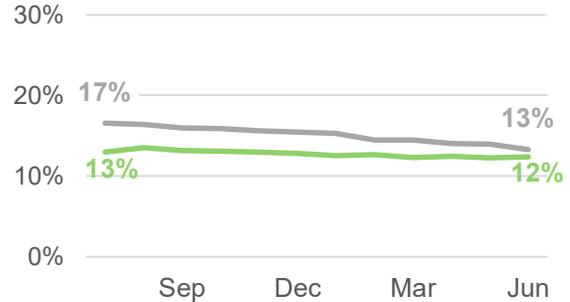
#### Retirement Eligibility (Full)

##### Eligible Now



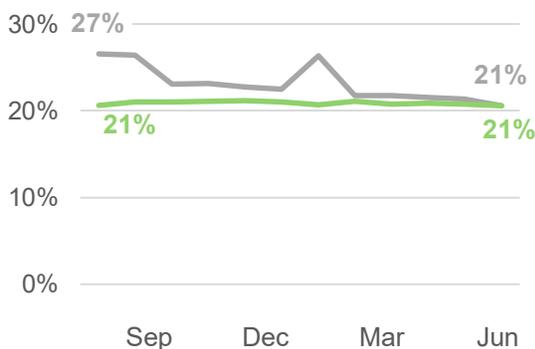
#### Retirement Eligibility (Early)

##### Eligible Now



#### Retirement Eligibility (Full)

##### Eligible Within 5 Years



#### Retirement Eligibility (Early)

##### Eligible Within 5 Years



# WSSC Water Performance Report

## Protect Our Resources

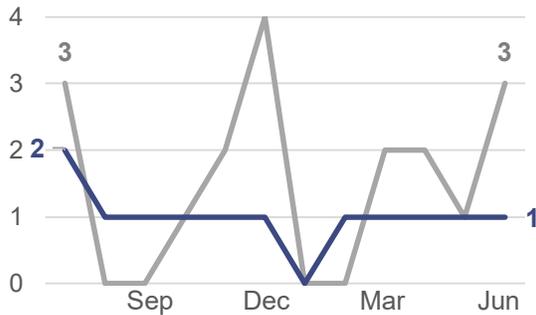
— FY 2019  
— FY 2020

**Plan Proactively with Community Stakeholders and Resolve and Learn from Past Incidents**

**Maintain Best in Class Operating Environment Safety for Employees**

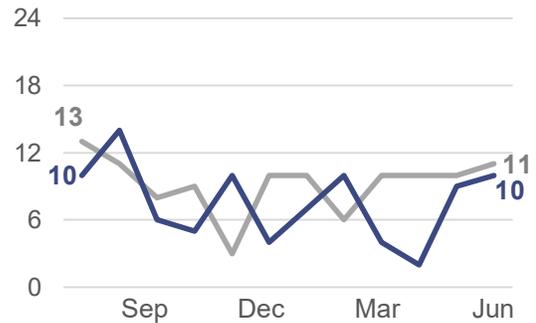
### Emergency & Coordinated Responses

# of cross-departmental coordinated responses, exercises and drills



### Occupational Injuries

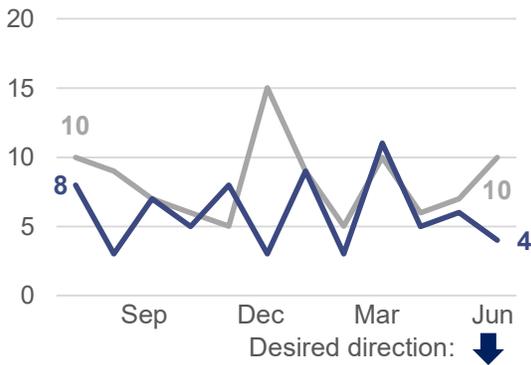
# of occupational injuries



## Secure WSSC Water's Critical Infrastructure

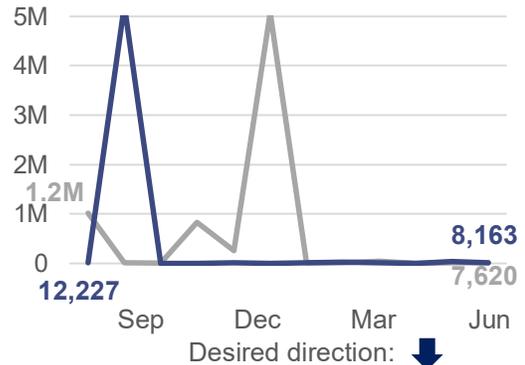
### Sanitary Sewer Overflows

# of sanitary sewer overflows



### Sanitary Sewer Overflow Volume

Total gallons of sanitary sewer overflows in millions per month



## WSSC WATER GOVERNANCE

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



### Montgomery County Commissioners



**Howard A. Denis**  
Chair



**Fausto R. Bayonet**  
Commissioner



**T. Eloise Foster**  
Commissioner



### Prince George's County Commissioners



**Keith E. Bell**  
Vice Chair

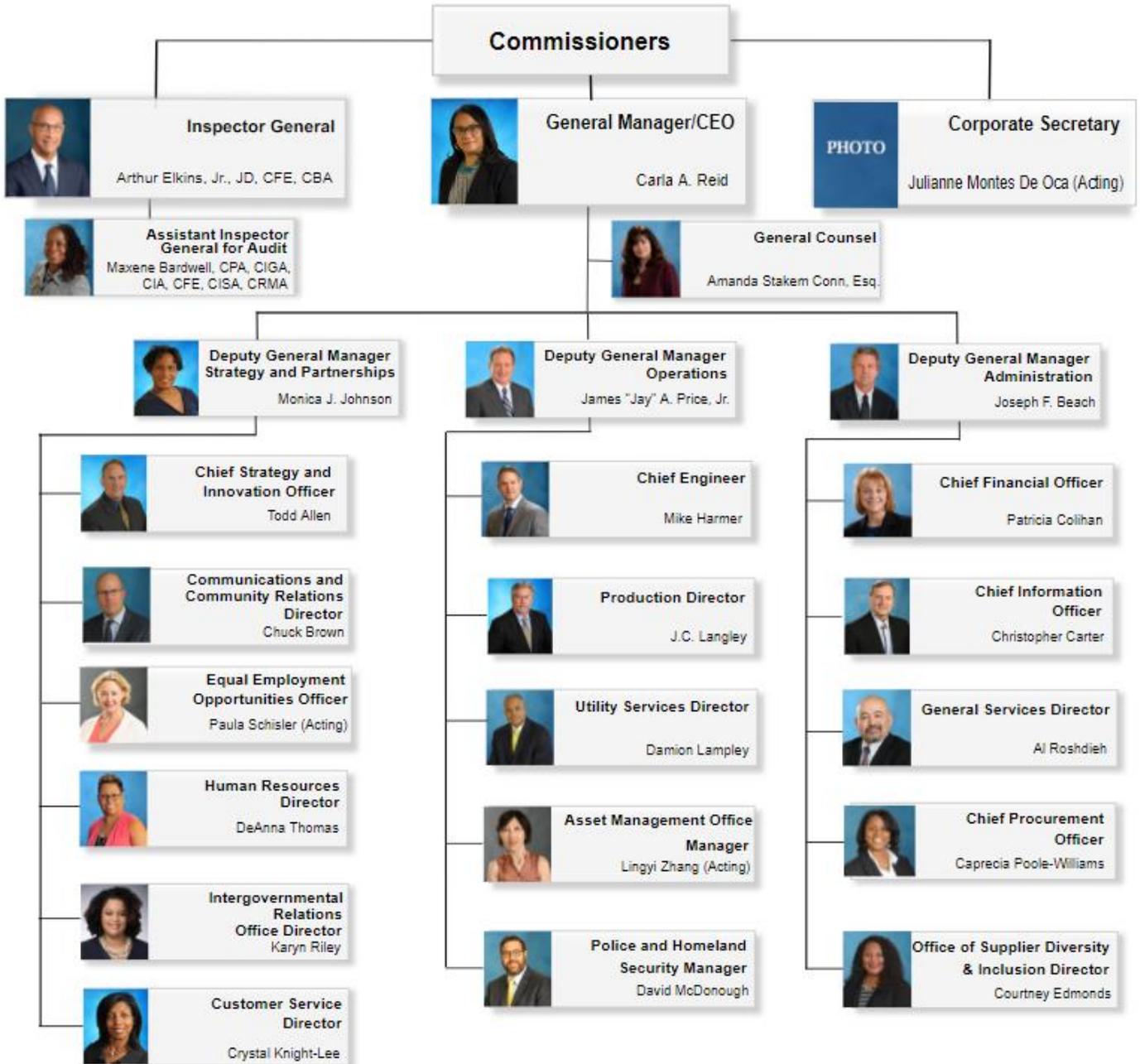


**Chris Lawson**  
Commissioner

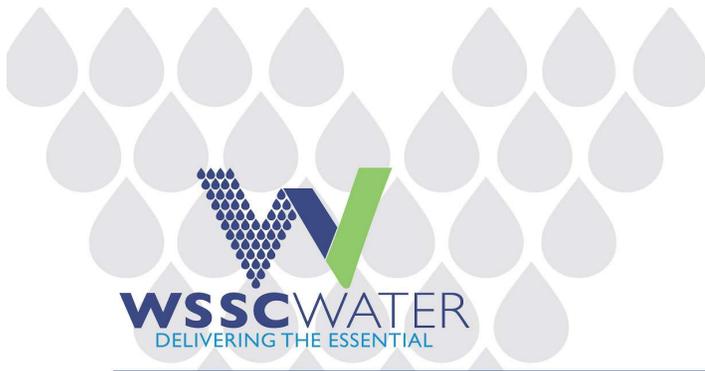


**Sandra L. Thompson**  
Commissioner

# OUR LEADERSHIP AND ORGANIZATION



## **CHAIR'S LETTER**



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

GENERAL MANAGER  
Carla A. Reid

March 1, 2021

The Honorable Angela D. Alsobrooks, Prince George's County Executive  
The Honorable Marc Elrich, Montgomery County Executive  
The Honorable Calvin S. Hawkins, Chair, Prince George's County Council  
The Honorable Tom Hucker, President, Montgomery County Council

Dear Ms. Alsobrooks, Mr. Elrich, Mr. Hawkins, and Mr. Hucker:

We are hereby transmitting WSSC Water's Proposed Fiscal Year 2022 (FY 2022) 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 WSSC Water's mission through the following strategic priorities:

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

## FY 2022 PROPOSED CAPITAL AND OPERATING BUDGETS

The FY 2022 Proposed Budget for all operating and capital funds totals \$1.556 billion or \$100.8 million (6.9%) more than the Approved FY 2021 Budget. The Proposed Operating Budget of \$852.1 million represents an increase of \$2.4 million (0.3%) over the FY 2021 Approved Operating Budget of \$849.7 million. This is basically a same service level budget with modest increases to fund essential improvements, including much needed repairs at our facilities, Triadelphia Reservoir dredging to remove accumulated sediment, and cybersecurity enhancements to protect customer information. Funding is also included for organizational development to enable successful transitions to new and

upgraded systems and a Drinking Water Treatment Master Plan Study. The costs of these improvements are partially offset by reduced debt service expenses.

The Proposed Capital Budget of \$703.7 million represents an increase of \$98.3 million (16.2%) from the FY 2021 Approved Capital Budget of \$605.4 million. This increase is due to the ramping up of construction on the Piscataway Bioenergy Project and the addition of five new wastewater pumping stations and force main replacement projects to address aging assets that are at or beyond their useful life. All costs and related increased revenues associated with the Advanced Metering Infrastructure Project have been removed from the Proposed FY 2022 operating and capital budgets.

The Proposed Budget calls for a combined 5.9% average increase in water and sewer consumption revenue. This proposed increase meets the Spending Affordability Guidelines as recommended by both Prince George's and Montgomery counties. Of the increase, 5.1% is driven by an expected decrease in sewer revenue based on historic trends, lower projected interest income and a reduced reliance on fund balance. 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 approximately 1.0% of the median household income (see Section 3). As the account maintenance and infrastructure investment fees remain flat for the sixth year, the rate increase will add approximately \$11.83 (5.2% bill increase) per quarter to the bill of a customer using 165 gallons per day, based upon an average per person consumption of 55 gallons per day for a three-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, rather than the more commonplace consumer price index. Other investments drive our budget, including: compliance with the Sanitary Sewer Overflow (SSO) and the Potomac Plant 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 and safeguard our networks. Many of these costs are legally mandated and not easily deferred or reduced.

## FINANCIAL ASSISTANCE PROGRAMS

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 safe, clean drinking water and efficient wastewater treatment compares favorably to other household utilities and expenses, more residents are struggling to meet their monthly expenses during these unprecedented and uncertain times. The Customer Assistance Program (CAP), created in FY 2016 to help financially struggling customers by providing assistance with water and sewer bills, has provided relief to thousands of our customers this year. The CAP will continue in FY 2022 and is proposed to increase by \$1.2 million from the FY 2021 budgeted revenue offset of \$888,000 to \$2.1 million.

In addition, in accordance with House Bill 408, enacted in the FY 2018 legislative session, the Proposed Budget includes \$100,000 to fund the third year of the Pipe Emergency Replacement Loan Program (PipeER), which provides loans of up to \$5,000 per eligible residential customer to finance the replacement of leaking on-property water service lines. The remaining balance in the loan fund is

returned to WSSC Water. Beginning in FY 2021, WSSC Water will transfer those available funds to the Water Fund.

## SPENDING AFFORDABILITY GUIDELINE LIMITATIONS

To reconcile our departments' initial FY 2022 requests with the counties' Spending Affordability Guidelines, a funding gap of \$14 million 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.

Although we are not able to reinstate several programs, this budget funds essential maintenance that supports our strategic priorities. It should be noted that 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 to reduce discolored water complaints;
- Testing all 43,000 fire hydrants in our service area on a 10-year cycle, a best practice recommended by the American Water Works Association;
- Increasing the number of regulatory inspectors allowing more time per inspection to perform gas-fitting and plumbing inspection. This ensures installations are not rushed due to staffing shortages that are a result of a steady increase in the number of inspections requested from applicants; and
- Increasing workyears and funding to adequately support the pipe relocations required for projects such as the I-495/I-270 widening and the MAGLEV High Speed Rail from Baltimore to DC.

## COST-SAVING MEASURES

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

- Our efforts in the Supply Chain Management Transformation Project, which has been supported by the Commission and both counties since FY 2013, have produced cost reductions in excess of \$41 million in the operating and capital budgets since the inception of this program and cost avoidance savings of nearly \$37 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;
- For the first time since FY 2017, this budget includes funding for additional positions. After a thorough analysis of departmental work backlogs, WSSC Water is proposing two positions in Production, two positions in Customer Service and unfreezing six CIP funded positions in Engineering and Construction to meet mission-critical needs. Twenty-four positions remained frozen.

- Our Innovation Program has identified promising methods for locating and remediating water system leakages and extending pipe life, as well as developing new approaches to wastewater treatment that have the potential to significantly reduce processing costs while also improving our environmental stewardship efforts; and
- Changes made in monitoring and supervision of overtime costs have reduced these expenses by \$4.7 million since FY 2017.

## OPTIMIZE INFRASTRUCTURE

The proposed budget includes the rehabilitation of 31 miles of smaller water mains (<16-inches in diameter), as we begin to ramp back up toward our asset management plan goal of 55 miles per year, continued development of our enhanced pipe condition assessment program, and evaluation of new water main rehabilitation technologies to help control costs while also minimizing disruption for our customers.

For large diameter water mains, the Pre-stressed Concrete Cylinder Pipe (PCCP) Program provides for the ongoing acoustic fiber optic (AFO) monitoring of more than 118 miles of pipe, ongoing inspection, and rehabilitation and replacement of large diameter pipes. The program will replace one-half mile of pipe in FY 2022, eventually building up to two miles per year. Inspection, rehabilitation, and replacement of large valves continues at a pace of two per year. Replacement of ferrous pipes is projected at six miles. Funding is also included for the continued compliance with all requirements of the SSO and Potomac Water Filtration Plant (WFP) Consent Decrees.

## INFORMATION TECHNOLOGY MODERNIZATION

In addition to our ongoing investments in WSSC Water's physical infrastructure, the FY 2022 budget invests in our organizational infrastructure. Funding is included to enhance our cybersecurity program to efficiently and effectively mitigate risks by ensuring our electronic data and computer systems and networks are protected from theft, attack or unauthorized access. Cybersecurity program initiatives include artificial intelligence threat detection, new end-user security awareness training and risk reduction of identity theft through two-step authentication.

The budget also provides for an Enterprise Asset Management/Work Management system. This comprehensive solution provides applications, modules, tools and supporting data for managing and monitoring all activities required for operations, maintenance, repair and capital planning for water/wastewater underground infrastructure.

## SPENDING AFFORDABILITY

WSSC Water, in cooperation with the Montgomery and Prince George's County governments, continues to participate in the spending affordability process. This 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 and Prince George's county councils approved resolutions establishing four limits on WSSC Water's FY 2022 budget. As indicated in the following table, the proposed budget meets the spending affordability limits for New Water and Sewer

Debt, Debt Service and Average Water/Sewer Rate Increase. The Water/Sewer Operating Expenses meet the intent of the limit as the excess is covered by non-rate-related revenues.

**WSSC WATER FY 2022 PROPOSED BUDGET VS. SPENDING AFFORDABILITY LIMITS**  
 (\$ in Millions)

	<b>FY 2022 Proposed Budget</b>	<b>Prince George's County Limit</b>	<b>Montgomery County Limit</b>
New Water and Sewer Debt	\$409.7	\$427.9	\$427.9
Total Water and Sewer Debt Service	\$309.0	\$309.7	\$309.7
Total Water/Sewer Operating Expenses	\$842.3*	\$841.4	\$841.4
Water/Sewer Rate Revenue Increase	5.9%	5.9%	5.9%

\*Exceedance covered by offsetting funding sources

The Proposed Budget provides for:

- Implementing the first year of the FYs 2022-2027 Capital Improvement Program (CIP);
- Paying WSSC Water's share of operating (\$59 million in FY 2022) and capital costs (\$55 million in FY 2022; \$392 million in FYs 2022-2027) for the District of Columbia Water and Sewer Authority's (DC Water) Blue Plains Wastewater Treatment Plant;
- Paying debt service of \$316.8 million - of which \$309.0 million is in the Water and Sewer Operating Funds;
- Holistically rehabilitating the Piscataway basin to reduce infiltration and inflow;
- Funding additional operating costs at the Piscataway Water Resource Recovery Facility (WRRF) due to increased flows;
- Funding maintenance and repairs at critical facilities;
- Replacing 31 miles of small diameter and 6.5 miles of large diameter water mains
- Rehabilitating 31 miles of small diameter sewer mains and lateral lines and 14.4 miles of large diameter sewer mains;
- Funding \$5.3 million for water meter replacements;
- Funding \$71.1 million for large diameter pipe rehabilitation. This includes \$35.3 million for PCCP inspection, repair, and acoustic fiber optic monitoring of the pipes' condition; \$32.4 million for large diameter repairs and cathodic protection; \$3.4 million for large valve inspections, replacement, and repairs;
- Complying with the SSO and the Potomac WFP Consent Orders;

- Operating and maintaining a system of three reservoirs impounding 14 billion gallons of water, two water filtration plants, six WRRF's, 6,000 miles of water main, and over 5,700 miles of sewer main 24 hours a day, seven days a week; and
- Proposing limited compensation enhancements considering the very challenging fiscal environment.

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, 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 the 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 plan to do the same this year. An increase to the SDC for FY 2022 is currently being evaluated by the Bi-County SDC Policy and Rates Workgroup.

## 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, 2021.

Sincerely,

DocuSigned by:

*Howard Denis*

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Howard A. Denis  
Commission, Chair

cc:

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

**BUDGET SUMMARIES**

## COMPARATIVE EXPENSES

### Comparative Expenses by Fund

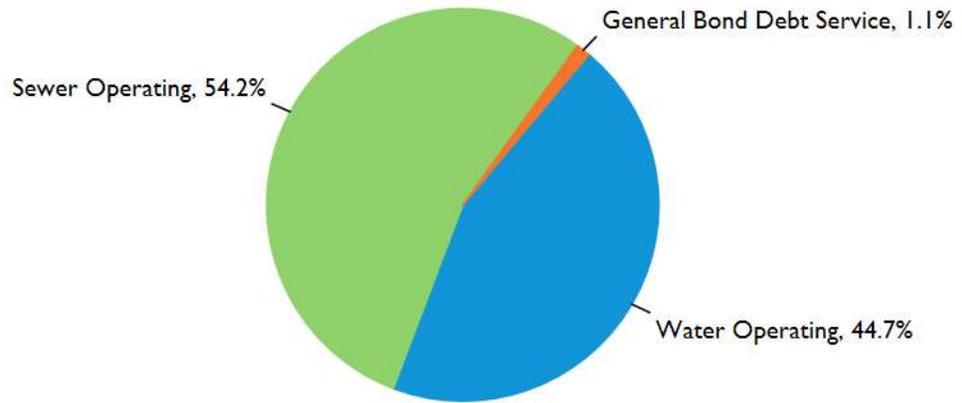
(\$ in thousands)	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed	FY 2022 Over/(Under) FY 2021	% Change
<b>Operating Funds</b>							
Water Operating	\$ 320,088	\$ 339,200	\$ 338,471	\$ 365,190	\$ 380,565	\$ 15,375	4.2 %
Sewer Operating	385,527	419,633	413,421	470,833	461,734	(9,099)	(1.9)%
General Bond Debt Service	19,108	18,847	14,292	13,633	9,794	(3,839)	(28.2)%
<b>Total Operating</b>	<b>\$ 724,723</b>	<b>\$ 777,680</b>	<b>\$ 766,184</b>	<b>\$ 849,656</b>	<b>\$ 852,093</b>	<b>\$ 2,437</b>	<b>0.3 %</b>
<b>Capital Funds</b>							
Water Supply Bond	261,602	210,783	162,378	256,499	291,667	35,168	13.7 %
Sewer Disposal Bond	190,058	152,891	211,729	308,014	384,600	76,586	24.9 %
General Construction	23,555	23,121	20,278	40,869	27,478	(13,391)	(32.8)%
<b>Total Capital</b>	<b>\$ 475,215</b>	<b>\$ 386,795</b>	<b>\$ 394,385</b>	<b>\$ 605,382</b>	<b>\$ 703,745</b>	<b>\$ 98,363</b>	<b>16.2 %</b>
<b>Grand Total</b>	<b>\$ 1,199,938</b>	<b>\$ 1,164,475</b>	<b>\$ 1,160,569</b>	<b>\$ 1,455,038</b>	<b>\$ 1,555,838</b>	<b>\$ 100,800</b>	<b>6.9 %</b>

### Comparative Expenses by Major Expense Category

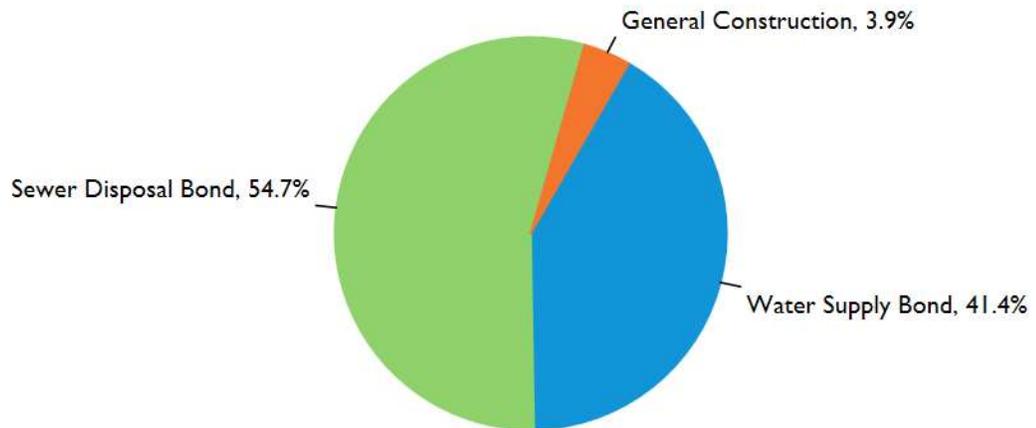
(\$ in thousands)	FY 2020 Actual			FY 2021 Approved			FY 2022 Proposed		
	Capital	Operating	Total	Capital	Operating	Total	Capital	Operating	Total
<b>Expense Categories</b>									
Salaries & Wages	\$ 26,388	\$ 132,574	\$ 158,962	\$ 27,826	\$ 128,369	\$ 156,195	\$ 27,449	\$ 133,730	\$ 161,179
Heat, Light & Power	155	15,534	15,689	277	20,431	20,708	222	18,501	18,723
Regional Sewage Disposal	-	56,414	56,414	-	58,000	58,000	-	59,160	59,160
Contract Work	211,404	18,342	229,746	353,066	22,846	375,912	444,405	21,337	465,742
Consulting Engineers	44,478	18,534	63,012	77,183	19,326	96,509	79,614	19,890	99,504
Debt Service	-	292,322	292,322	-	325,593	325,593	-	316,827	316,827
All Other	111,960	232,464	344,424	147,030	275,091	422,121	152,055	282,648	434,703
<b>Grand Total</b>	<b>\$ 394,385</b>	<b>\$ 766,184</b>	<b>\$ 1,160,569</b>	<b>\$ 605,382</b>	<b>\$ 849,656</b>	<b>\$ 1,455,038</b>	<b>\$ 703,745</b>	<b>\$ 852,093</b>	<b>\$ 1,555,838</b>

# FY 2022 PROPOSED BUDGET BY FUND

**Grand Total = \$1,555,838,354**



**Operating Funds = \$852,092,882**



**Capital Funds = \$703,745,472**

## REVENUE AND EXPENSE TRENDS

### Water & Sewer Operating Funds - Combined

(\$ in thousands)	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
<b>Revenues</b>					
Water Consumption Charges	\$ 271,735	\$ 273,753	\$ 271,173	\$ 295,512	\$ 318,941
Sewer Use Charges	325,879	341,496	346,985	393,698	398,862
Account Maintenance Fees	32,473	32,116	35,922	32,360	31,866
Infrastructure Investment Fees	39,847	39,278	42,781	39,410	38,808
Plumbing and Inspection Fees	12,141	13,594	14,425	14,470	14,350
Rockville Sewer Use	3,223	3,106	3,147	3,000	3,100
Miscellaneous	19,117	20,913	21,053	20,801	21,600
Interest Income	5,478	9,306	4,881	10,000	1,000
<b>Total Operating Revenues</b>	<b>\$ 709,893</b>	<b>\$ 733,562</b>	<b>\$ 740,367</b>	<b>\$ 809,251</b>	<b>\$ 828,527</b>
<b>Other Credits and Transfers</b>					
Use of Fund Balance	227	11,580	11,341	8,000	-
Reconstruction Debt Service Offset	7,700	12,500	11,600	9,500	6,000
SDC Debt Service Offset	2,396	5,551	6,695	5,772	5,772
Premium Transfer	-	-	7,904	1,500	-
Underwriters Discount Transfer	-	-	-	2,000	2,000
<b>Total Funds Available</b>	<b>\$ 720,216</b>	<b>\$ 763,193</b>	<b>\$ 777,907</b>	<b>\$ 836,023</b>	<b>\$ 842,299</b>
<b>Expenses</b>					
Salaries & Wages	117,144	125,100	131,711	127,726	133,039
Heat, Light & Power	20,033	19,683	15,534	20,423	18,493
Regional Sewage Disposal	58,331	54,809	56,414	58,000	59,160
<b>Debt Service</b>					
Principal Payments	151,057	153,565	154,238	177,022	170,902
Interest Payments	106,445	121,819	125,507	136,843	138,143
PAYGO	10,065	15,754	-	31,016	27,585
All Other	242,540	268,103	268,488	284,993	294,977
<b>Total Expenses</b>	<b>\$ 705,615</b>	<b>\$ 758,833</b>	<b>\$ 751,892</b>	<b>\$ 836,023</b>	<b>\$ 842,299</b>

## REVENUE AND EXPENSE TRENDS (Continued)

### General Bond Debt Service Fund

(\$ in thousands)	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
<b>Operating Revenues</b>					
Front Foot Benefit & House Connection	\$ 19,191	\$ 15,809	\$ 12,824	\$ 10,378	\$ 8,428
Interest Income	865	1,127	483	600	-
Miscellaneous	285	268	174	229	130
<b>Total Operating Revenues</b>	<b>\$ 20,341</b>	<b>\$ 17,204</b>	<b>\$ 13,481</b>	<b>\$ 11,207</b>	<b>\$ 8,558</b>
<b>Other Credits and Transfers</b>					
Reconstruction Debt Service Offset	7,700	12,500	11,600	9,500	6,000
Use of Fund Balance	(7,700)	(12,500)	(11,600)	(9,500)	(6,000)
<b>Total Funds Available</b>	<b>\$ 20,341</b>	<b>\$ 17,204</b>	<b>\$ 13,481</b>	<b>\$ 11,207</b>	<b>\$ 8,558</b>
<b>Expenses</b>					
Salaries & Wages	701	751	863	643	691
Heat, Light & Power	11	-	-	8	8
All Other	802	825	852	1,254	1,313
<b>Subtotal</b>	<b>\$ 1,514</b>	<b>\$ 1,576</b>	<b>\$ 1,715</b>	<b>\$ 1,905</b>	<b>\$ 2,012</b>
<b>Debt Service</b>					
Principal Payments	12,672	13,337	9,445	8,796	5,803
Interest Payments	4,922	3,934	3,132	2,932	1,979
<b>Subtotal</b>	<b>\$ 17,594</b>	<b>\$ 17,271</b>	<b>\$ 12,577</b>	<b>\$ 11,728</b>	<b>\$ 7,782</b>
<b>Total Expenses</b>	<b>\$ 19,108</b>	<b>\$ 18,847</b>	<b>\$ 14,292</b>	<b>\$ 13,633</b>	<b>\$ 9,794</b>

## REVENUE AND EXPENSE TRENDS (Continued)

### Capital Funds

(\$ in thousands)	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
<b>Funds Provided</b>					
Bonds and Notes Issues/Cash on Hand	\$ 609,678	\$ 338,012	\$ 289,097	\$ 531,659	\$ 607,766
PAYGO	10,065	15,754	-	31,016	27,585
Federal & State Grants	3,706	995	1,589	23,000	24,471
System Development Charge	23,200	15,000	14,077	9,530	31,329
Other Contributions	12,807	7,667	12,451	10,177	12,594
<b>Total Capital Funds</b>	<b>\$ 659,456</b>	<b>\$ 377,428</b>	<b>\$ 317,214</b>	<b>\$ 605,382</b>	<b>\$ 703,745</b>
<b>Expenses</b>					
Salaries & Wages	\$ 27,717	\$ 27,293	\$ 26,388	\$ 27,826	\$ 27,449
Heat, Light & Power	264	213	155	277	222
Contract Work	225,086	202,735	211,404	353,066	444,405
Consulting Engineers	41,718	51,872	44,478	77,183	79,614
All Other	180,431	104,682	111,960	147,030	152,055
<b>Total Capital Expenses</b>	<b>\$ 475,216</b>	<b>\$ 386,795</b>	<b>\$ 394,385</b>	<b>\$ 605,382</b>	<b>\$ 703,745</b>

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

## PROPOSED RATES, FEES AND CHARGES

Presented in this section are the Fiscal Year (FY) 2022 proposed variable and fixed rates, as well as fees and charges that will be effective July 1, 2021. The majority of WSSC Water’s revenue is derived from user charges for high-quality water and sewer services provided to customers. WSSC Water assessed these rates through an in-depth process ensuring revenue stability, cost recovery, conservation management and affordability.

### COMBINED WATER AND SEWER OPERATING FUNDS - PROPOSED RATE IMPACT

#### 5.9% Average Water and Sewer Rate Increase

	FY 2022 Proposed (\$ in thousands)
<b>FUNDING SOURCES</b>	
<b><u>Revenues at Current Rates</u></b>	
Consumption Charges	\$ 677,812
Account Maintenance Fees	31,866
Infrastructure Investment Fees	38,808
Miscellaneous Revenues	40,050
<b>Subtotal</b>	<b>\$ 788,536</b>
<b><u>Other Credits and Transfers</u></b>	
Reconstruction Debt Service Offset	6,000
Systems Development Charges (SDC) Debt Service Offset	5,772
Underwriters Discount Transfer	2,000
<b>Total Funding Sources</b>	<b>\$ 802,308</b>
<b>EXPENSES</b>	
Operating, Maintenance & Support Services Expenses	505,669
Debt Service	309,045
Pay-As-You-GO (PAYGO)	27,585
<b>Total Expenses</b>	<b>\$ 842,299</b>
Shortfall to be Covered by Rate Increase	<u>\$ (39,991)</u>
Proposed Average Water and Sewer Rate Increase (Shortfall divided by Consumption Charges)	<u>5.9 %</u>

The FY 2022 Proposed Budget calls for a combined 5.9% average increase in water consumption and sewer use revenue. This proposed increase meets the 5.9% Spending Affordability Guidelines (SAG) limit recommended by both Prince George’s and Montgomery Counties. Even with this increase, WSSC Water rates remain favorable when compared to many other comparable water and sewer utilities as shown on page 3-10.

## WATER AND SEWER RATE SCHEDULES

### Proposed Rate Schedule Effective July 1, 2021

Average Daily Consumption During Billing Period	FY 2022 July 1, 2021 Proposed		Total Combined
	Water Rates	Sewer Rates	
(Gallons Per Day)	Per 1,000 Gallons		
0 - 80.9999	\$ 5.76	\$ 7.58	\$ 13.34
81 - 165.9999	6.51	8.42	14.93
166 - 275.9999	7.50	10.57	18.07
276 & Greater	8.79	13.96	22.75

Proposed Flat Rate Sewer Charge - \$142.00 per quarter.

### Current Rate Schedule

Average Daily Consumption During Billing Period	FY 2021 July 1, 2020 Approved		Total Combined
	Water Rates	Sewer Rates	
(Gallons Per Day)	Per 1,000 Gallons		
0 - 80.9999	\$ 5.35	\$ 7.25	\$ 12.60
81 - 165.9999	6.04	8.06	14.10
166 - 275.9999	6.96	10.10	17.06
276 & Greater	8.15	13.33	21.48

Approved Flat Rate Sewer Charge - \$135.00 per quarter.

## QUARTERLY CUSTOMER BILLS AT VARIOUS CONSUMPTION LEVELS

Meter Size	Average Daily Consumption (Gallons Per Quarter)	Approved FY 2018	Approved FY 2019	Approved FY 2020	Approved FY 2021	Proposed FY 2022
3/4" Residential Meter	100 (9,125 gal/qtr)	\$ 122.72	\$ 127.01	\$ 138.94	\$ 145.58	\$ 152.48
3/4" Residential Meter	165 (15,056 gal/qtr)	206.12	213.95	217.83	229.21	241.04
3/4" Residential Meter	500 (45,625 gal/qtr)	816.40	851.99	794.66	840.78	888.79
2" Meter	1,000 (91,250 gal/qtr)	1,878.23	1,952.14	1,903.02	2,004.81	2,110.76
3" Meter	5,000 (456,250 gal/qtr)	9,169.19	9,552.44	9,736.92	10,284.01	10,853.51
6" Meter	10,000 (912,500 gal/qtr)	19,085.00	19,878.88	19,748.55	20,852.26	22,001.19

Amounts include the Account Maintenance Fees and Infrastructure Investment Fees shown on pages 2-4 and 2-5.

## ACCOUNT MAINTENANCE FEES

### Proposed For Implementation July 1, 2021

Meter Size	FY 2021 Current Quarterly Charges		FY 2022 Proposed Quarterly Charges	
<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>				
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 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 quarterly fee is prorated based on the number of days in the billing cycle.

## INFRASTRUCTURE INVESTMENT FEES

### Proposed For Implementation July 1, 2021

Meter Size	FY 2021 Current		FY 2022 Proposed	
	Quarterly Charges		Quarterly Charges	
<u>Small Meters</u>				
5/8"	\$	11.00	\$	11.00
3/4"		12.00		12.00
1"		14.00		14.00
<u>Large Meters</u>				
1-1/2"		90.00		90.00
2"		185.00		185.00
3"		585.00		585.00
4"		813.00		813.00
6"		1,265.00		1,265.00
8"		2,845.00		2,845.00
10"		4,425.00		4,425.00
<u>Fire Service Meters</u>				
4"		499.00		499.00
6"		616.00		616.00
8"		2,524.00		2,524.00
10"		2,714.00		2,714.00
12"		5,214.00		5,214.00

This quarterly fee is prorated based on the number of days in the billing cycle.

## SYSTEM DEVELOPMENT CHARGES

### Proposed For Implementation July 1, 2021

SDC Category	FY 2021 Current Charges	FY 2022 Proposed Charges	Current Maximum Allowable	Proposed Maximum Allowable
Apartment				
Water	\$ 896	\$ 896	\$ 1,346	\$ 1,368
Sewer	1,140	1,140	1,714	1,741
1-2 toilets/residential				
Water	1,344	1,344	2,022	2,054
Sewer	1,710	1,710	2,568	2,609
3-4 toilets/residential				
Water	2,240	2,240	3,368	3,422
Sewer	2,850	2,850	4,285	4,354
5 toilets/residential				
Water	3,135	3,135	4,714	4,789
Sewer	3,991	3,991	6,000	6,096
6+ toilets/residential (per fixture unit)				
Water	88	88	134	136
Sewer	115	115	175	178
Non-residential (per fixture unit)				
Water	88	88	134	136
Sewer	115	115	175	178

No increase is proposed for the System Development Charges for FY 2022 in any category. The maximum allowable charge is being adjusted pursuant to Division II, Section 25-403(c) of the Public Utilities Article of the Annotated Code of Maryland, based on the 1.6% change in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) for all items in the Washington, D.C. metropolitan area from November 2019 to November 2020.

## MISCELLANEOUS FEES AND CHARGES - PROPOSED FOR IMPLEMENTATION JULY 1, 2021

WSSC Water 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, 2021.

Fee/Charge Number and Name	Current	FY 2022 Proposed	Charge Change
<b>INSPECTIONS, LICENSES AND PERMITS</b>			
<b>I Inspection Fees - Water/Sewer Connection Hookup, Well/Septic Hookup, Plumbing and Gas-fitting Inspections</b>			
<u>Plumbing and Gas-fitting Inspections</u>			
New Single Family Detached Dwellings and Townhouses	\$ 1,011	\$ 1,112	Yes
New Attached Dwellings (townhouses/multiplex excluding apartments)	1,011	1,112	Yes
<u>All Other Residential</u>			
Water/Well Hookup	132	145	Yes
Meter Yoke Inspection (meter only installation)	132	145	Yes
Water Hookup Converting from Well (includes 2 inspections)	264	290	Yes
Sewer/Septic Hookup	132	145	Yes
First Plumbing Fixture	132	145	Yes
Each Additional Fixture	53	61	Yes
SDC Credit Fixture Inspection (per fixture)	48	53	Yes
Minimum Permit Fee	242	263	Yes
Permit Reprocessing Fee	73	75	Yes
Long Form Permit Refund Fee	242	263	Yes
Long Form Permit Re-Issue Fee	242	263	Yes
<u>All Non-Residential</u>			
<u>Plan Review without Permit Application</u>			
25 Fixtures or Less	534	550	Yes
26-200 Fixtures	2,038	2,344	Yes
Over 200 Fixtures	4,061	4,670	Yes
<u>2nd or 3rd Review (with or without permit application)</u>			
25 Fixtures or Less	187	202	Yes
26-200 Fixtures	457	526	Yes
Over 200 Fixtures	973	1,119	Yes
Water/Well Hookup	235	259	Yes
Meter Yoke Inspection (meter only installation)	235	259	Yes
Sewer/Septic Hookup	235	259	Yes
FOG Interceptor	235	259	Yes
First Plumbing Fixture	235	259	Yes
Each Additional Fixture	59	64	Yes
SDC Credit Fixture Inspection (per fixture)	48	53	Yes
Minimum Permit Fee	337	371	Yes
Permit Reprocessing Fee	73	75	Yes
Long Form Permit Refund Fee	352	383	Yes
Long Form Permit Re-Issue Fee	352	383	Yes

MISCELLANEOUS FEES AND CHARGES - PROPOSED FOR IMPLEMENTATION JULY 1, 2021

Fee/Charge Number and Name	Current	FY 2022 Proposed	Charge Change
<b>INSPECTIONS, LICENSES AND PERMITS (Continued)</b>			
<b>2 License Fees for the Regulated Trades</b>			
<u>Reciprocal Master Plumber, Gas-fitter</u>			
Initial Registration per type (for 2 years)	\$ 123	\$ 135	Yes
Registration Renewal all types (for 2 years)	106	117	Yes
Late Registration Renewal	63	69	Yes
<u>Examined Master Plumber, Gas-fitter</u>			
Initial Registration per type (for 4 years)	130	143	Yes
Registration Renewal all types (for 4 years)	130	143	Yes
Late Registration Renewal	63	69	Yes
Cross-connection Technician Registration	32	35	Yes
Sewer and Drain Registration and Renewal (for 2 years)	53	61	Yes
Sewer and Drain Late Renewal Fee	24	26	Yes
<u>Journeyman License Registration</u>			
Initial Registration per type (for 2 years)	37	41	Yes
Registration Renewal (for 2 years)	37	41	Yes
Late Registration Renewal	25	27	Yes
License Transfer Fee	31	31	-
License Replacement Fee	18	19	Yes
Apprentice License Registration Renewal	13	14	Yes
<b>3 Short Form Permit Fee (up to 3 fixtures) - Non-Refundable</b>	113	124	Yes
<b>4 Long Form Permit Transfer Fee (with inspection)</b>	194	213	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 Impoundment Fee	103	105	Yes
Removed Boat/Craft Storage Fee (Monthly)	82	80	Yes
<u>Watershed Use Permit Fees</u>			
Watershed Use Permit (January 1-December 31)	72	70	Yes
Watershed Use Permit (Single Day)	6	5	Yes
Open Season Boat Mooring (March 15 - November 30)	82	80	Yes
Winter Boat Mooring (December 1 - March 14)	57	60	Yes
Azalea Garden Rental (4 hours)	77	75	Yes
Bio-Brick Pavilion Rental (4 hours)	77	80	Yes
Boarding Stable Entrance Permit (Single Day)	258	260	Yes
Adjacent Landowner Entrance Permit (Single Day)	82	80	Yes
<u>Picnic Permit</u>			
Picnic Permit - Groups of 1-5 Persons (Single Day)	6	5	Yes
Picnic Permit - Groups of 6-10 Persons (Single Day)	12	10	Yes
Picnic Permit - Groups of 11-15 Persons (Single Day)	18	15	Yes
<b>7 Site Utility Inspection Fees (Non-Minor)</b>			
Base Fee	1,133	1,133	-
Pipeline (per foot)	6	6	-

MISCELLANEOUS FEES AND CHARGES - PROPOSED FOR IMPLEMENTATION JULY 1, 2021

Fee/Charge Number and Name	Current	FY 2022 Proposed	Charge Change
<b>DISCHARGE AND WATER PROTECTION</b>			
<b>8 Septic Hauler Discharge Permit Fees</b>			
<u>Category I - Residential &amp; Septic Waste &amp; Grease</u>			
1-49 gallons (per vehicle)	\$ 257	\$ 257	-
50-799 gallons (per vehicle)	5,578	6,136	Yes
800-2,999 gallons (per vehicle)	15,910	17,501	Yes
3,000 gallons & up (per vehicle)	34,754	38,229	Yes
January thru June (50% of fee)	50% of fee	50% of fee	-
Transfer and/or Replacement Permit Sticker	130	143	Yes
Industrial/Special Waste Disposal Fee (per 1,000 gallons)	366	377	Yes
Zero Discharge Permit Fee	130	143	Yes
Temporary Discharge Permit Fee plus sewer rate per 1,000 gallons	130	156	Yes
Sewer Rate - Hauled Waste (1,000 gallons of truck capacity)	47	48	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)	5,594	6,153	Yes
Greater than 5,000 gpd (double visit)	8,571	9,428	Yes
Non-Discharging Categorical Industries (zero discharge)	1,507	1,658	Yes
<u>Significant Industrial Users</u>			
Less than 25,000 gpd (single visit - priority pollutant sampling)	5,594	6,153	Yes
Greater than 25,000 gpd (double visit - priority pollutant sampling)	8,571	9,428	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)	6,651	7,316	Yes
Significant Industrial User - Renewal (for 4 years)	3,259	3,585	Yes
Initial Zero-Discharge CIU Permit (for 4 years)	2,526	2,779	Yes
Reissued Zero-Discharge CIU Permit (for 4 years)	1,684	1,852	Yes
Temporary Discharge Permit (non-SIU)	6,651	7,316	Yes
<b>11 Discharge Fees - Food Service Establishment</b>			
Full Permit FSE	537	537	-
BMP Permit FSE	152	152	-
<b>12 Cross Connection Fees</b>			
Test Report Fee (per report)	42	46	Yes
Base Fee for High Hazard Commercial Water Customer (per month)	18	20	Yes
Base Fee for All Other Commercial Water Customer (per month)	9	10	Yes

MISCELLANEOUS FEES AND CHARGES - PROPOSED FOR IMPLEMENTATION JULY 1, 2021

Fee/Charge Number and Name	Current	FY 2022 Proposed	Charge Change
<b>METERS AND RELATED SERVICES</b>			
<b>13 Small Meter Replacement Fee (at Customer Request)</b>	\$ 215	\$ 215	-
<b>14 Meter Replacement Fees (Damaged or Stolen Meter)</b>			
5/8" w/ touch pad (inside w/remote)	152	157	Yes
5/8" w/ pit pad (outside w/o remote)	150	150	-
5/8 Meter - pad encoder	127	131	Yes
5/8" x 3/4" w/ touch pad (inside w/ remote)	129	133	Yes
3/4" w/ touch pad (inside w/ remote)	160	160	-
3/4" w/ pit pad (outside w/o remote)	157	162	Yes
1" w/ touch pad (inside w/ remote)	202	202	-
1" w/ pit pad (outside w/o remote)	199	205	Yes
1" Kamstrup Meter, UT	319	329	Yes
1 1/2" Badger Flanged Meter	567	584	Yes
1 1/2" Flanged Meter	750	750	-
1 1/2" Nipple Meter	739	761	Yes
2" Flanged Meter	1,100	1,100	-
2" 15 1/4 Flanged Meter	1,207	1,243	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	1,475	1,519	Yes
Turbine, Horizontal 4" Neptune w/ pit pad	1,975	2,034	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	4,615	4,753	Yes
4" Detector Check	3,275	3,373	Yes
6" Detector Check	3,850	3,966	Yes
8" Detector Check	4,986	5,136	Yes
10" Detector Check	6,350	6,541	Yes
12" Detector Check	22,211	22,877	Yes
4" Fire Service Meter	8,239	8,239	-
6" Fire Service Meter	10,037	10,338	Yes
8" Fire Service Meter	12,502	12,877	Yes
10" Fire Service Meter	14,389	14,821	Yes
12" Fire Service Meter	20,403	21,015	Yes
3" Octave UT L=24	3,095	3,188	Yes
4" Octave UT L=29/ L=33	4,095	4,218	Yes
6" Octave UT L=45	6,026	6,207	Yes
8" Octave UT L=53	9,677	9,967	Yes
10" Octave UT L=68	13,080	13,472	Yes
<b>15 Meter Testing Fees</b>			
5/8" to 1"	261	261	-
1-1/2"	424	424	-
2" and up	473	473	-

MISCELLANEOUS FEES AND CHARGES - PROPOSED FOR IMPLEMENTATION JULY 1, 2021

Fee/Charge Number and Name	Current	FY 2022 Proposed	Charge Change
<b>METERS AND RELATED SERVICES (Continued)</b>			
<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	66	76	Yes
Minimum Permit Inspection fee	220	242	Yes
<b>17 Water Turn-Off, Turn-On Fees*</b>			
Small Meter Turn-Off	80	80	-
Small Meter Turn-On	100	100	-
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>	301	346	Yes
<b>20 Missed Appointment Fees</b>			
First Missed Appointment or Restoration of Service 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>	13,803	15,873	Yes
Quarterly Calibrations (per quarter)	3,451	3,969	Yes
<b>23 Property Inspection Fee</b>	119	119	-
<b>24 Warehouse Restocking Fee</b>	47	56	Yes

\* Currently under review.

MISCELLANEOUS FEES AND CHARGES - PROPOSED FOR IMPLEMENTATION JULY 1, 2021

Fee/Charge Number and Name	Current	FY 2022 Proposed	Charge Change
<b>FIRE HYDRANT SERVICES</b>			
<b>25 Temporary Fire Hydrant Connection Fees</b>			
<u>3/4" Meter - Deposit</u>			
2 Weeks or Less with/Approved Payment Record	No fee	Delete	Yes
3/4" Meter Deposit	\$ 379	\$ 379	-
<u>3" Meter - Deposit</u>			
2 Weeks or Less with/Approved Payment Record	No fee	Delete	Yes
3" Meter Deposit	2,420	2,420	-
<u>Service Charge</u>			
2 Weeks or Less (3/4" meter)	68	75	Yes
2 Weeks or Less (3" meter)	130	130	-
Over 2 Weeks (3/4" and 3" meters)	175	175	-
Water Consumption - 3/4" meter (Minimum charge or Tier 4 rate per 1,000 gallons flat rate)	36	37	Yes
Water Consumption - 3" meter (Minimum charge or Tier 4 rate per 1,000 gallons flat rate)	229	242	Yes
Late Fee for Return of Meter (per day)	10	10	-
Fee on Unpaid Temporary Fire Hydrant Billings	1.5% per month	1.5% per month	-
Loss/Destruction of Meter	Replacement cost	Replacement cost	-
Loss/Destruction of Wrench	40	40	-
<b>26 Truck Inspection Fee with Attached Fire Hydrant Meter (for 2 years)</b>	52	52	-
<b>27 Fire Hydrant Inspection Fee (per hydrant)</b>	158	Delete	Yes
Controlled Access Surcharge Fee	30	Delete	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, 2021

Fee/Charge Number and Name	Current	FY 2022 Proposed	Charge Change
<b>DEVELOPMENT SERVICES</b>			
<b>29 Feasibility Review Fees (WSSC Water Built)</b>			
Feasibility Submission Fee (non-refundable)	\$ 1,956	\$ 1,956	-
Feasibility Review & Report Fee Deposit (can be deferred as deficit when extension is completed)	13,048	14,353	Yes
<b>30 Construction Services Fee</b>			
	9.3% of WSSC Water's unit cost estimate or 12% of contractor's cost estimate	9.3% of WSSC Water's unit cost estimate or 12% 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)	1,322	1,454	Yes
Major/Splitting Additional Reviews of Unsigned or Signed Plans (per review)	2,698	2,968	Yes
<u>Per Site Utility/Minor Utility Additional Unsigned or Signed Plan Review</u>			
Site Utility (per review)	1,604	1,764	Yes
Minor Site Utility (per review)	417	459	Yes
Additional Review of Required Data (per application)	904	994	Yes
<b>33 Hydraulic Planning Analysis and System Planning Forecast</b>			
Modeling and Re-Modeling Fee - Up to 3 parts	2,116	2,433	Yes
Modeling and Re-Modeling Fee - per part over 3	765	842	Yes
Pressure Sewer System Review Fee (per system)	404	444	Yes
<b>34 In-House Design Deposit</b>			
	Deposit	Deposit	-
<b>35 Partial Release Fee</b>			
	1,468	1,541	Yes
<b>36 Off-Property Service Connection Reimbursement</b>			
	Reimbursement	Reimbursement	-
<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</b>			
Major Development - Over 10 Units	1,693	1,693	-
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>			
	394	404	Yes
<b>40 Site Utility (On-site) Review Fees</b>			
Base Fee	3,631	3,921	Yes
Additional Fee per 100 feet	352	380	Yes
Minor (Waived) Site Utility (On-Site) Fee	1,217	1,314	Yes
<b>41 Name/Transfer of Ownership Change Fee</b>			
	275	303	Yes
<b>42 Variance Review Fee</b>			
	1,362	1,498	Yes

MISCELLANEOUS FEES AND CHARGES - PROPOSED FOR IMPLEMENTATION JULY 1, 2021

Fee/Charge Number and Name	Current	FY 2022 Proposed	Charge Change
<b>PIPELINE, ENGINEERING AND ENVIRONMENTAL SERVICES</b>			
<b>43 Shutdown/Charge Water Main Fee</b>	\$ 1,177	\$ 1,177	-
Shutdown Complex Water Main Fee	2,144	2,144	-
<b>44 Review and Inspection Fees for Site Work Potentially Impacting WSSC</b>			
<b>Water Pipelines</b>			
Simple Review	399	399	-
Complex Review / Non-DR Developer Review	3,138	3,766	Yes
Inspection for Minor Adjustment / Non-DR Developer (per inspection)	266	266	-
<b>45 Relocation Fee</b>			
Inspection 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)	173	182	Yes
<b>48 Re-Test or Additional Tests Chlorination and Pressure Test (per test)</b>	173	182	Yes
Inspector Overtime (per hour)	206	206	-
<b>49 Review Fee for Additional Reviews of Contract Documents As-Builts (per hour)</b>	206	206	-
<b>50 Residential Outside Meter Housing Upgrade/Pipe Alteration</b>	6,805	6,805	-
<b>51 Utility Erosion and Sediment Control Permit Fees (per linear foot)</b>			
Minor Projects (<125 linear foot OR less than 42 inch deep and 20 inch width)	0.26	0.30	Yes
Major Projects	0.39	0.45	Yes
Minimum Charge for Major Projects	124	124	-
<b>52 Right-of Way Release (or Subordination) Review Fee (per document)</b>	1,335	1,442	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	381	438	Yes
<b>55 Feasibility Report and Committee Review Fee for On-Site Takeover Projects</b>	1,288	1,481	Yes

MISCELLANEOUS FEES AND CHARGES - PROPOSED FOR IMPLEMENTATION JULY 1, 2021

Fee/Charge Number and Name	Current	FY 2022 Proposed	Charge Change
<b>PUBLICATIONS AND ADMINISTRATIVE</b>			
<b>56 Plans, Plats and 200' Reference Maps Copies</b>			
Xerographic bond paper copy (per sheet)	\$ 6	\$ 6	-
<b>57 WSSC Water Plumbing and Fuel Gas Code (Plumbing Code)</b>			
Sale of Plumbing Regulation (per book)	46	51	Yes
<b>58 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	66	73	Yes
Construction General Conditions & Standard Specifications	61	70	Yes
SEP Construction General Conditions & Standard Specifications	61	70	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 Photocopies of WSSC Water Documents Charges</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 WSSC Water Pipeline Design Manual Fee</b>	90	90	-
<b>61 WSSD Laws</b>			
Bound Volume	83	83	-
Supplements	45	45	-
<b>62 Transcribed Tape of a Hearing or Meeting Fee</b>	Prevailing fee charged by vendor	Prevailing fee charged by vendor	-

MISCELLANEOUS FEES AND CHARGES - PROPOSED FOR IMPLEMENTATION JULY 1, 2021

Fee/Charge Number and Name	Current	FY 2022 Proposed	Charge Change
<b>OTHER FEES AND CHARGES</b>			
<b>63 Patuxent Watershed Civil Citation Fees (State Mandated)</b>			
First Offense	\$ 150	\$ 150	-
Each Additional Offense within Calendar Year	300	300	-
<b>64 Civil Citation Fees - Sediment Control, Theft of Service and Plumbing</b>			
<b>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>65 Lobbyist Registration Fee (Code of Ethics)</b>	110	121	Yes
<b>66 Dishonored Check Fee &amp; Electronic Payment Fee</b> (applies to all dishonored checks and dishonored electronic payments)	46	35	Yes
<b>67 Credit Card Surcharge (Applies to customer payment of any fee/charge by credit card other than water and sewer billing)</b>	2% of amount charged	2% of amount charged	-
<b>68 Protest Filing Fee</b>	847	857	Yes
<b>69 Preparation of Hold Harmless Agreement Fee</b>	1,351	1,486	Yes
<b>70 Connection Redemption Fee</b>	44	22	Yes

**SECTION 3**  
**CUSTOMER AFFORDABILITY**

## CUSTOMER AFFORDABILITY

This section discusses customer affordability, including financial assistance programs offered by WSSC Water as part of its Fiscal Year (FY) 2022 Proposed Budget, how the agency’s water and sewer bills at various household sizes and income levels compare to a federally established measure of customer affordability and how the agency’s water and sewer bills compare to those of other utilities.

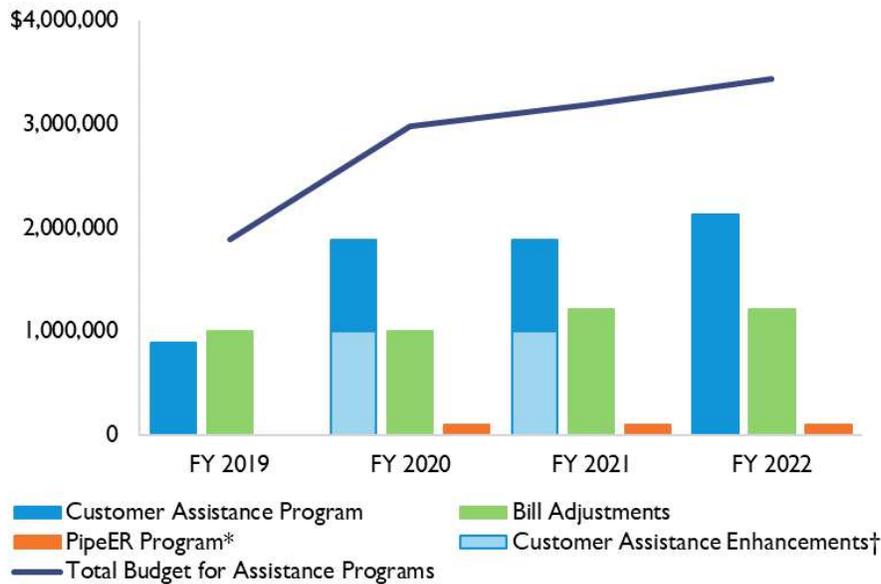
### WSSC WATER FINANCIAL ASSISTANCE PROGRAMS

WSSC Water is committed to making water and sewer bills affordable for its customers, which is why the agency offers a multitude of financial assistance programs that are designed to address common affordability issues faced by its customers. The financial assistance programs offered by the agency include the following:

- Customer Assistance Program (CAP)
- Water Fund
- PipeER Program (also known as the Connection Pipe Emergency Replacement Loan Program)
- Bay Restoration Fund Exemption Program
- Bill adjustments
- Flexible payment options

These programs aim to tackle customer affordability from several different angles, depending on the specific needs of the customer. The CAP, PipeER Program, and bill adjustments are funded as part of WSSC Water’s annual budget process. The chart below shows the funding levels for these programs, individually and overall, from FY 2019 through FY 2022. As shown in the chart, WSSC Water has increased the funding for its financial assistance programs by approximately 82% over the last several years, from about \$1.9 million in FY 2019 to over \$3.4 million in FY 2022.

**WSSC Water Financial Assistance Programs Budget**



\*The PipeER Program was established in FY 2020.

†Funding was included in the FY 2020 and 2021 budgets for customer assistance enhancements. This funding has been folded into CAP for FY 2022.

The following sections describe each program in detail. Additional information, including guidance on how to enroll in each of the programs, can be found on our website at <https://www.wsscwater.com/assistance>.

## WSSC WATER FINANCIAL ASSISTANCE PROGRAMS (Continued)

### Customer Assistance Program

CAP provides financial assistance to approved residential customers via credits for WSSC Water’s fixed fees (the Account Maintenance Fee and the Infrastructure Investment Fee). The credits are capped at \$28 per quarterly bill or \$112 per year, which is equivalent to the fees for a 3/4” meter. Eligibility for CAP is determined based on enrollment in the Maryland Office of Home Energy Programs’ (OHEP) energy assistance program. If a customer is enrolled in this state program, then they also qualify for WSSC Water’s CAP. Customers are required to annually re-enroll with OHEP to continue their CAP enrollment. The current income eligibility criteria established by OHEP for its energy assistance program are outlined in the table below.

Income Eligibility Limits Effective July 1, 2020 to June 30, 2021 (Based on 175% of the Federal Poverty Level)		
Household Size	Maximum Gross Monthly Income Standards	Maximum Gross Annual Income Standards
1	\$ 1,861	\$ 22,330
2	2,515	30,170
3	3,168	38,010
4	3,821	45,850
5	4,475	53,690
6	5,128	61,530
7	5,781	69,370
8	6,435	77,210
For Each Additional Person, Add	654	7,840

WSSC Water was given the authority to establish CAP via legislation passed by the Maryland General Assembly and signed by the Governor in 2015. Per the enabling legislation, CAP is 100% funded via WSSC Water revenues. For FY 2022, CAP funding increased to \$2.1 million from \$0.9 million in FY 2021. To date, WSSC Water’s CAP has assisted nearly 14,000 customers.

### Water Fund

The Water Fund was established in 1994 by WSSC Water employees to help residential customers in financial need pay their water and sewer bills. Eligible customers may receive up to \$500 in financial assistance per year toward their water and sewer bills. The Salvation Army administers the Water Fund and is responsible for determining whether applicants qualify for assistance. The eligibility criteria are primarily based on household income and size, as shown in the table below.

Income Eligibility Limits Effective July 1, 2020 to June 30, 2021 (Based on 200% of the Federal Poverty Level)		
Household Size	Maximum Gross Monthly Income Standards	Maximum Gross Annual Income Standards
1	\$ 2,127	\$ 25,520
2	2,874	34,480
3	3,620	43,440
4	4,367	52,400
5	5,114	61,360
6	5,860	70,320
7	6,607	79,280
8	7,354	88,240
For Each Additional Person, Add	747	8,960

## WSSC WATER FINANCIAL ASSISTANCE PROGRAMS (Continued)

### Water Fund (Continued)

The Water Fund is funded entirely by contributions from customers, employees and other sources. Customers can donate to the Water Fund via direct online donations, through lump sum donations added when paying their bill or through participation in the bill round up program. WSSC Water employees contribute to the Water Fund through the agency's annual giving campaign and special events that support the Water Fund, like the annual Manhole Open golf tournament. WSSC Water pays the administrative and promotional fees while The Salvation Army assists participants and manages the fund, which ensures that 100% of all donations go directly to those in need. Since its inception, nearly \$1.6 million has been distributed to more than 17,300 customers. In FY 2020, the Water Fund provided help to 2,847 customers by disbursing almost \$350,000 in aid.

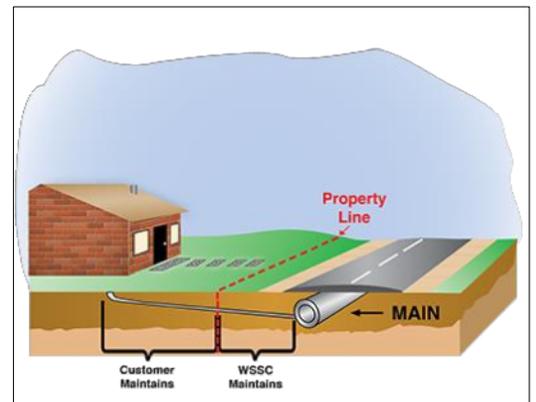
### PipeER Program



The PipeER Program, also known as the Connection Pipe Emergency Replacement Loan Program, provides loans to eligible residential customers to finance the replacement of their water service line, which is located on their property and connects WSSC Water's main line to the home. The program provides \$100,000 annually to customers in need. The funds are available on a first come, first served basis each FY until the fund is depleted. All loans must be used to replace a water service line, not for service line repairs. Once approved, customers are eligible to receive a loan up to \$5,000. The loan proceeds are disbursed directly to a WSSC Water licensed plumber and any additional cost over the loan amount must be paid by the customer.

The PipeER Program is administered by the WSSC Federal Credit Union, which includes underwriting the loans. In order to qualify for the program, customers must meet the following criteria:

- The applicant must be a residential customer of WSSC Water and be the owner of the property upon which the pipe replacement will occur
- The customer must have received a WSSC Water 30-day leak letter or notification
- The customer must have received at least two quotes for the work from WSSC Water licensed plumbers
- The applicant must meet the WSSC Federal Credit Union's minimum underwriting standards



The Maryland General Assembly passed, and the Governor signed, legislation that enabled WSSC Water to create the PipeER Program in 2018. In accordance with the legislation establishing the PipeER Program, WSSC Water includes the program funding of \$100,000 in its annual budget. The legislation also limits the total outstanding amount for all loans under the program to \$1.0 million. WSSC Water has committed to transferring any unused funds from the \$100,000 annual budget to the Water Fund each year to further aid customers facing financial hardships.

### Bay Restoration Fund Exemption Program

The Chesapeake Bay has experienced a decline in water quality due to over-enrichment of nutrients (mainly phosphorus and nitrogen). Effluent from water resource recovery facilities (WRRFs) is one of the top three major contributors of nutrients entering the bay. Therefore, the Maryland General Assembly established the Chesapeake Bay Watershed Restoration Fund (also known as the Bay Restoration Fund) via legislation that was signed by the Governor in 2004. The legislation also mandated an environmental surcharge, often referred to as the Bay Restoration Fund Fee, to provide a source of revenue for the fund. The fee is imposed upon WRRF users in order to finance enhanced nutrient removal upgrades at Maryland's WRRFs (there is also a similar fee for septic users). In 2012, a bill was passed to increase the fee to \$5.00 per month (or \$15.00 per quarter) for residential customers served by a WRRF that discharges to the Chesapeake Bay and Coastal Bay watersheds.

## WSSC WATER FINANCIAL ASSISTANCE PROGRAMS (Continued)

### Bay Restoration Fund Exemption Program (Continued)

As part of the legislation establishing the Bay Restoration Fund, WSSC Water was tasked with billing and collecting the fee from its customers. The agency then turns the funds over to the Maryland Department of the Environment (MDE), which administers the fund. As part of the 2012 legislation, WSSC Water was given the authority to establish a Bay Restoration Fund Exemption Program for residential customers that demonstrate substantial financial hardship, subject to the approval of MDE.



In order to qualify for the Bay Restoration Fund Exemption Program, residential customers must either be certified by OHEP or meet at least two of the following criteria:

- Have received assistance from the Water Fund within the last 12 months
- Have received public assistance or food stamps within the last 12 months
- Have received Veteran’s Disability or Social Security Disability benefits within the last 12 months
- Meet the income eligibility criteria based on the current year’s tax return

The current income eligibility criteria for the Bay Restoration Fund Exemption Program are outlined in the table below.

Income Eligibility Limits Effective July 1, 2020 to June 30, 2021 (Based on 175% of the Federal Poverty Level)		
Household Size	Maximum Gross Monthly Income Standards	Maximum Gross Annual Income Standards
1	\$ 1,861	\$ 22,330
2	2,515	30,170
3	3,168	38,010
4	3,821	45,850
5	4,475	53,690
6	5,128	61,530
7	5,781	69,370
8	6,435	77,210
For Each Additional Person, Add	654	7,840

## WSSC WATER FINANCIAL ASSISTANCE PROGRAMS (Continued)

### Bill Adjustments

Leaks due to issues with the plumbing system within a building or from the underground service line can result in higher water bills, which can cause a financial hardship for the property owner. While property owners are responsible for maintaining their plumbing systems and service lines, WSSC Water does make bill adjustments available under certain circumstances in order to relieve the financial hardship caused by an undetected leak. In accordance with WSSC Water's Code of Regulations, the following types of bill adjustments are available:

- High bill adjustment (single-unit residential properties)
- One-time high bill adjustment (single-unit commercial properties)
- Leaks on property – underground leaks (residential or commercial, single- or multi-unit)
- Underground leaks, off property (residential or commercial, single- or multi-unit)
- Delayed collection action (single-unit residential and single-unit commercial)
- Charitable institutions
- Credits for customers with physical or mental impairment (single-unit residential)
- Fire or vandalism (residential or commercial, single- or multi-unit)
- Public fountain use
- Discolored water or sod restoration (single-/multi-unit residential)
- Unpaid previous owner charges (residential or commercial, single- or multi-unit)
- Gasket leak on meter (residential or commercial, single- or multi-unit)
- Illegal consumption (single-unit residential)
- Lining project (residential or commercial, single- or multi-unit)

Detailed information on the qualification criteria for each type of bill adjustment can be found in WSSC Water's Code of Regulations, which is published online at <https://wssc.district.codes/code>.

### Flexible Payment Options

WSSC Water offers flexible payment options, such as extended due dates and payment plans, to assist customers with unexpected financial hardships that cause them to have trouble paying their water and sewer bills. Customers that have been approved for CAP may also be eligible for a payment plan lasting up to 48 months. Additionally, there is a payment plan option for customers that are not enrolled in CAP. Effective January 4, 2021, this option offers a payment plan that may last up to 36 months. To learn more about the flexible payment options, customers can contact one of WSSC Water's customer service advisors by calling 301-206-4001.



# WSSC WATER BILL AFFORDABILITY

## Federal Affordability Standard

The U.S. Environmental Protection Agency (EPA) has established affordability criteria for residential water and wastewater services. The EPA criteria establishes an overall affordability standard of 4.5% of median household income. This overall standard is comprised of individual thresholds of 2.5% for potable water and 2.0% for wastewater and combined sewer overflow controls that were set by the EPA. Therefore, given the EPA’s role as the federal agency responsible for regulating drinking water systems, WSSC Water has adopted the EPA standard of 4.5% of median household income as the measure it uses to determine the affordability of its services for its customers.

## Median Household Income

Based on 5-year data from the U.S. Census Bureau’s American Community Survey, the median household income for Montgomery and Prince George’s Counties was \$97,914 in calendar year 2019, which is the latest year for which data is available. Based on the FY 2022 proposed rates, WSSC Water’s average annual residential bill for water and sewer services at 165 gallons per day is approximately \$964. The consumption level of 165 gallons per day is used 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. Therefore, it is estimated that the annual cost of water and sewer services from WSSC Water for the average customer will be 1.0% of the median household income in FY 2022, absent any changes in household income between 2019 and 2022. This level is well below the 4.5% standard set by the EPA.

Median Household Income	Average WSSC Water Bill	Share of Median Income
\$ 97,914	\$ 964	1.0%

Median household income figures (in 2019 dollars) from the U.S. Census Bureau ([www.census.gov](http://www.census.gov)), American Community Survey 5-Year Estimates for 2015-2019.

Looking more in-depth, the table below shows the share of median household income for the average WSSC Water bill by household size over the FY 2016 to FY 2019 time period. The average WSSC Water bill for each size household is based on consumption of 55 gallons of water per person per day. Over the four-year period analyzed, the share of WSSC Water’s bill to median household income remained steady for all seven household sizes. This means that while WSSC Water’s rates have been going up, they have been increasing in proportion with the changes to median household incomes in Montgomery and Prince George’s Counties.

Household Size	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual
1-person Household	0.5%	0.5%	0.5%	0.5%
2-person Household	0.5%	0.5%	0.5%	0.5%
3-person Household	0.7%	0.7%	0.7%	0.7%
4-person Household	0.9%	0.9%	0.9%	0.9%
5-person Household	1.3%	1.3%	1.3%	1.3%
6-person Household	1.7%	1.7%	1.6%	1.7%
7-or-more Person Household <sup>†</sup>	2.0%	2.0%	2.0%	2.0%

Median household income figures from the U.S. Census Bureau ([www.census.gov](http://www.census.gov)), American Community Survey 5-Year Estimates for 2012-2016, 2013-2017, 2014-2018 and 2015-2019.

<sup>†</sup>The average WSSC Water bill for the 7-or-more person household size was calculated based on a 7-person household.

## WSSC WATER BILL AFFORDABILITY (Continued)

### Household Income Quintiles

The table below compares the average household income by income quintile to the average WSSC Water bill for a three-person household. Each income quintile contains 20% of the population of Montgomery and Prince George's County based on where their household income falls on the spectrum for all households. As shown in the table, the average household income for the first quintile is \$23,806 per year. At this level of income, a three-person household would spend about 4.1% of their annual income on water and sewer services, which is below the 4.5% EPA affordability threshold. Therefore, WSSC Water's average bill for water and sewer services is affordable for the average customer at the lower end of the household income distribution in Montgomery and Prince George's Counties.

Quintile	Average Household Income	Average WSSC Water Bill*	Share of Average Income
First	\$ 23,806	\$ 964	4.1%
Second	61,318	964	1.6%
Third	98,399	964	1.0%
Fourth	149,591	964	0.6%
Fifth	307,194	964	0.3%

Average household income figures (in 2019 dollars) from the U.S. Census Bureau ([www.census.gov](http://www.census.gov)), American Community Survey 5-Year Estimates for 2015-2019.

\*The average WSSC Water bill is based on a 3-person household using 55 gallons of water per person per day.

### Household Income Brackets

The table below shows a more detailed breakdown of household incomes in Montgomery and Prince George's Counties and how the average WSSC Water bill for a three-person household compares to each income level. Looking at this more detailed breakdown, the average WSSC Water bill begins to exceed the EPA affordability threshold towards the lower bound of the fourth income bracket (\$20,000-\$24,999 per year). The income at which the 4.5% threshold is crossed for a three-person household is about \$21,426 per year. The first through third income brackets contain approximately 7.6% of households and the fourth contains about 2.3%, so the average bill for a three-person household would exceed the EPA threshold for fewer than 9.9% of households in Montgomery and Prince George's Counties without any financial assistance from the agency.

Income Bracket Lower Bound	Income Bracket Upper Bound	Number of Households	Share of Households	Average WSSC Water Bill*	Share of Lower Bound	Share of Upper Bound
\$ -	\$ 9,999	24,601	3.6%	\$ 964	N/A	9.6%
10,000	14,999	13,415	2.0%	964	9.6%	6.4%
15,000	19,999	13,945	2.0%	964	6.4%	4.8%
20,000	24,999	15,365	2.3%	964	4.8%	3.9%
25,000	29,999	17,367	2.5%	964	3.9%	3.2%
30,000	34,999	20,075	2.9%	964	3.2%	2.8%
35,000	39,999	18,736	2.7%	964	2.8%	2.4%
40,000	44,999	19,382	2.8%	964	2.4%	2.1%
45,000	49,999	18,558	2.7%	964	2.1%	1.9%
50,000	59,999	42,137	6.2%	964	1.9%	1.6%
60,000	74,999	58,748	8.6%	964	1.6%	1.3%
75,000	99,999	91,221	13.4%	964	1.3%	1.0%
100,000	124,999	75,834	11.1%	964	1.0%	0.8%
125,000	149,999	56,645	8.3%	964	0.8%	0.6%
150,000	199,999	80,870	11.9%	964	0.6%	0.5%
200,000	N/A	115,394	16.9%	964	0.5%	N/A
<b>Total</b>		<b>682,293</b>	<b>100.0%</b>			

Income bracket information from the U.S. Census Bureau ([www.census.gov](http://www.census.gov)), American Community Survey 5-Year Estimates for 2015-2019.

\*The average WSSC Water bill is based on a 3-person household using 55 gallons of water per person per day.

## WSSC WATER BILL AFFORDABILITY (Continued)

### Household Income Brackets (Continued)

WSSC Water’s income-based financial assistance programs, CAP and the Water Fund, would provide help to most of the customers in the four lowest income brackets, even if they are in single-person households. CAP provides assistance for single-person households with annual incomes of up to \$22,330 and the Water Fund provides assistance to single-person households with up to \$25,520 in annual income. For a three-person household, those income limits increase to \$38,010 and \$43,440, respectively. Therefore, WSSC Water’s financial assistance programs can help keep the costs of water and sewer services affordable for many of those who are most likely to struggle to pay their bills.

The table below shows how WSSC Water’s CAP can increase bill affordability for our lowest income customers. As previously mentioned, CAP provides up to \$112 per year in financial assistance to approved residential customers via credits for WSSC Water’s fixed fees (the Account Maintenance Fee and the Infrastructure Investment Fee). This would lower the average WSSC Water bill, which is based on a three-person household with a 3/4” meter, from approximately \$964 per year to \$852 per year. The income at which the 4.5% threshold is crossed for a three-person household would similarly decrease from about \$21,426 per year to \$18,937 per year. Consequently, the percentage of households for which the average three-person bill would exceed the EPA threshold would drop to less than 7.6%, from the previous figure of less than 9.9%. The Water Fund, which provides up to \$500 in financial assistance per year for eligible residential customers, can further help those customers facing affordability concerns even after the CAP assistance is taken into account.

Income Bracket Lower Bound	Income Bracket Upper Bound	Number of Households	Share of Households	Average WSSC Water Bill (w/ CAP)*†	Share of Lower Bound	Share of Upper Bound
\$ -	\$ 9,999	24,601	3.6%	\$ 852	N/A	8.5%
10,000	14,999	13,415	2.0%	852	8.5%	5.7%
15,000	19,999	13,945	2.0%	852	5.7%	4.3%
20,000	24,999	15,365	2.3%	852	4.3%	3.4%
25,000	29,999	17,367	2.5%	852	3.4%	2.8%
30,000	34,999	20,075	2.9%	852	2.8%	2.4%
35,000	39,999	18,736	2.7%	852	2.4%	N/A

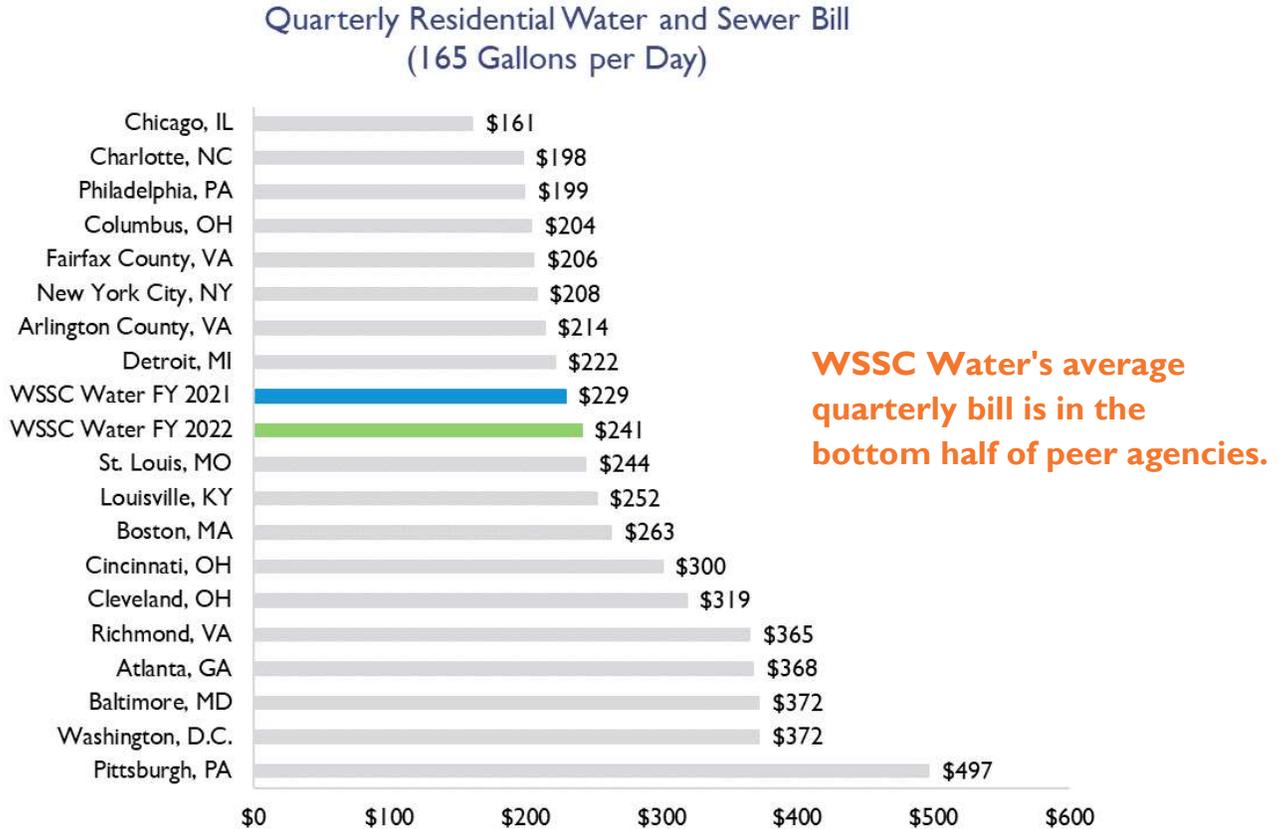
Income bracket information from the U.S. Census Bureau ([www.census.gov](http://www.census.gov)), American Community Survey 5-Year Estimates for 2015-2019.

\*The average WSSC Water bill is based on a 3-person household using 55 gallons of water per person per day.

## WATER AND SEWER BILL COMPARISONS

### 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 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 and fees used in this comparison were in effect as of December 2020. The chart includes WSSC Water bills at FY 2021 approved and FY 2022 proposed rates. As shown in the chart, the quarterly bills in the other communities range from a low of \$161 in Chicago, Illinois to a high of \$497 in Pittsburgh, Pennsylvania. WSSC Water ranks in the bottom half of the peer agencies, with quarterly bills of \$229 in FY 2021 and \$241 in FY 2022. This shows that WSSC Water’s rates and fees are competitive both locally and nationally.

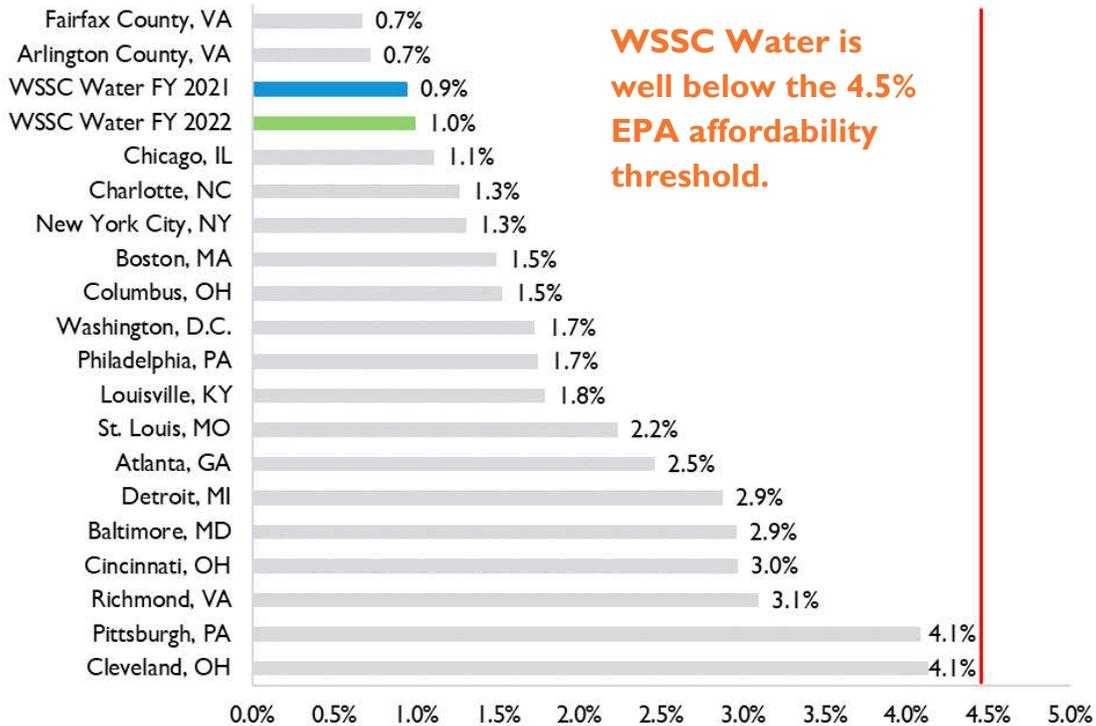


## WATER AND SEWER BILL COMPARISONS (Continued)

### 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 2022 is only 1.0% of the median household income of its customers, a slight increase from the 0.9% in FY 2021. This places WSSC Water among the most affordable of its peer agencies, with only two agencies (Fairfax County and Arlington County in Virginia) having lower percentages. Additionally, WSSC Water is well below the 4.5% threshold that the EPA considers to be affordable for customers.

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



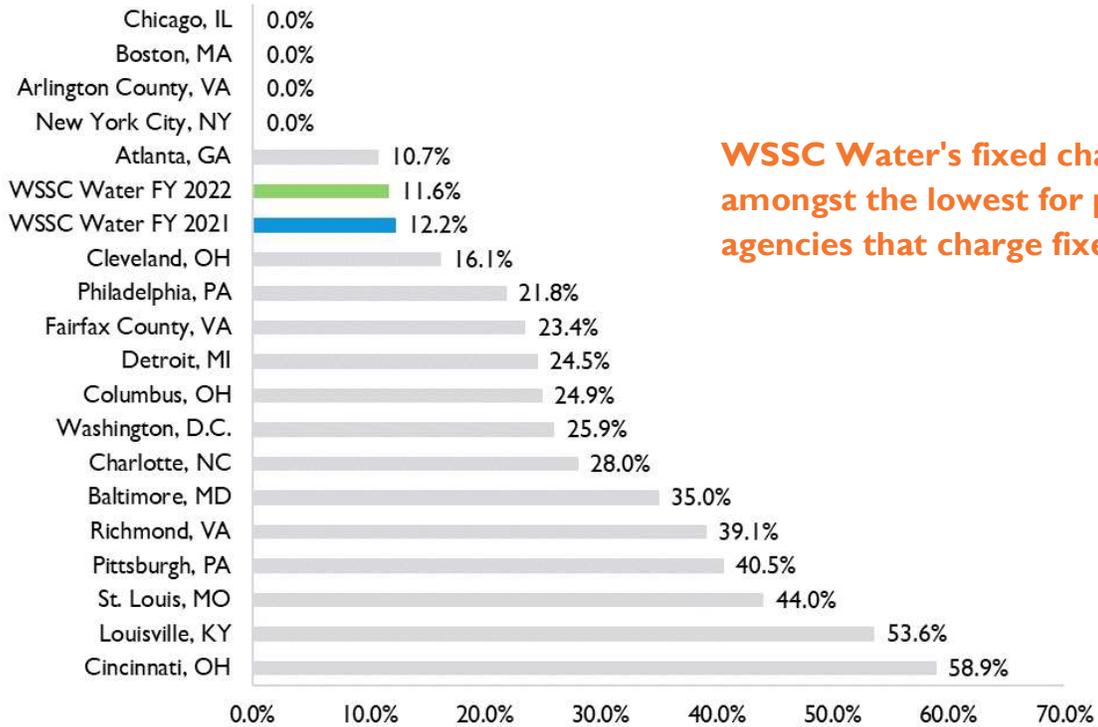
Median household income figures (in 2019 dollars) from the U.S. Census Bureau ([www.census.gov](http://www.census.gov)), American Community Survey 5-Year Estimates for 2015-2019.

## WATER AND SEWER BILL COMPARISONS (Continued)

### Percentage of Bill from Fixed Charges Comparison

The chart below compares fixed charges as a portion of the average residential bill 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’s fixed charges are the second lowest as a percentage of the average bill. In FY 2021, 12.2% of the average residential bill from WSSC Water was attributable to fixed fees. In FY 2022, that percentage will drop to 11.6%, as the water and sewer rates increase but the fixed fees remain the same. WSSC Water’s CAP focuses on limiting the impact of these fixed fees on those who are most likely to struggle to pay their bills.

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



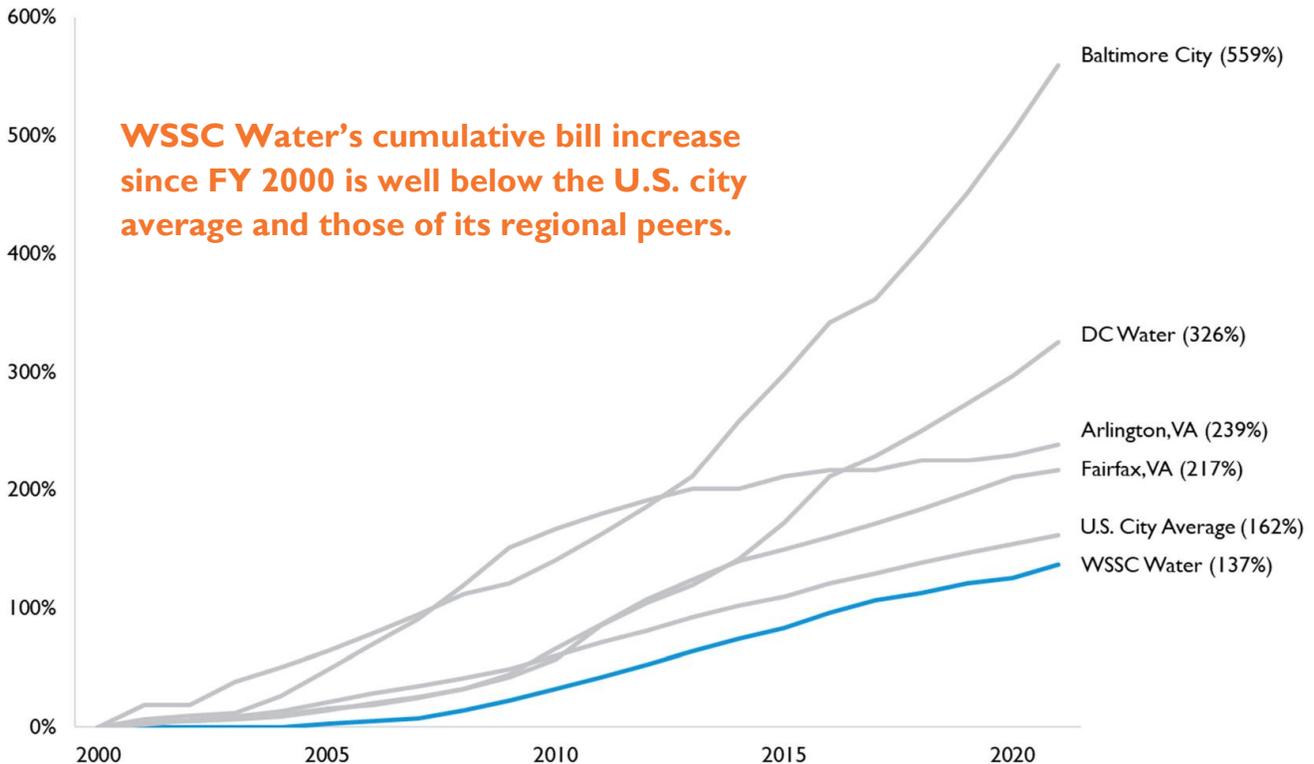
**WSSC Water's fixed charges are amongst the lowest for peer agencies that charge fixed fees.**

## WATER AND SEWER BILL COMPARISONS (Continued)

### Bill Increases Over Time Comparison

The chart below shows a comparison of the cumulative bill increases for comparable water and sewer providers in the greater Washington-Baltimore-Arlington combined statistical area and the U.S. city average for FYs 2000-2021. As with the previous comparisons, the consumption level used is 165 gallons per day to represent the average 3-person household using 55 gallons of water per person per day. The chart shows that the cumulative increase in the average WSSC Water bill was about 137% over the last 21 years, which is lower than the increases for all of the peer agencies and the U.S. city average over the same time period. The increases for the comparable regional providers range from a low of 217% for Fairfax, Virginia to a high of 559% for Baltimore City, Maryland. The U.S. city average increased by 162% over the 21-year analysis period.

FYs 2000-2021 Bill Increase Comparison  
(165 Gallons per Day)



Assumes a 5/8" residential meter for purposes of determining the appropriate fees.

The U.S. city average is based on the water and sewerage maintenance component of the Consumer Price Index for Urban Wage Earners and Clerical Workers, not seasonally adjusted, from the U.S. Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)). Values for July of each fiscal year (i.e., July 2020 = FY 2021 value).

## WATER AND SEWER BILL COMPARISONS (Continued)

### Electric and Cell Phone Service Bill Comparison

Another useful comparison is looking at the cost of other utility or utility-like services. Two such services for which there is readily available data from government sources are electric services and cell phone service. The most recent year for which data are available for all three services (electricity, cell phone and WSSC Water services) is 2019. The data show that in 2019 the average cost of electricity from the two primary providers in Montgomery and Prince George's Counties, Baltimore Gas and Electric Company (BGE) and Potomac Electric Power Company (PEPCO), was approximately \$116 per month. For cell phone service, the 2019 data for the South Census Region, which includes the State of Maryland, has a monthly cost of about \$103. The average monthly cost of water and sewer services from WSSC Water, based on a three-person household using FY 2019 rates and fees, was only about \$71 in comparison. This means that the monthly cost of water and sewer was only around 61% of the cost of electricity and 69% of the cost of cell phone service in 2019.

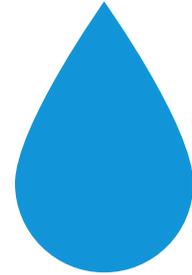
### In 2019, the average household spent per month...



**\$116**  
on electricity from  
**BGE and PEPCO**



**\$103**  
on cell phone  
service



**\$71**  
on water and sewer  
services from **WSSC**  
**Water**

Electric sales, revenue and average price data from the U.S. Energy Information Administration ([www.eia.gov](http://www.eia.gov)), 2019 Electricity Reports.

Cellular phone service expenditures from the U.S. Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)), Consumer Expenditure Survey, September 2020.

The average WSSC Water bill is based on a three-person household with consumption of 55 gallons of water per person per day.

**SECTION 4**  
**SPENDING AFFORDABILITY AND LONG-RANGE**  
**FINANCIAL PLAN**

## SPENDING AFFORDABILITY AND LONG-RANGE FINANCIAL PLAN

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 roadmap and reflects financial strategic intent, as well as imposing discipline by highlighting the cumulative effects of decisions. Addressing issues earlier not only protects WSSC Water's long-term financial condition but also ensures that necessary actions and/or changes are properly communicated to our customers, County Councils and other stakeholders.

### MAJOR ASSUMPTIONS, WORKLOAD INDICES AND DEMAND PROJECTIONS

Below is a summary of the budget outcomes from the FY 2022 SAG process.

- Fund Balance – It was assumed for the purpose of preparing the FY 2022 Proposed Budget that, at the end of FY 2021, accumulated net revenues for the water and sewer operating funds would total \$162.3 million. For FY 2022, the total water and sewer operating revenues are \$828.5 million; therefore, at least \$124.3 million will be held in accumulated net revenues in adherence to WSSC Water's 15% reserve policy (see Fiscal Guidelines page 6-1).
- Revenues – The estimated FY 2022 revenues from water consumption and sewer use charges are \$318.9 million and \$398.9 million, respectively. Water production is assumed to be 163.0 million gallons per day (MGD) in FY 2022 and water consumption is projected to increase from 122.1 MGD in FY 2021 to 126.4 MGD in FY 2022.
- Capital Budget – The capital budget includes expenditure estimates for all projects for which work is reasonably expected to be accomplished. This provides management with maximum flexibility to proceed on the many and diverse projects approved each year in the budget. The FY 2022 Capital Budget is \$703.8 million.
- Debt Service – The debt service estimates for FY 2022 assume that \$208.5 million in Water Supply bonds and \$201.2 million in Sewage Disposal bonds will be issued in FY 2022, in addition to repayment of existing debt. The water and sewer issues will be 30-year bonds with an estimated 4.0% average interest rate.
- Reconstruction Debt Service Offset (REDO) – For FY 2022, \$6.0 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 – Four additional authorized workyears are included. Funding for compensation enhancements is limited due to the very challenging fiscal environment.

## MAJOR ASSUMPTIONS, WORKLOAD INDICES AND DEMAND PROJECTIONS (Continued)

The following table presents data used during the SAG process to develop the FY 2022 Proposed Budget.

Workload Data	Actual					Projected	
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Water and Sewer Combined Rate Increase (%)	1.0	3.0	3.5	4.5	5.0	6.0	5.9
Population to be Served (000s)	1,774	1,785	1,777	1,801	1,810	1,819	1,828
Customer Accounts (000s): *	N/A	460	460	461	464	475	475
Residential (%)	N/A	95.6	95.7	95.5	95.4	95.4	95.4
Commercial and Industrial (%)	N/A	3.7	3.7	3.7	3.8	3.8	3.8
Government and Other (%)	N/A	0.7	0.6	0.8	0.8	0.8	0.8
<b>Water Program:</b>							
Water Production (Average MGD)	164.2	163.1	163.9	161.7	162.6	164.0	163.0
Water Consumption (Average MGD)	123.3	130.5	126.6	123.2	128.6	122.1	126.4
Water Mains Maintained (Miles)	5,586	5,647	5,768	5,816	5,844	5,939	6,000
Water House Connections Maintained (000s)	457	461	465	469	471	474	476
<b>Sewer Program:</b>							
Sewage Treated (Average MGD)	184.8	179.0	172.8	218.7	188.3	197.2	192.1
Sewer Use (Average MGD)	113.3	118.6	116.3	113.3	116.0	116.7	117.5
Sewer Mains Maintained (Miles)	5,451	5,549	5,578	5,604	5,624	5,687	5,728
Sewer House Connections Maintained (000s)	432	435	438	441	443	445	447
<b>House Connections added:</b>							
Water	4,389	3,498	2,931	3,480	2,410	2,600	2,800
Sewer	3,310	2,997	2,500	3,152	1,868	2,200	2,400
New Water & Sewer Bond & Notes Debt Issues (\$ in millions)	535	455	459	390	234	410	410
Average Annual Interest Rate for New Bond Issuance (%)	3.3	4.3	4.0	4.2	3.2	5.0	4.0

\* Beginning with the FY 2022 budget, the data source was changed to WSSC Water's new Customer-to-Meter (C2M) customer billing system and prior fiscal years have been restated.

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

(\$ in thousands)	FY 2021 Approved	FY 2022 Proposed	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected
New Water and Sewer Debt Issues	\$ 409,922	\$ 409,704	\$ 415,548	\$ 356,388	\$ 350,000	\$ 350,000	\$ 350,000
Water and Sewer Combined Rate Increase (Average)	6.0 %	5.9 %	8.0 %	8.0 %	7.0 %	6.5 %	6.0 %
<b>Operating Revenues</b>							
Consumption Charges	\$ 689,210	\$ 717,803	\$ 765,097	\$ 827,329	\$ 886,354	\$ 945,173	\$ 1,003,177
Account Maintenance Fees	32,360	31,866	31,930	31,994	32,058	32,122	32,186
Infrastructure Investment Fees	39,410	38,808	38,886	38,963	39,041	39,119	39,198
Plumbing and Inspection Fees	14,470	14,350	14,781	15,224	15,681	16,151	16,636
Rockville Sewer Use	3,000	3,100	3,100	3,100	3,100	3,100	3,100
Miscellaneous	20,801	21,600	21,816	22,034	22,255	22,477	22,702
Interest Income	10,000	1,000	1,000	1,500	2,000	2,500	3,000
<b>Total Operating Revenues</b>	<b>\$ 809,251</b>	<b>\$ 828,527</b>	<b>\$ 876,610</b>	<b>\$ 940,144</b>	<b>\$ 1,000,489</b>	<b>\$ 1,060,642</b>	<b>\$ 1,119,999</b>
<b>Other Credits and Transfers</b>							
Use of Fund Balance	8,000	-	-	-	-	-	-
Reconstruction Debt Service Offset	9,500	6,000	4,000	2,000	-	-	-
SDC Debt Service Offset	5,772	5,772	5,772	5,772	5,772	5,772	5,748
Premium Transfer	1,500	-	-	-	-	-	-
Underwriters Discount Transfer	2,000	2,000	2,000	2,000	2,000	2,000	2,000
<b>Total Funds Available</b>	<b>\$ 836,023</b>	<b>\$ 842,299</b>	<b>\$ 888,382</b>	<b>\$ 949,916</b>	<b>\$ 1,008,261</b>	<b>\$ 1,068,414</b>	<b>\$ 1,127,747</b>
<b>Operating Expenses</b>							
Salaries & Wages	127,726	133,039	138,813	145,059	151,587	158,408	165,537
Heat, Light & Power	20,423	18,493	19,233	20,002	19,191	18,413	19,278
Regional Sewage Disposal	58,000	59,160	60,343	61,550	62,781	64,037	65,317
All Other	284,993	294,977	301,084	307,105	313,247	319,512	325,903
<b>Total Operating Expenses</b>	<b>\$ 491,142</b>	<b>\$ 505,669</b>	<b>\$ 519,473</b>	<b>\$ 533,716</b>	<b>\$ 546,806</b>	<b>\$ 560,370</b>	<b>\$ 576,035</b>
<b>Debt Service</b>							
Bonds and Notes Principal and Interest	313,865	309,045	328,519	352,154	377,451	398,406	418,476
<b>Other Transfers and Adjustments</b>							
Additional and Reinstated	-	-	-	-	5,000	5,000	20,000
PAYGO	31,016	27,585	31,016	44,000	65,000	80,000	80,000
<b>Total Expenses</b>	<b>\$ 836,023</b>	<b>\$ 842,299</b>	<b>\$ 879,008</b>	<b>\$ 929,870</b>	<b>\$ 994,257</b>	<b>\$ 1,043,776</b>	<b>\$ 1,094,511</b>
<b>Net Revenue (Loss)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 9,374</b>	<b>\$ 20,046</b>	<b>\$ 14,004</b>	<b>\$ 24,638</b>	<b>\$ 33,236</b>
<b>Beginning Fund Balance - July 1</b>							
Net Increase (Decrease) in Fund Balance	\$ 147,605	\$ 162,291	\$ 162,291	\$ 171,665	\$ 191,711	\$ 205,715	\$ 230,353
Adjustments	-	-	9,374	20,046	14,004	24,638	33,236
<b>Ending Fund Balance - June 30</b>	<b>\$ 147,605</b>	<b>\$ 162,291</b>	<b>\$ 171,665</b>	<b>\$ 191,711</b>	<b>\$ 205,715</b>	<b>\$ 230,353</b>	<b>\$ 263,589</b>
Debt Service Coverage (1.10 - 1.25 is Target)	1.01	1.04	1.09	1.15	1.19	1.24	1.25
Debt Service as a % of Total Expenses (< 40% is Target)	37.5 %	36.7 %	37.4 %	37.9 %	38.0 %	38.2 %	38.2 %
End Fund Balance as a % of Operating Revenue (min. 15%)	20.1 %	19.6 %	19.6 %	20.4 %	20.6 %	21.7 %	23.5 %
Days Operating Reserve-on-Hand (75-105 Days is Target)	70.9	70.3	71.3	75.3	75.5	80.6	87.9
Total Workyears (All Funds)	1,776	1,786	1,786	1,786	1,786	1,786	1,786

**Assumptions:**

- The FYs 2023-2027 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 2022 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.
- Adjustments to Consumption Charges for Water and Sewer Combined Rate Increase assumes rate increase is 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.
- Adjustments shown for FY 2021 reflect prior period adjustment and the COVID-19 savings plan.

**SECTION 5**  
**EXPLANATION OF BUDGET AND SUMMARIES**

## EXPLANATION OF BUDGET AND SUMMARIES

Maryland state law requires that WSSC Water prepare capital and operating budgets each fiscal year. The FY 2022 Proposed Budget shows funding and staff requirements, organizational components and program and fund sources.

### BUDGET FORMULATION

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. 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 preliminary proposed budget document must be available to the public by January 15. Hearings on the WSSC Water budget are held in each County or virtually via livestream before February 15. The agency considers comments and testimony given at the public hearings before the proposed budget is transmitted to the Counties. The flow chart on page 5-3 depicts the budget and CIP process.

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 15 months, beginning in April of each year. After a preliminary staff-level review in May, the General Manager and key management personnel review all CIP project submissions in June to assess the justification for new projects, the criticality and priority of ongoing projects and the overall financial impacts of these projects on spending affordability.

Only the debt service requirements for bond funded capital expenditures in the first budget year of the six-year CIP are included in the operating budget. By July, 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. A draft proposed document is made available to the public in August and 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.

## BUDGET FORMULATION (Continued)

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

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.

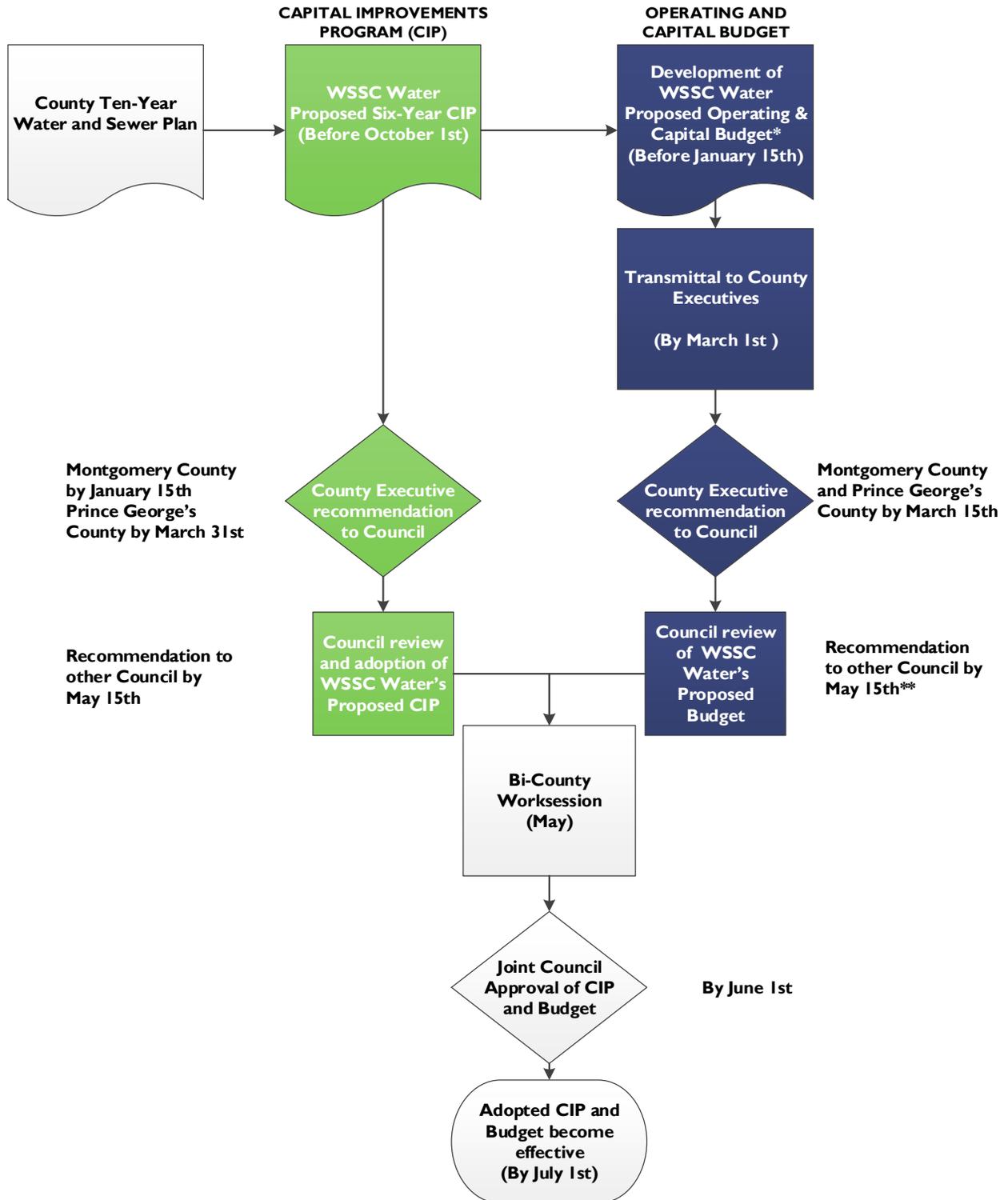
### Operating Budget

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 AND CAPITAL IMPROVEMENTS PROGRAM PROCESS



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

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

## FUND STRUCTURE

The 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 Charges (FFBC) 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 Charges (SDC)
Sewage Disposal Bond	Construct major sewage treatment and transmission facilities; Reconstruct sewerage collection system.	Sewage Disposal Bonds, SDC and Grants
General Construction Bond	Construct minor water and sewer lines and support facilities.	General Construction Bonds and House Connection (H/C) 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.	FFBC and Deferred H/C Charges

### Water

WSSC Water issues Water Supply Bonds (Capital Fund) and collects 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. Water consumption charges are based upon metered water use.

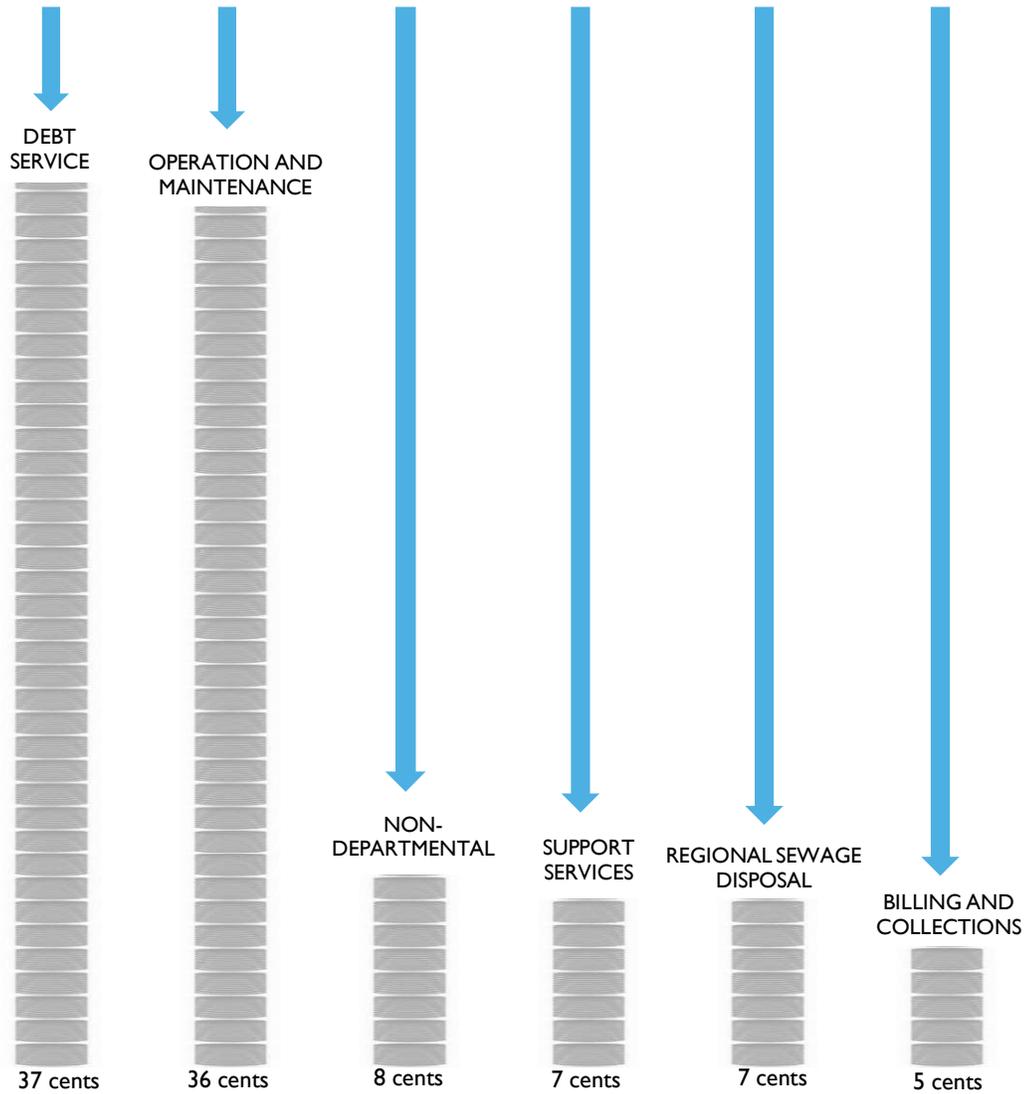
### Sewer

WSSC Water issues Sewage Disposal Bonds (Capital Fund), collects SDC, 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

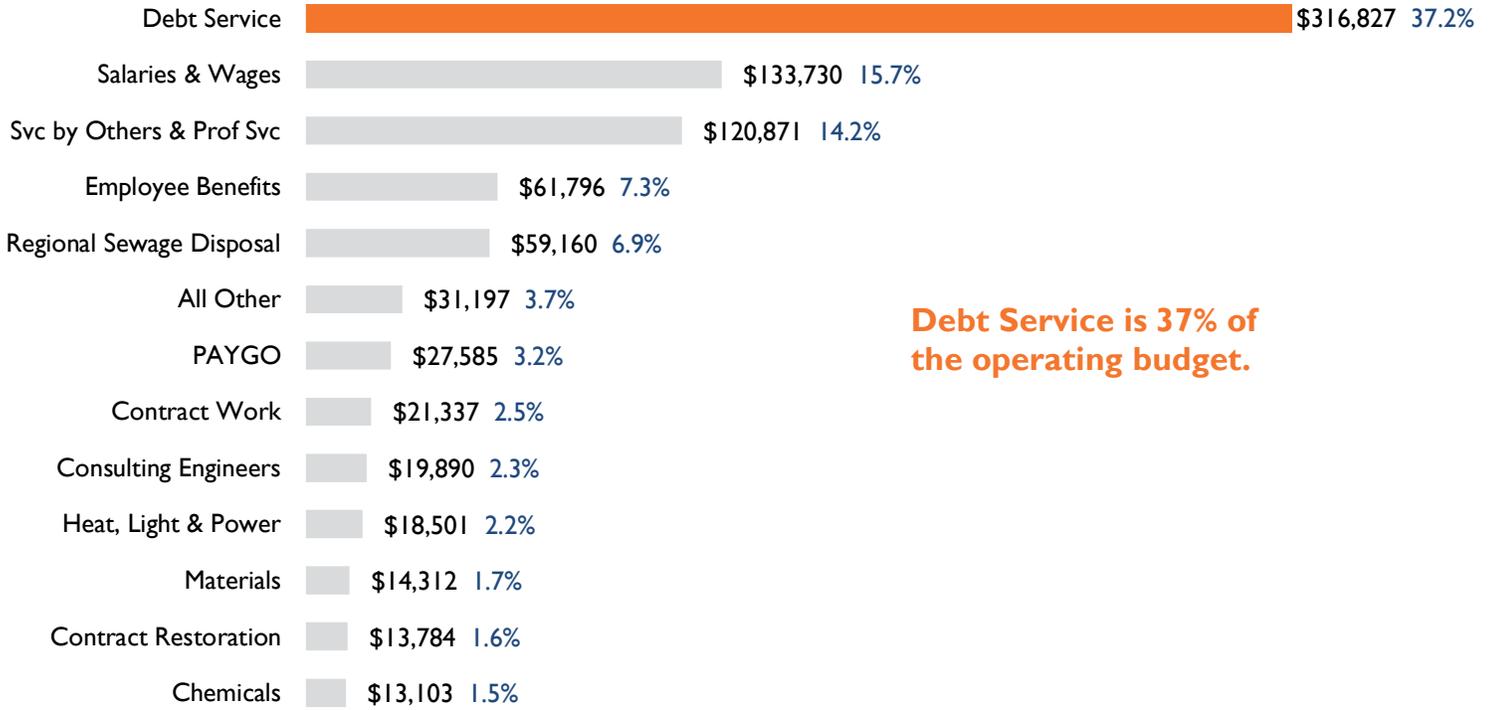
WSSC Water issues General Construction Bonds (Capital Fund) to pay for the construction of minor water and sewer lines (water distribution lines less than 15 inches in diameter and sewer lines less than 14 inches in diameter) and support facilities. General Bond Debt Service Fund revenues - customer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

# HOW EACH DOLLAR OF A WATER AND SEWER BILL IS SPENT



## FY 2022 PROPOSED BUDGET – BY MAJOR EXPENSE CATEGORIES

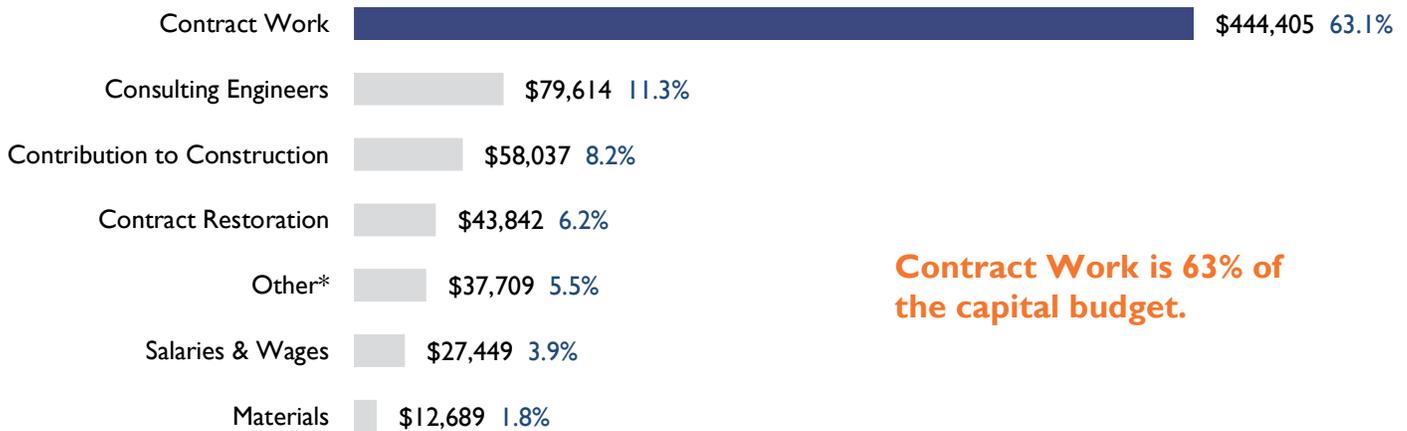
**Total Operating Budget = \$852,093** (\$ in thousands)



Debt Service is 37% of the operating budget.

Includes Water Operating, Sewer Operating and General Bond Debt Service

**Total Capital Budget = \$703,745** (\$ in thousands)

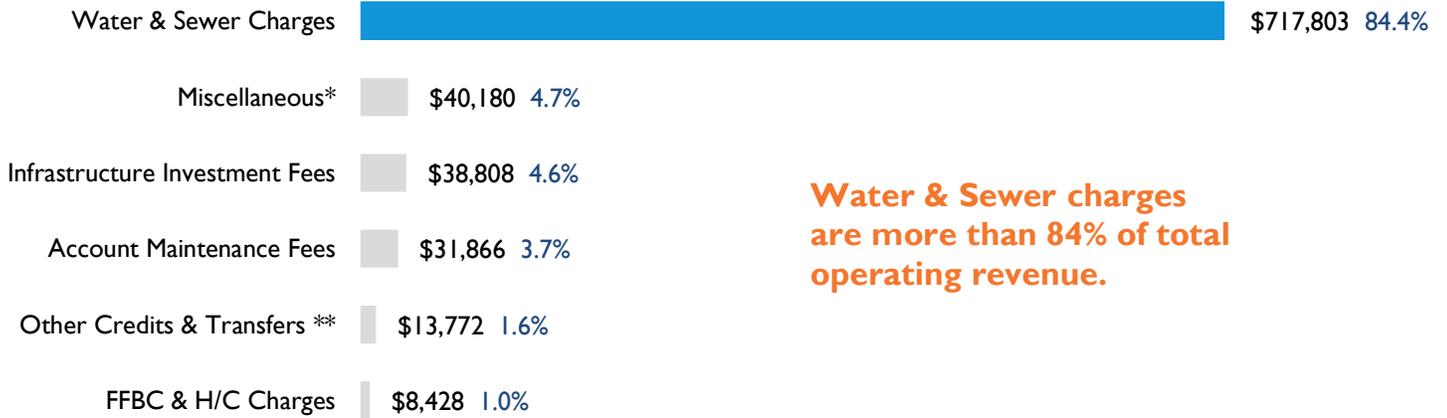


Contract Work is 63% of the capital budget.

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

## FY 2022 PROPOSED BUDGET – BY SOURCES

**Total Operating Revenue = \$850,857 (\$ in thousands)**

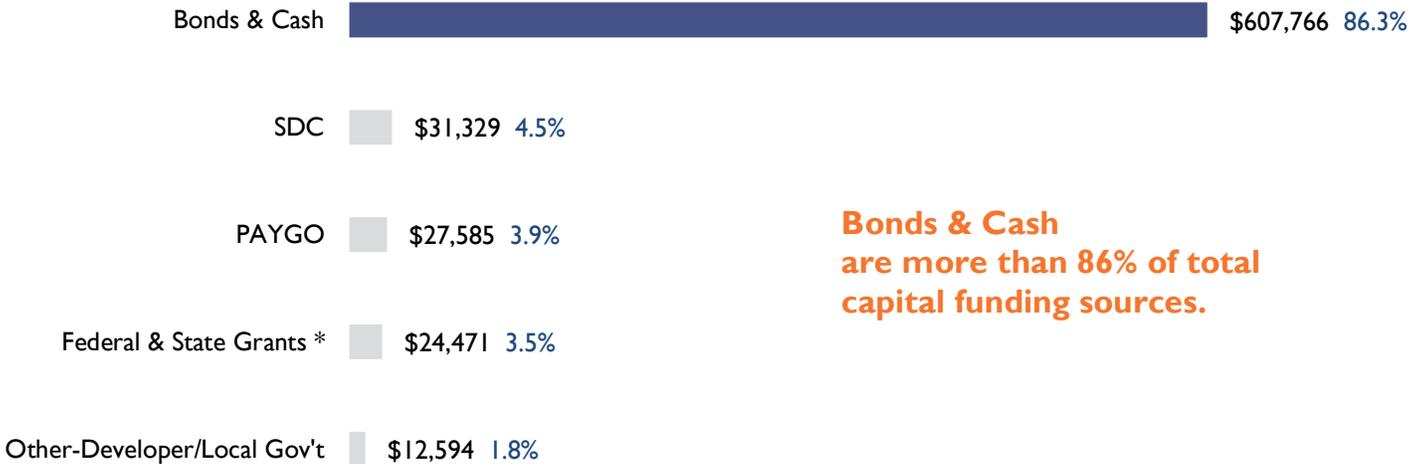


**Water & Sewer charges are more than 84% of total operating revenue.**

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

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

**Total Capital Funding Sources = \$703,745 (\$ in thousands)**

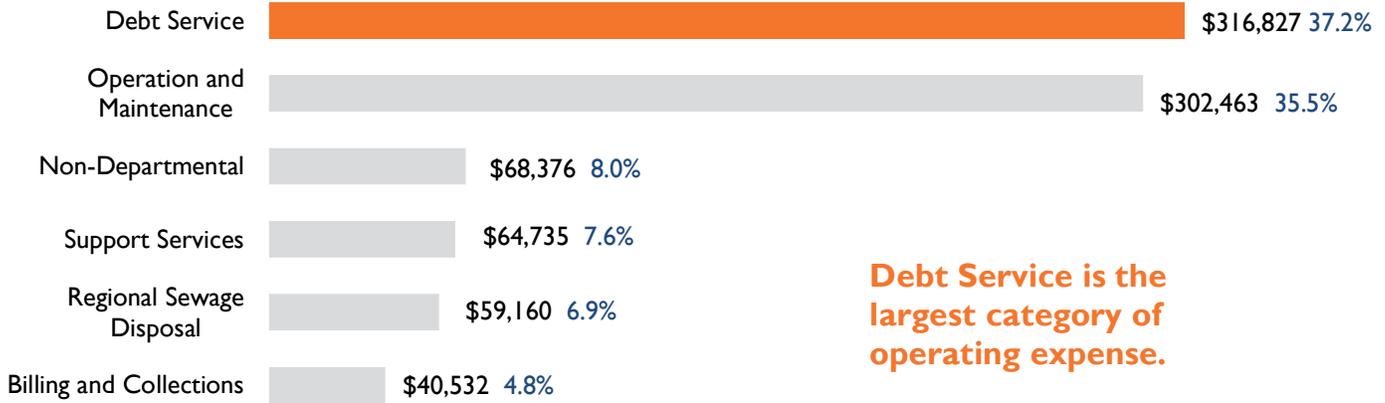


**Bonds & Cash are more than 86% of total capital funding sources.**

(\*) Includes funding from Maryland's Bay Restoration Fund.

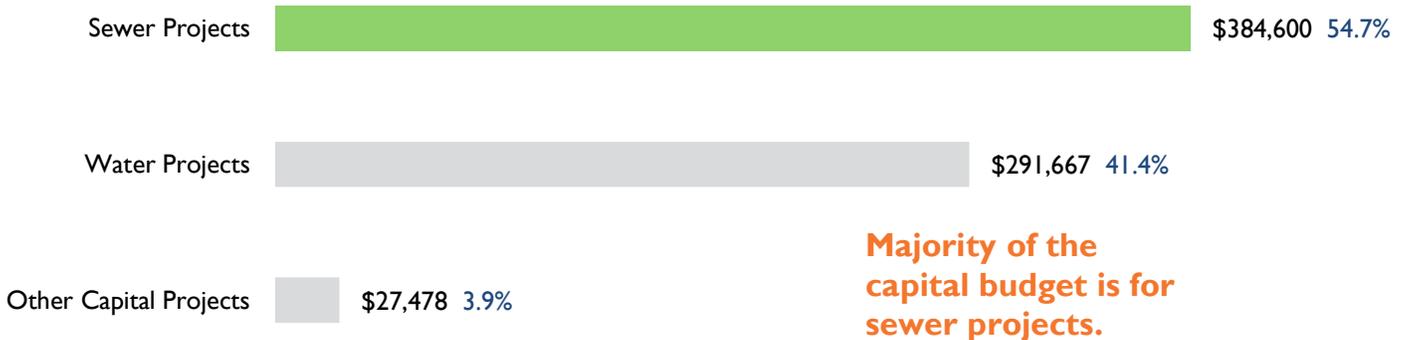
## FY 2022 PROPOSED BUDGET – BY FUND USES

**Total Operating Uses = \$852,093** (\$ in thousands)



Includes Water Operating, Sewer Operating and General Bond Debt Service

**Total Capital Uses = \$703,475** (\$ in thousands)



Includes Water Supply, Sewage Disposal and General Construction Bond

## OPERATING REVENUE & EXPENSE BY MAJOR SOURCE CATEGORY AND FUND TYPE

(\$ in thousands)	Water Operating		Sewer Operating		General Bond Debt Service		Total		% Chg
	FY 2021 Approved	FY 2022 Proposed	FY 2021 Approved	FY 2022 Proposed	FY 2021 Approved	FY 2022 Proposed	FY 2021 Approved	FY 2022 Proposed	
<b>Operating Revenues</b>									
Water Consumption Charges	\$ 295,512	\$ 318,941	\$ -	\$ -	\$ -	\$ -	\$ 295,512	\$ 318,941	7.9 %
Sewer Use Charges	-	-	393,698	398,862	-	-	393,698	398,862	1.3 %
FFBC & H/C Charges	-	-	-	-	10,378	8,428	10,378	8,428	(18.8)%
Account Maintenance Fees	16,503	16,251	15,857	15,615	-	-	32,360	31,866	(1.5)%
Infrastructure Investment Fees	20,099	19,792	19,311	19,016	-	-	39,410	38,808	(1.5)%
Plumbing & Inspection Fees	8,380	8,180	6,090	6,170	-	-	14,470	14,350	(0.8)%
Rockville Sewer Use	-	-	3,000	3,100	-	-	3,000	3,100	3.3 %
Miscellaneous	10,500	10,200	10,301	11,400	229	130	21,030	21,730	3.3 %
Interest Income	1,000	500	9,000	500	600	-	10,600	1,000	(90.6)%
<b>Total Operating Revenues</b>	<b>\$ 351,994</b>	<b>\$ 373,864</b>	<b>\$ 457,257</b>	<b>\$ 454,663</b>	<b>\$ 11,207</b>	<b>\$ 8,558</b>	<b>\$ 820,458</b>	<b>\$ 837,085</b>	<b>2.0 %</b>
<b>Other Credits and Transfers</b>									
Use of Fund Balance	4,080	-	3,920	-	-	-	8,000	-	(100.0)%
Other	-	-	-	-	9,500	6,000	9,500	6,000	(36.8)%
REDO	4,845	3,060	4,655	2,940	(9,500)	(6,000)	-	-	0.0 %
SDC Debt Service Offset	2,731	2,731	3,041	3,041	-	-	5,772	5,772	0.0 %
Premium Transfer	692	-	808	-	-	-	1,500	-	(100.0)%
Underwriters Discount Transfer	848	910	1,152	1,090	-	-	2,000	2,000	0.0 %
<b>Total Funds Available</b>	<b>\$ 365,190</b>	<b>\$ 380,565</b>	<b>\$ 470,833</b>	<b>\$ 461,734</b>	<b>\$ 11,207</b>	<b>\$ 8,558</b>	<b>\$ 847,230</b>	<b>\$ 850,857</b>	<b>0.4 %</b>
<b>Operating Expenses</b>									
Salaries & Wages	69,910	72,834	57,816	60,205	643	691	128,369	133,730	4.2 %
Heat, Light & Power	11,671	10,541	8,752	7,952	8	8	20,431	18,501	(9.4)%
Regional Sewage Disposal	-	-	58,000	59,160	-	-	58,000	59,160	2.0 %
All Other	140,636	147,825	144,357	147,152	1,254	1,313	286,247	296,290	3.5 %
<b>Total Operating Expenses</b>	<b>\$ 222,217</b>	<b>\$ 231,200</b>	<b>\$ 268,925</b>	<b>\$ 274,469</b>	<b>\$ 1,905</b>	<b>\$ 2,012</b>	<b>\$ 493,047</b>	<b>\$ 507,681</b>	<b>3.0 %</b>
<b>Debt Service</b>									
Principal Payments	72,416	73,453	104,606	97,449	8,796	5,803	185,818	176,705	(4.9) %
Interest Payments	60,588	67,045	76,255	71,098	2,932	1,979	139,775	140,122	0.2 %
<b>Total Debt Service</b>	<b>\$ 133,004</b>	<b>\$ 140,498</b>	<b>\$ 180,861</b>	<b>\$ 168,547</b>	<b>\$ 11,728</b>	<b>\$ 7,782</b>	<b>\$ 325,593</b>	<b>\$ 316,827</b>	<b>(2.7) %</b>
<b>Other Transfers</b>									
PAYGO	9,969	8,867	21,047	18,718	-	-	31,016	27,585	(11.1)%
<b>Total Expenses</b>	<b>\$ 365,190</b>	<b>\$ 380,565</b>	<b>\$ 470,833</b>	<b>\$ 461,734</b>	<b>\$ 13,633</b>	<b>\$ 9,794</b>	<b>\$ 849,656</b>	<b>\$ 852,093</b>	<b>0.3 %</b>
<b>Net Revenue (Loss)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (2,426)</b>	<b>\$ (1,236)</b>	<b>\$ (2,426)</b>	<b>\$ (1,236)</b>	<b>(49.1)%</b>
<b>Fund Balance - July 1</b>	<b>\$ 34,469</b>	<b>\$ 41,201</b>	<b>\$ 113,136</b>	<b>\$ 121,090</b>	<b>\$ 21,818</b>	<b>\$ 19,392</b>			
Net Increase (Decrease) in Fund Balance	-	-	-	-	(2,426)	(1,236)			
Adjustments	6,732	-	7,954	-	-	-			
<b>Fund Balance - June 30</b>	<b>\$ 41,201</b>	<b>\$ 41,201</b>	<b>\$ 121,090</b>	<b>\$ 121,090</b>	<b>\$ 19,392</b>	<b>\$ 18,156</b>			

Assumptions:

Adjustments shown for FY 2021 reflect prior period adjustment and the COVID-19 savings plan

## CAPITAL FUNDING & EXPENSE BY MAJOR SOURCE CATEGORY AND FUND TYPE

(\$ in thousands)	Water Supply Bond		Sewer Disposal Bond		General Construction Bond		Total		
	FY 2021 Approved	FY 2022 Proposed	FY 2021 Approved	FY 2022 Proposed	FY 2021 Approved	FY 2022 Proposed	FY 2021 Approved	FY 2022 Proposed	% Chg
<b>Funds Provided</b>									
Bonds & Notes Issues/Cash on Hand	\$ 235,617	\$ 251,069	\$ 255,183	\$ 329,510	\$ 40,859	\$ 27,187	\$ 531,659	\$ 607,766	14.3 %
PAYGO	9,969	8,867	21,047	18,718	-	-	31,016	27,585	(11.1) %
Anticipated Contributions:									
Federal & State Grants	1,500	4,120	21,500	20,351	-	-	23,000	24,471	6.4 %
SDC	8,057	24,718	1,473	6,611	-	-	9,530	31,329	228.7 %
Other Contributions	1,356	2,893	8,811	9,411	10	290	10,177	12,594	23.7 %
<b>Total Funds Provided</b>	<b>\$ 256,499</b>	<b>\$ 291,667</b>	<b>\$ 308,014</b>	<b>\$ 384,601</b>	<b>\$ 40,869</b>	<b>\$ 27,477</b>	<b>\$ 605,382</b>	<b>\$ 703,745</b>	<b>16.2 %</b>
<b>Construction Costs</b>									
Salaries & Wages	16,095	15,601	8,568	8,521	3,163	3,327	27,826	27,449	(1.4) %
Contract Work	143,327	174,144	206,567	267,089	3,172	3,172	353,066	444,405	25.9 %
Consulting Engineers	33,642	34,681	20,778	38,901	22,763	6,032	77,183	79,614	3.1 %
All Other	63,435	67,241	72,101	70,090	11,771	14,946	147,307	152,277	3.4 %
<b>Total Construction Costs</b>	<b>\$ 256,499</b>	<b>\$ 291,667</b>	<b>\$ 308,014</b>	<b>\$ 384,601</b>	<b>\$ 40,869</b>	<b>\$ 27,477</b>	<b>\$ 605,382</b>	<b>\$ 703,745</b>	<b>16.2 %</b>

## PROJECTED CHANGE IN FUND BALANCE

Fund (\$ in thousands)	Fund Balance - July 1st	Operating Revenues	Operating Expenses	Other Credits and Transfers	Adjust.	Fund Balance - June 30th	Fund Balance	
							Increase/ (Decrease)	% Chg
<b>Water Operating</b>								
FY 2021	\$ 34,469	\$ 351,994	\$ (365,190)	\$ 13,196	\$ 6,732	\$ 41,201	\$ 6,732	19.5 %
FY 2022	41,201	373,864	(380,565)	6,701	-	41,201	-	- %
<b>Sewer Operating</b>								
FY 2021	113,136	457,257	(470,833)	13,576	7,954	121,090	7,954	7.0 %
FY 2022	121,090	454,663	(461,734)	7,071	-	121,090	-	- %
<b>General Bond Debt Service</b>								
FY 2021	21,818	11,207	(13,633)	-	-	19,392	(2,426)	(11.1) %
FY 2022	\$ 19,392	\$ 8,558	\$ (9,794)	\$ -	\$ -	\$ 18,156	\$ (1,236)	(6.4) %

Operating expenses include debt service.

### Explanation of Significant Changes to Fund Balance

#### Water and Sewer Operating Funds

The FY 2022 proposed ending fund balance remains the same due to the decision to not use available fund balance to fund current expenses. The FY 2021 beginning fund balance reflects prior period adjustment and the COVID-19 savings plan.

#### General Bond Debt Service Fund

The FY 2022 Proposed Budget ending fund balance is 6.4% lower than the projected FY 2021 ending balance for the General Bond Debt Service Fund. Revenues for this fund are derived from FFBC and H/C charges. Developers now build these types of mains and lines that were previously built by WSSC Water for new development. As a result, property owners of newly developed sites do not pay FFBC to WSSC Water. Additionally, as the bonds associated with older sites expire, the impacted property owners cease paying WSSC Water the associated FFBC. Therefore, the revenues for this fund are expected to decrease further in the future. 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 Operating Funds - Combined

(\$ in thousands)	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
<b>Expenses</b>					
Salaries & Wages	\$ 117,144	\$ 125,100	\$ 131,711	\$ 127,726	\$ 133,039
Heat, Light & Power	20,033	19,683	15,534	20,423	18,493
Regional Sewage Disposal	58,331	54,809	56,414	58,000	59,160
All Other	242,540	268,103	268,488	284,993	294,977
<b>Subtotal</b>	<b>\$ 438,048</b>	<b>\$ 467,695</b>	<b>\$ 472,147</b>	<b>\$ 491,142</b>	<b>\$ 505,669</b>
<b>Debt Service</b>					
Principal Payments	151,057	153,565	154,238	177,022	170,902
Interest Payments	106,445	121,819	125,507	136,843	138,143
<b>Subtotal</b>	<b>\$ 257,502</b>	<b>\$ 275,384</b>	<b>\$ 279,745</b>	<b>\$ 313,865</b>	<b>\$ 309,045</b>
<b>Other Transfers</b>					
PAYGO	10,065	15,754	-	31,016	27,585
<b>Total Expenses</b>	<b>\$ 705,615</b>	<b>\$ 758,833</b>	<b>\$ 751,892</b>	<b>\$ 836,023</b>	<b>\$ 842,299</b>

General Bond Debt Service Fund

(\$ in thousands)	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
<b>Expenses</b>					
Salaries & Wages	\$ 701	\$ 751	\$ 863	\$ 643	\$ 691
Heat, Light & Power	11	-	-	8	8
All Other	802	825	852	1,254	1,313
<b>Subtotal</b>	<b>\$ 1,514</b>	<b>\$ 1,576</b>	<b>\$ 1,715</b>	<b>\$ 1,905</b>	<b>\$ 2,012</b>
<b>Debt Service</b>					
Principal Payments	12,672	13,337	9,445	8,796	5,803
Interest Payments	4,922	3,934	3,132	2,932	1,979
<b>Subtotal</b>	<b>\$ 17,594</b>	<b>\$ 17,271</b>	<b>\$ 12,577</b>	<b>\$ 11,728</b>	<b>\$ 7,782</b>
<b>Total Expenses</b>	<b>\$ 19,108</b>	<b>\$ 18,847</b>	<b>\$ 14,292</b>	<b>\$ 13,633</b>	<b>\$ 9,794</b>

### Capital Budget

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

(\$ in thousands)	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
<b>Expenses</b>					
Salaries & Wages	\$ 27,717	\$ 27,293	\$ 26,388	\$ 27,826	\$ 27,449
Heat, Light & Power	264	213	155	277	222
Contract Work	225,086	202,735	211,404	353,066	444,405
Consulting Engineers	41,718	51,872	44,478	77,183	79,614
All Other	180,431	104,682	111,960	147,030	152,055
<b>Total Expenses</b>	<b>\$ 475,216</b>	<b>\$ 386,795</b>	<b>\$ 394,385</b>	<b>\$ 605,382</b>	<b>\$ 703,745</b>

**SECTION 6**  
**FISCAL GUIDELINES**

## FISCAL GUIDELINES

This section discusses fiscal guidelines that 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.

## FISCAL CONTROL

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.

### **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 15% 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 had been budgeting \$31.0 million in PAYGO each fiscal year to reduce the amount of planned debt issued for capital projects. For FY 2022 PAYGO was lowered to \$27.5 million due to financial challenges related to COVID-19 savings plan.

### **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.

### **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 increases, 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 re-engineering of programs, guidelines and practices which are no longer cost effective.

### **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, facilities and other expenditure actions to reduce or avoid costs in the future.

### **Strategic Sourcing**

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 & 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 both strategic sourcing specialists and business unit staff 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 remain 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 to its customers through a variety of programs, such as the Customer Assistance Program (CAP), the Water Fund and the Connection Pipe Emergency Replacement Loan Program (also known as the PipeER Program).

CAP provides residential customers with a credit for WSSC Water's fixed fees, up to a limit of \$28 per quarterly bill or \$112 per year. The Water Fund, which is administered by a third party, provides one-time or emergency assistance to customers in financial need and is funded entirely by contributions from customers, employees and other sources. The PipeER Program provides \$100,000 annually to eligible residential customers to finance the replacement of a water service line located on their property that connects the agency's main line to the home. At the end of the FY, any unused funds in the PipeER Program are contributed to the Water Fund. Additional information can be found at <https://www.wsscwater.com/assistance>.

Additional factors and events that shaped the budget environment include:

- Flat or declining water consumption revenues
- Sewer revenue reduction to re-baseline
- Compliance with consent decrees
- Addressing aging infrastructure
- Uncertainty regarding potential changes in environmental regulations

As part of the FY 2022 Spending Affordability Guideline process, WSSC Water staff originally recommended a water and sewer rate increase of 6.6%. Montgomery and Prince George's Counties supported a 5.9% rate increase. In order to reconcile FY 2022 operating budget submissions, some departments would not receive funding for new positions, initiatives nor enhancements to existing programs. In addition, certain department budgets were recommended for targeted reductions. WSSC Water emphasized that it would work to maintain service at current levels. However, it may be necessary to pull back on certain preventative and non-essential services during FY 2022 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 Chain Management Transformation 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 2022 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.

## 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 annual system reconstruction programs 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 directly support 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 ratepayer 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 ratepayers, as well as current ratepayers. It would be inequitable and an unreasonable fiscal burden to make current ratepayers 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:

- Involve a long-term capital asset, as defined in accordance with accounting principles, and 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 (SDC), governmental aid or private contributions
- Ensure that tax-exempt debt is issued only for those improvements that meet the Internal Revenue Service requirements for the use of tax-exempt bond proceeds

### **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 bondholders 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.

Paying principal and interest on debt is the first claim on WSSC Water's revenues. By 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.

## CIP FISCAL GUIDELINES (Continued)

### Guideline on WSSC Water Debt Limits (Continued)

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 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 WSSC Water's water and sewer expenditures. This measure excludes expenditures in the General Bond Debt Service fund
- Water and Sewer Debt Service Coverage Ratio (DSCR) - 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 DSCR is 1.10 - 1.25. This measure excludes the General 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 the debt service is paid from its water consumption charges, sewer use 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.

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.

## CIP FISCAL GUIDELINES (Continued)

### **Guideline on Other Forms of Debt (Continued)**

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 providing below market interest rates for qualifying projects. When advantageous to the agency, debt financing via this program is pursued.

SDC funds are used to pay for new treatment, transmission and collection (storage) facilities.

### **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 to 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 SDC. In 1993 the Maryland General Assembly approved legislation authorizing the Montgomery and Prince George's County Councils to establish, and WSSC Water to impose, a SDC. 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. SDC funds are used to pay for new treatment, transmission and collection (storage) facilities. The SDC is reviewed annually by the County Councils. 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 the 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 ratepayer 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 Internal Revenue Code 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 that the general ratepayer is not subsidizing private activity.

### **Revenue Projections**

WSSC Water will estimate revenues in a realistic and conservative manner 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 non-recurring 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. The agency's 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

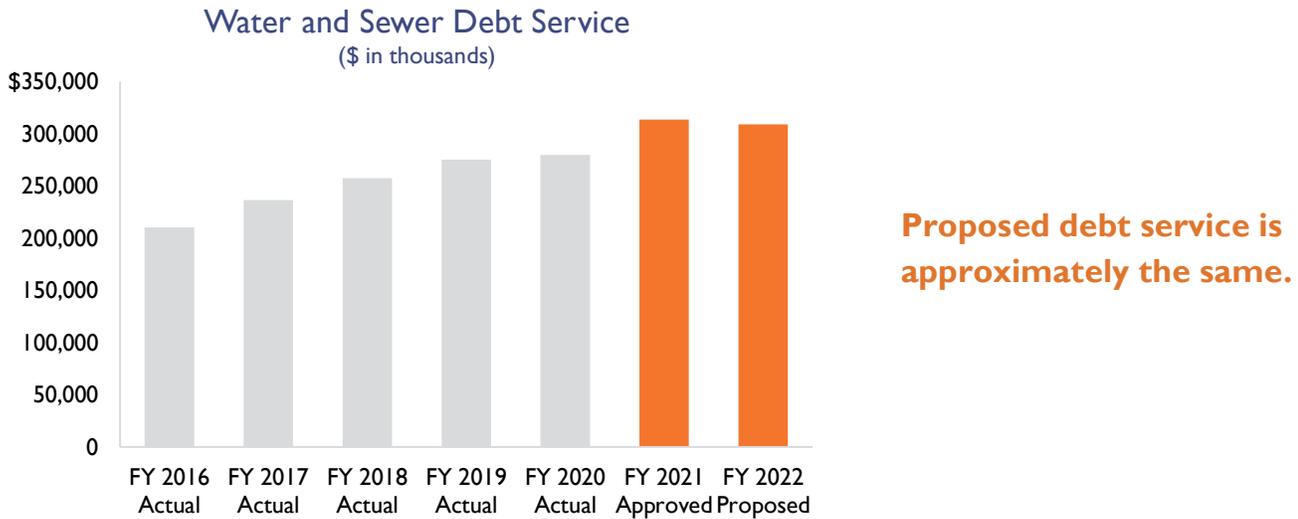
The Account Maintenance Fee (AMF) is a fixed fee that recovers the cost of service associated with maintaining and servicing customer accounts. These expenses include the cost of purchasing, maintaining, reading and replacing meters; processing meter readings; generating and mailing customer bills; and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

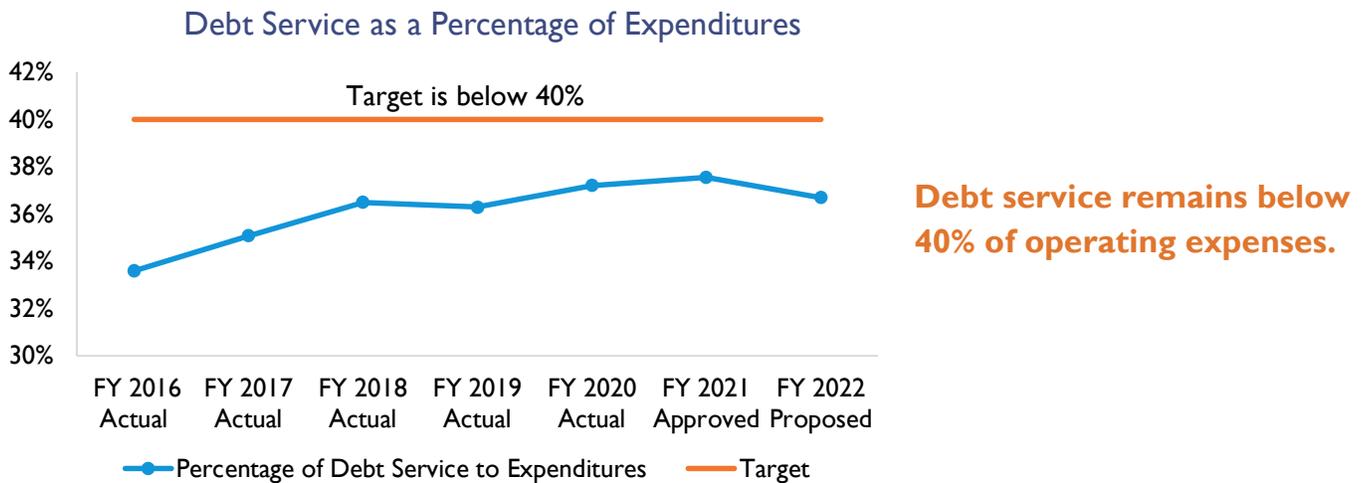
#### Infrastructure Investment Fee

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.

## WATER AND SEWER DEBT SERVICE GUIDELINES

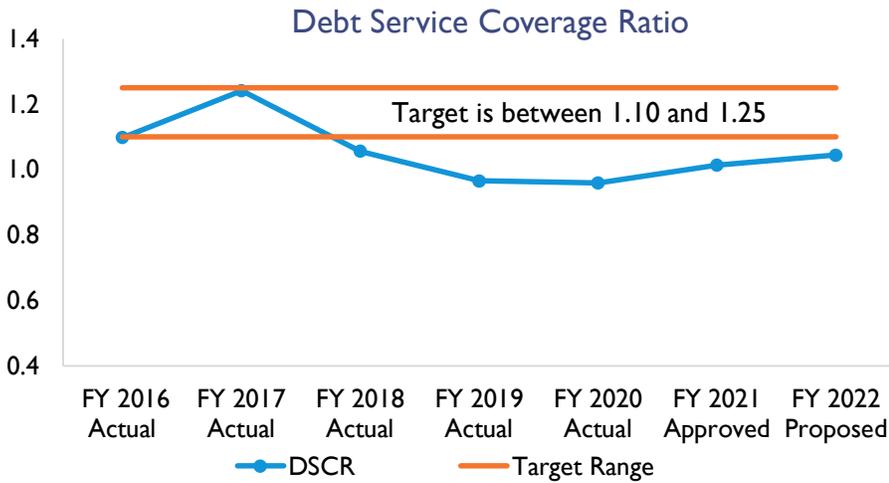


The largest expenditure in the FY 2022 proposed water and sewer operating budget is debt service. Debt service decreased slightly in FY 2022 due to lower interest rate projections and bond refunding. Ongoing water and sewer rehabilitation programs aimed at addressing WSSC Water’s aging infrastructure continue to be a major contributing factor to debt service. Rehabilitation programs make up over 37% of the FY 2022 Proposed CIP and highlights can be found in the FY 2022 to FY 2027 Proposed CIP at <https://www.wsscwater.com/fin>.



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 2022, the proposed debt service percentage is 36.7% of operating costs.

WATER AND SEWER DEBT SERVICE GUIDELINES (Continued)



**Projected FY 2022 debt service coverage ratio is 1.04.**

The 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 – 1.25. The projected ratio for FY 2022 is 1.04, but it is anticipated to be on target at 1.15 in FY 2024.

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 7**  
**REVENUES**

## REVENUES

This section provides assumptions, including discussions of the regional economy. Revenue sources used to fund WSSC Water's Fiscal Year (FY) 2022 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 2022 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.

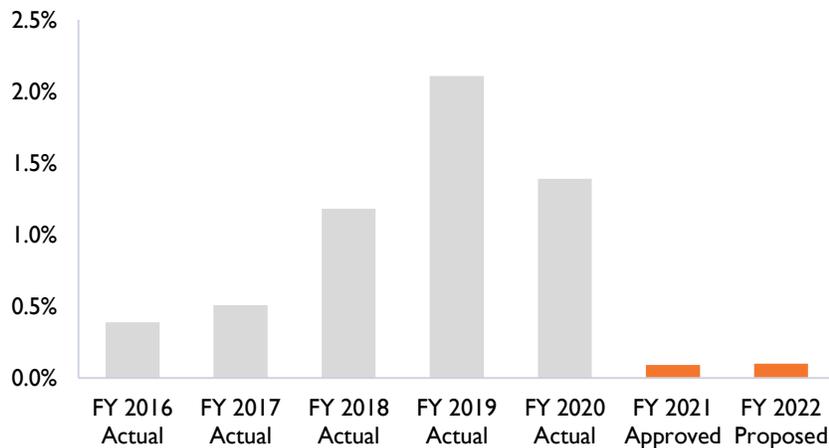
### COVID-19 Impact to Assumptions

The FY 2022 Proposed Operating Budget anticipates continued pressure on revenue resulting from the COVID-19 pandemic challenging customers' ability to pay utility and household expenses. The operating budget includes \$14.0 million in cost containment reductions across all departments. The cost control measures enable a same service level operating budget with 0.3% growth over the FY 2021 Approved Operating Budget.

### Interest Rates

From September 2007 to December 2008, the Federal Reserve Board, through its Federal Open Market Committee (FOMC), aggressively cut the target rate on federal funds from 5.25% to a range of 0.00% - 0.25%. The targeted federal funds rate set by the FOMC remained at the 0.00% - 0.25% range until December 2015. From December 2015 to December 2018, the FOMC increased rates nine times to a high of 2.25%. The FOMC began easing during 2019, reducing rates three times to 1.50% by year's end. To address the effects of the global COVID-19 pandemic, the FOMC reduced rates twice in March of 2020, bringing rates back to near zero. As a result, investment income is assumed to decrease \$9.0 million in FY 2022 from FY 2021 Approved Budget levels. Most economists now predict interest rates will remain lower for longer. WSSC Water's short-term investments are highly correlated with the federal funds rate.

### Yield on Investment Income



Lower projected investment income equates to a 1.3% rate increase.

## ECONOMIC OUTLOOK (Continued)

### 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, national economic climate, federal and state tax and expenditure policies, federal and state mandates and financial markets.

### Population Served and Customer Accounts

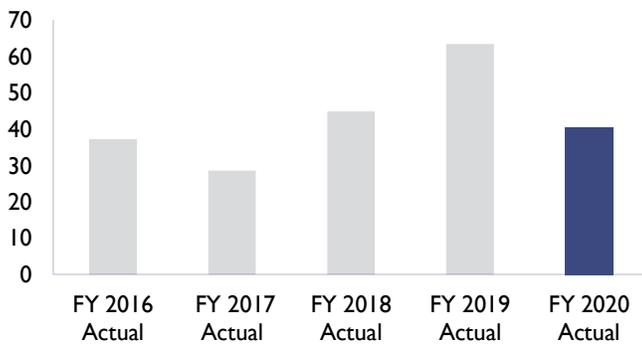
Based on WSSC Water's research, the agency's FY 2022 population served will increase by 0.5% from FY 2021. The agency assumes that the population will grow annually at 0.4% beyond FY 2022.

As of June FY 2022, WSSC Water is estimated to have 475,000 customer accounts. Most accounts are residential at 95.4%, followed by commercial and industrial at 3.8%, and government and other at 0.8%.

### 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.

**Washington D.C.**  
**Total Annual Precipitation**  
(in inches)



The Washington, D.C. area experienced record precipitation during FY 2018 and FY 2019 of 44.9 inches and 63.4 inches, respectively. FY 2020 precipitation decreased 35.9% compared to FY 2019. Water production increased from 161.7 million gallons per day (MGD) in FY 2019 to 162.6 MGD in FY 2020. Normal annual precipitation is 42.5 inches for Montgomery County and 42.4 inches for Prince George's County. For calendar 2019, Montgomery County received 50.6 inches and Prince George's County received 47.1 inches.

## ECONOMIC OUTLOOK (Continued)

### Economic Indicators

Revenue projections depend on the current and national, regional and local economic indicators. The assumptions for each indicator will affect WSSC Water's revenue projections. Such projections are dependent on several factors: public health crises; fiscal and monetary policy; real estate and construction projects; population; income and employment; consumer and business confidence; the stock market; mortgage interest rates; and geo-political risks. Analysts assess the stability and strength of an organization's revenue potential, which includes looking at income, inflation and the general strength of the region.

Prior to the COVID-19 public health emergency, the Maryland Bureau of Revenue Estimates anticipated the continued slowing of underlying economic growth due to several factors, including: the reduction of federal government 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 changing age demographics of the workforce 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.

### COVID-19 Public Health Crisis

The Maryland Bureau of Revenue Estimates has been monitoring the impact of the COVID-19 public health crisis since March 2020, which continues to catastrophically impact the health and economies of Maryland, particularly Prince George's and Montgomery Counties, which have the most virus cases in the state. In April 2020, Prince George's County reduced its FY 2021 budget revenue estimates by \$134.0 million or 4.8% below the County's FY 2021 proposed budget revenues. In July 2020, Montgomery County reduced FY 2021 operating and capital budget spending estimates by \$66.0 million.

### Real Estate and Construction Projects

The construction of new residential units in Montgomery County increased 18.9% in 2018 and 65.6% in 2019. The County had a 2.0% increase in median owner-occupied housing values. Prince George's County residential construction decreased 23.3% in 2018 and increased 82.8% in 2019. The County saw continued increasing home prices of 4.1% due to declining inventory. Complete 2020 data is not yet available.



Large construction projects in Montgomery and Prince George's Counties also positively impact WSSC Water's revenue. In August 2017 construction began on a 16-mile light rail system between Montgomery and Prince George's County, called the Purple Line. In addition, the UM Capital Region Medical Center, Prince George's County's new regional hospital, is projected to open in 2021. These projects will result an increase in the population of the area served and consequently an increase in WSSC Water customers.

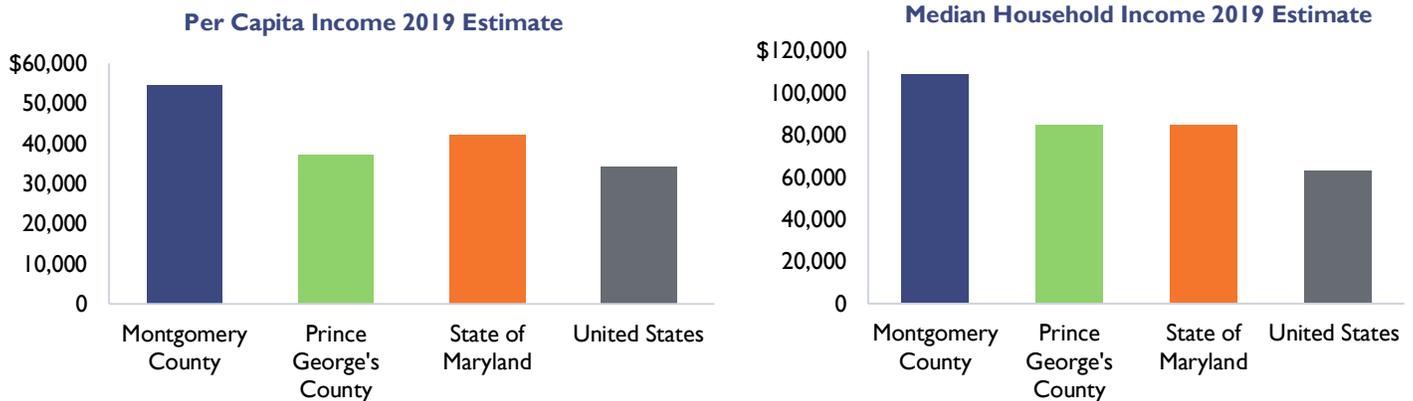
## ECONOMIC OUTLOOK (Continued)

### Population

During 2019, Montgomery County had a slight decrease in population. In 2019, Prince George's County's population growth was flat but has been slightly higher than the overall rate for Maryland.

### Per Capita Income and Median Household Income Statistics

According to the U.S. Census Bureau, the higher the per capita income and median household income indicators, the more money people have available to spend. Prince George's County's 2019 per capita income grew 3.7%, more slowly than the 4.0% state increase. Prince George's County median household income growth mirrored the state average of 3.6%. Montgomery County per capita income grew 3.2% for the same period. Montgomery County median household income in 2019 increased 2.4%, more slowly than the state's overall 3.6% increase.



### Employment

Montgomery County's 2019 unemployment rate of 2.9% was well below Maryland's 3.6%. Prince George's County 2019 unemployment rate has been slightly higher than the overall rate for Maryland.

Additional economic information about Montgomery County and Prince George's County is found in Appendix A.

## RATEPAYER, READY-TO-SERVE AND MISCELLANEOUS REVENUES

Revenues from the Water and Sewer Operating Funds are estimated at \$828.5 million in FY 2022. This is a \$19.3 million increase, or 2.4%, from the FY 2021 Approved Budget, primarily attributed to an increase in water and sewer use charges.

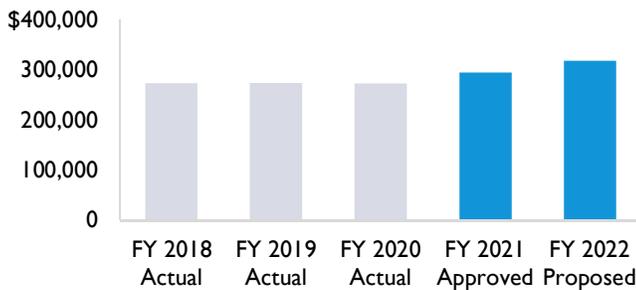
### Water and Sewer Consumption Revenues

The purpose of the water consumption and sewer use charges is to recover those costs for maintenance and operation of pipes, pumping stations, filtration and treatment plants and reservoirs needed to supply water to the Washington Suburban Sanitary District (WSSD), and to pay the principal and interest on bonds.

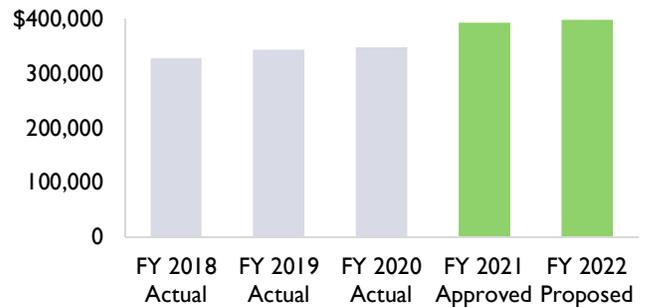
WSSC Water pays the District of Columbia Water and Sewer Authority (DC Water) for the agency’s share of the regional sewage disposal charges incurred by DC Water. State law requires the water consumption and sewer use charges be sufficient to meet all expense provisions.

FY 2022 water production is assumed to be 163.0 MGD and sewer treatment is projected to be 192.1 MGD.

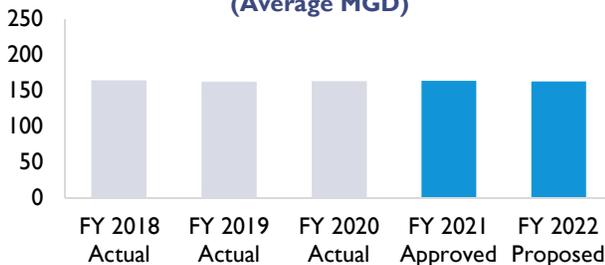
**Water Consumption Revenue**  
(\$ in thousands)



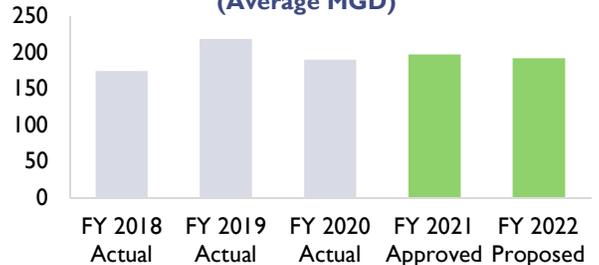
**Sewer Use Revenue**  
(\$ in thousands)



**Water Production**  
(Average MGD)



**Sewage Treatment**  
(Average MGD)



**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 proposed range of FY 2022 rates is \$5.76 to \$8.79 per 1,000 gallons of water consumed.

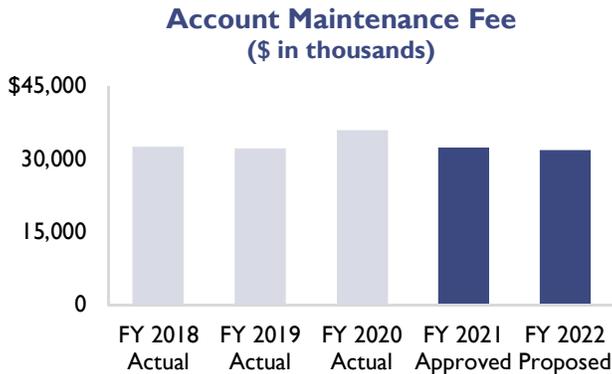
**Sewer Use Charges** – revenue is derived from applying an increasing rate schedule per 1,000 gallons of metered water use. The rate charged for each account is based upon the average daily water consumption during each billing period. The proposed range of FY 2022 rates is \$7.58 to \$13.96 per 1,000 gallons of metered water. The proposed rate for customers using sewage disposal only is a flat rate of \$142.00 per quarter.

## RATEPAYER, READY-TO-SERVE AND MISCELLANEOUS REVENUES (Continued)

### Water and Sewer Consumption Revenues (Continued)

The estimated FY 2022 revenues from water consumption and sewer use charges are \$318.9 million and \$398.9 million, respectively. A 5.9% revenue increase has been incorporated to help pay for debt service, maintenance and infrastructure renewal. Additional information on rates can be found in 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 2022 Proposed Budget remains relatively the same at \$31.9 million.

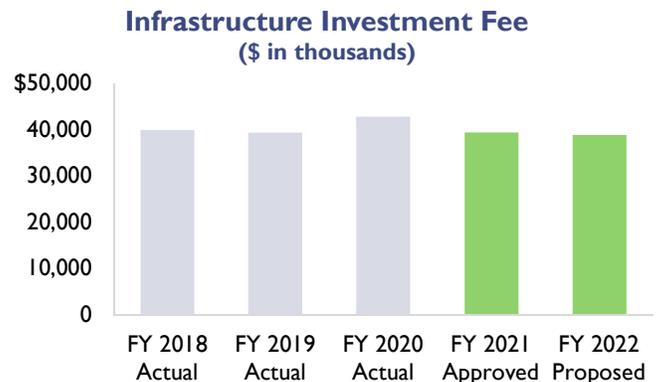
The AMF currently in place was developed in a 2014 study which resulted in a revised fee in FY 2016 based on meter size.

### Infrastructure Investment Fee

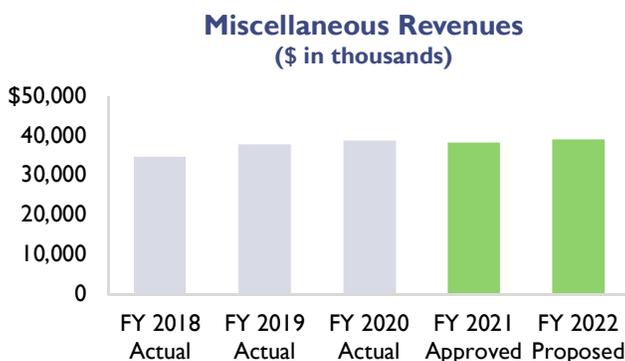
The Infrastructure Investment Fee (IIF) is a fixed fee that funds a portion of the debt service associated with the agency's water and sewer main reconstruction programs in the approved CIP.

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 2022. The fee is based on meter size.

The FY 2022 Proposed Budget remains relatively the same at \$38.8 million.



### Miscellaneous Revenues

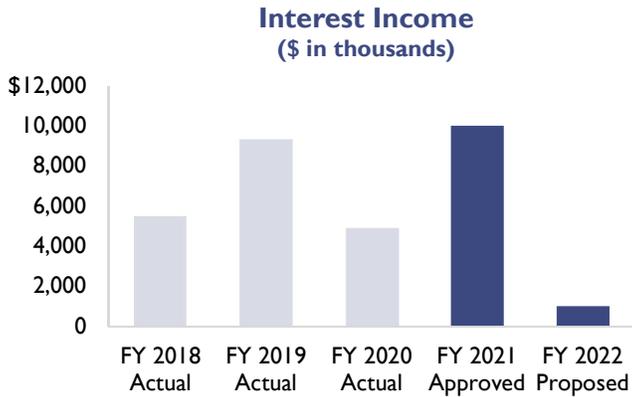


Miscellaneous Revenues are derived from: plumbing and inspection fees; Rockville sewer use; late payment of bills; repair of agency property (e.g., sewer mains) damaged by individuals; relocation of WSSC Water's sewer lines and/or facilities for the benefit of other parties (e.g., state or County departments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

The FY 2022 Proposed Budget assumes Miscellaneous Revenue will increase 2.0% from the FY 2021 Approved Budget, resulting in \$39.1 million in FY 2022 revenue.

## RATEPAYER, READY-TO-SERVE AND MISCELLANEOUS REVENUES (Continued)

### 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 a decrease back to 1.4% in FY 2020. Estimated returns for FY 2021 and FY 2022 are at 0.1% per annum. This assumption is based on the limited returns available in the market due to the current low interest rate environment, with no expectations of any meaningful near-term increase. As a result, interest income is assumed to decrease \$9.0 million in FY 2022 from the FY 2021 Approved Budget.

## 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 FFBC assessment rates are as follows (\$ per foot):

	Water	Sewer
<b>Subdivision</b>		
First 150 Feet	\$4.00	\$6.00
Next 150 Feet	3.00	4.50
Over 300 Feet	2.00	3.00
<b>Business</b>		
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 Water. 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 H/C 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 2022 Proposed Budget assumes that FFBC and H/C revenue will decrease approximately \$2.0 million (18.8%) from the FY 2021 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 an 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 2022 Proposed Budget assumes no use of fund balance.

### 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 2022 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 system reconstruction programs. For the FY 2022 Proposed Budget, REDO will be \$6.0 million.

## REVENUE TRENDS

### Water & Sewer Operating Funds - Combined

(\$ in thousands)	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
<b>Operating Revenues</b>					
Water Consumption Charges	\$ 271,735	\$ 273,753	\$ 271,173	\$ 295,512	\$ 318,941
Sewer Use Charges	325,879	341,496	346,985	393,698	398,862
Account Maintenance Fees	32,473	32,116	35,922	32,360	31,866
Infrastructure Investment Fees	39,847	39,278	42,781	39,410	38,808
Plumbing & Inspection Fees	12,141	13,594	14,425	14,470	14,350
Rockville Sewer Use	3,223	3,106	3,147	3,000	3,100
Miscellaneous	19,117	20,913	21,053	20,801	21,600
Interest Income	5,478	9,306	4,881	10,000	1,000
<b>Total Operating Revenues</b>	<b>\$ 709,893</b>	<b>\$ 733,562</b>	<b>\$ 740,367</b>	<b>\$ 809,251</b>	<b>\$ 828,527</b>
<b>Other Credits and Transfers</b>					
Use of Fund Balance	227	11,580	11,341	8,000	-
REDO	7,700	12,500	11,600	9,500	6,000
SDC Debt Service Offset	2,396	5,551	6,695	5,772	5,772
Premium Transfer	-	-	7,904	1,500	-
Underwriters Discount Transfer	-	-	-	2,000	2,000
<b>Total Funds Available</b>	<b>\$ 720,216</b>	<b>\$ 763,193</b>	<b>\$ 777,907</b>	<b>\$ 836,023</b>	<b>\$ 842,299</b>

### General Bond Debt Service Fund

(\$ in thousands)	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
<b>Operating Revenues</b>					
FFBC & H/C Charges	\$ 19,191	\$ 15,809	\$ 12,824	\$ 10,378	\$ 8,428
Interest Income	865	1,127	483	600	-
Miscellaneous	285	268	174	230	130
<b>Total Operating Revenues</b>	<b>\$ 20,341</b>	<b>\$ 17,204</b>	<b>\$ 13,481</b>	<b>\$ 11,208</b>	<b>\$ 8,558</b>
<b>Other Credits and Transfers</b>					
REDO	7,700	12,500	11,600	9,500	6,000
Use of Fund Balance	(7,700)	(12,500)	(11,600)	(9,500)	(6,000)
<b>Total Funds Available</b>	<b>\$ 20,341</b>	<b>\$ 17,204</b>	<b>\$ 13,481</b>	<b>\$ 11,208</b>	<b>\$ 8,558</b>

**SECTION 8**  
**CAPITAL BUDGET**

## CAPITAL BUDGET

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.

## EXPENSE CATEGORIES

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 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 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 EXPENSE SUMMARY

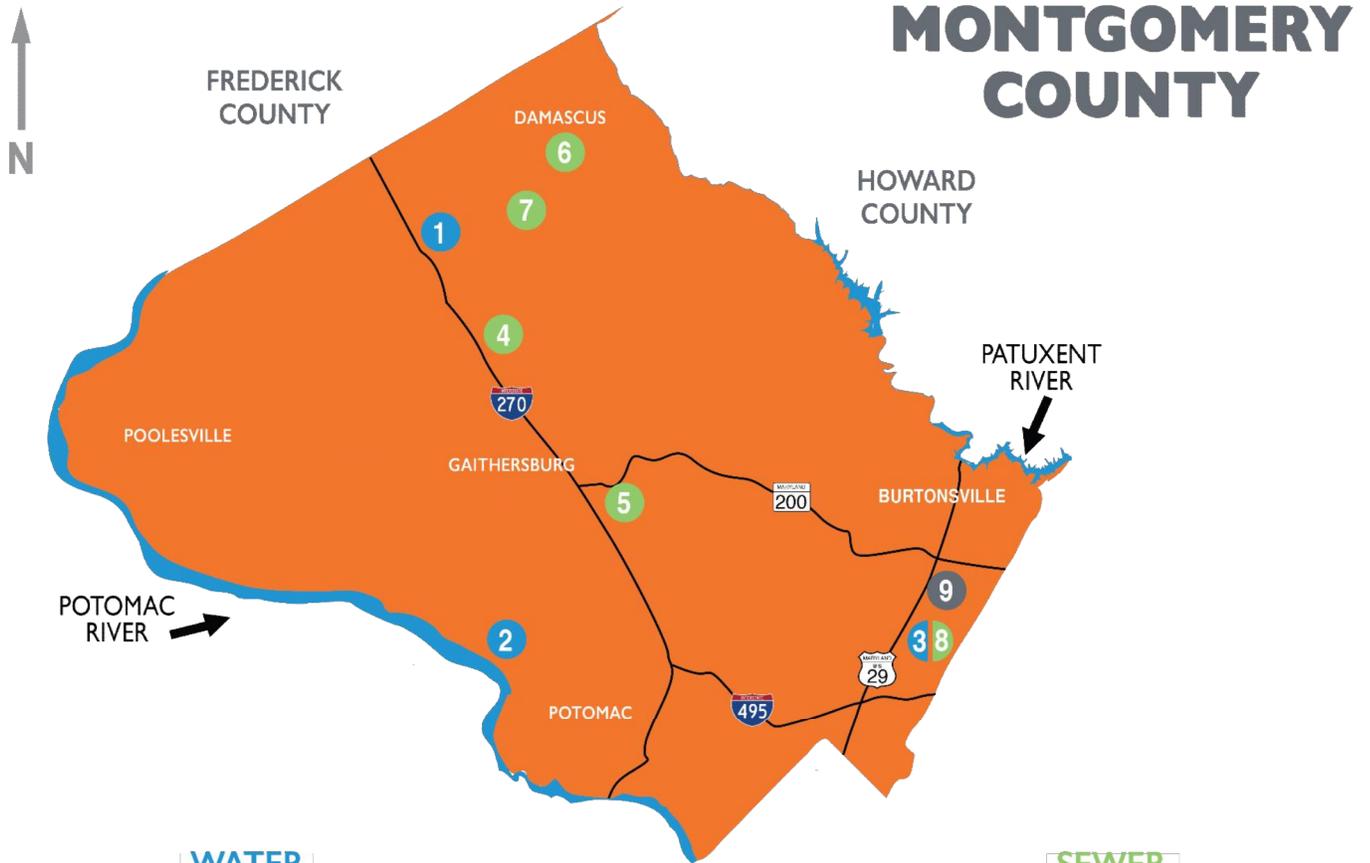
The total Fiscal Year (FY) 2022 Proposed Capital Budget is \$703.7 million. This is comprised of \$466.9 million in CIP projects, \$245.0 million in Information Only projects and an adjustment of \$8.1 million to account for expenditures funded via developer contributions for projects with a signed System Extension Permit (SEP). The FY 2022 Proposed Capital Budget is \$98.3 million higher than the FY 2021 Approved Capital Budget. The increase is primarily driven by a \$91.8 million increase in expenditures for the CIP projects in the budget year. Key changes leading to the increase are as follows:

- The ramping up of construction on the Piscataway Bioenergy project
- The addition of five new wastewater pumping station (WWPS) and force main (FM) replacement projects to address aging assets that are at or beyond their useful lives

(\$ in thousands)	FY 2021 Approved	FY 2022 Proposed
<b>Capital Improvements Program:</b>		
Montgomery County Water	\$ 1,821	\$ 2,864
Prince George's County Water	36,484	62,481
Bi-County Water	85,314	87,972
Montgomery County Sewer	9,637	8,512
Prince George's County Sewer	38,756	70,103
Bi-County Sewer	203,061	234,947
<b>Total Capital Improvements Program</b>	<b>\$ 375,073</b>	<b>\$ 466,879</b>
<b>Information Only:</b>		
Water Reconstruction Program	72,494	83,563
Sewer Reconstruction Program	55,495	71,083
Laboratory Division Building Expansion	1,276	9,482
Engineering Support Program	18,000	18,000
Energy Performance Program	7,595	3,576
Water Storage Facility Rehabilitation Program	1,650	3,000
Specialty Valve Vault Rehabilitation Program	1,132	2,252
Advanced Metering Infrastructure	20,687	-
Other Capital Programs	61,313	53,738
D'Arcy Park North Relief Sewer	290	290
<b>Total Information Only</b>	<b>\$ 239,932</b>	<b>\$ 244,984</b>
<b>Total Capital Expenses</b>	<b>\$ 615,005</b>	<b>\$ 711,863</b>
Adjustment for Developer Contributions	(9,623)	(8,118)
<b>Total Capital Budget</b>	<b>\$ 605,382</b>	<b>\$ 703,745</b>

## MAP OF PROJECTS IN MONTGOMERY COUNTY

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



### WATER

- 1 Pleasant's Property Water Main Extension (W-46.26)
- 2 Potomac WFP Pre-Filter Chlorination & Air Scour Improvements (W-73.22)  
Potomac WFP Submerged Channel Intake (W-73.30)  
Potomac WFP Main Zone Pipeline (W-73.32)  
Potomac WFP Consent Decree Program (W-73.33)  
Regional Water Supply Resiliency (W-175.05)
- 3 White Oak Water Mains Augmentation (W-113.20)  
Viva White Oak Water Main (W-113.21)

### SEWER

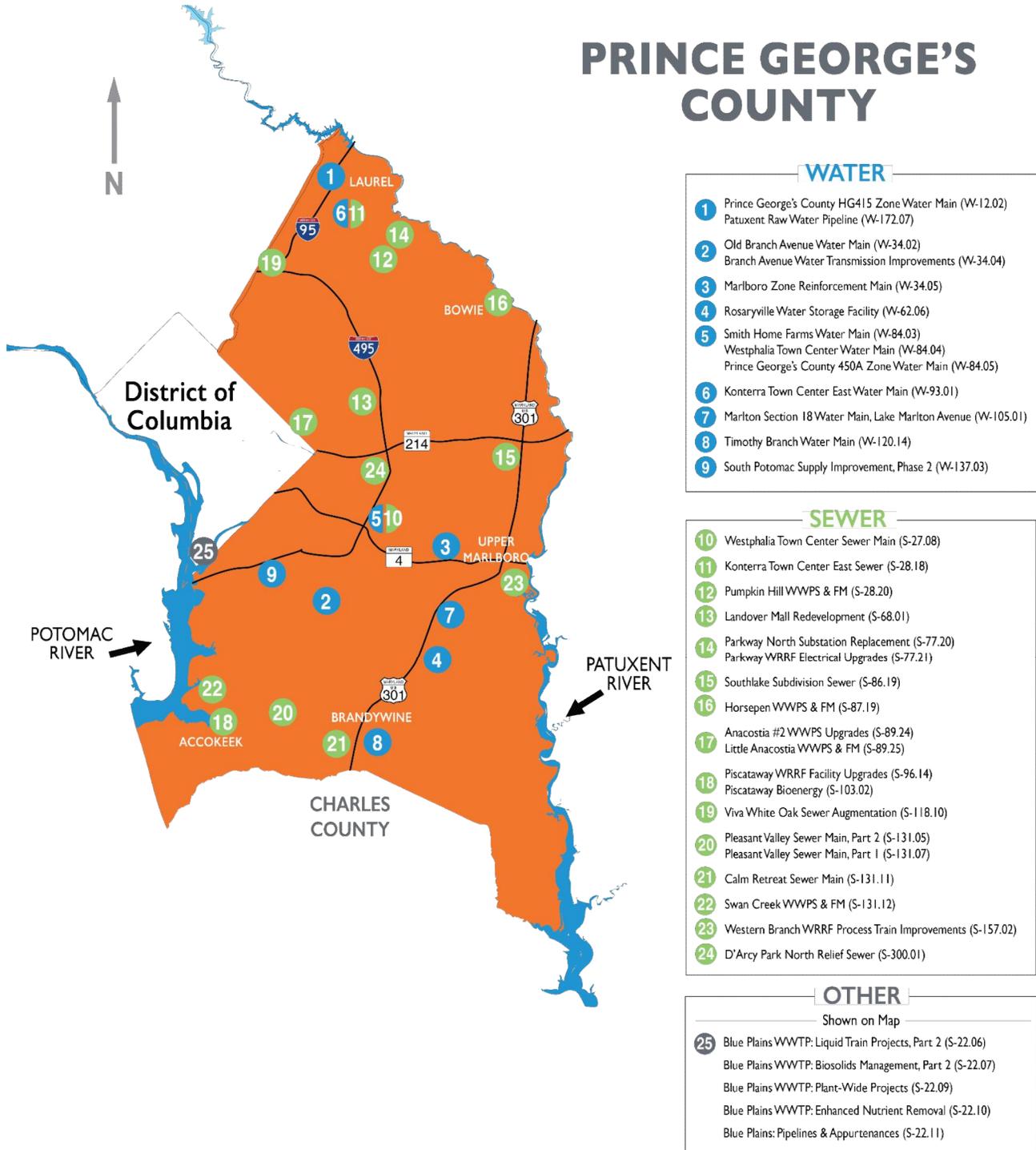
- 4 Milestone Center Sewer Main (S-84.67)
- 5 Shady Grove Station Sewer Augmentation (S-85.21)  
Shady Grove Neighborhood Center (S-85.22)
- 6 Damascus Town Center WWPS Replacement (S-94.13)
- 7 Spring Gardens WWPS Replacement (S-94.14)
- 8 Viva White Oak Sewer Main (S-118.09)

### ADMIN

- 9 Laboratory Division Building Expansion (A-101.04)

## 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. Additionally, the map shows the location of the five CIP projects associated with the Blue Plains Advanced Wastewater Treatment Plant (Blue Plains) in Washington D.C., which are owned and operated by the District of Columbia Water and Sewer Authority (DC Water). 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 2022 Proposed Capital Budget. Two of these projects are new and three are major ongoing projects. 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.

### Anacostia #2 WWPS Upgrades

This is a new \$31.3 million project for FY 2022 that is being undertaken to provide for the replacement of electrical and mechanical equipment at the WWPS and implementing National Fire Protection Association standards. The Anacostia #2 WWPS is WSSC Water's largest and most critical WWPS, with an average flow of 50 to 60 million gallons per day (MGD) and instantaneous flows up to 260 MGD during severe rainfall events. The 10 pumps at the station convey the wastewater to DC Water's Blue Plains facility via a 108-inch diameter force main. The majority of the electrical equipment was installed in the late 1970s when the station was originally constructed, and the mechanical equipment is more than 30 years old. Failure of any of the critical equipment could cause serious operational issues at the station. The work included in this project was recommended by business case evaluations that were undertaken to evaluate various alternatives for rehabilitation or replacement of the station's equipment.



### Horsepen WWPS & FM



The Horsepen WWPS & FM project is a new project for FY 2022 that provides for the planning, design and construction of modifications to the WWPS and replacement of the FM. The peak flows to the WWPS have exceeded the safe capacity of the existing facility. Additionally, the existing facility is over 30 years old and most of the equipment in the facility has reached the end of its useful life. The rehabilitation work will approximately double the station's capacity in order to meet the projected peak flow of 8.4 MGD and allow the facility to continue to safely operate well into the future. The rehabilitation work was recommended by a business case evaluation that examined the capacity, reliability and safety of the existing equipment.

The existing Horsepen FM is 18 inches in diameter and more than four miles long, making it one of the longest and most critical in WSSC Water's wastewater collections system. The FM experienced breaks in 2011, 2012, 2013 and 2018 that resulted in sanitary sewer overflows. Replacement is imperative given its age and location within environmentally sensitive areas. The replacement work also includes upsizing the FM to a 24-inch diameter pipe in order to accommodate the projections for increased flows to the WWPS.

The catalyst for this project is the actual and projected increase in flows to the WWPS. Accordingly, this project has been classified as a 90% growth project. This means that 90% of the funding for this \$35.3 million project will come from System Development Charge (SDC) revenues and only 10% will be bond funded. This results in a high return on investment for the \$3.5 million portion that is funded by ratepayers via long-term bonds since they will also benefit from the capacity, reliability and safety upgrades funded by the \$31.8 million portion funded via SDC revenues.

## HIGHLIGHTED PROJECTS (Continued)

### Patuxent Raw Water Pipeline

The Patuxent Raw Water Pipeline project is the final project in a series of three projects that will increase the capacity of the Patuxent Water Filtration Plant (WFP) from 72 MGD to 110 MGD. The first project in the series, the Patuxent WFP Phase II Expansion, added a sixth treatment train and other upgrades at the plant and was completed in October 2018. The Rocky Gorge Pump Station Upgrade project, the second in the series, provided for the modification and expansion of the station and is on the close-out list for the FY 2022 CIP as it is expected to be completed in early 2021. The Patuxent Raw Water Pipeline project is expected to be completed in FY 2024; at which time the Patuxent WFP will be capable of providing up to 110 MGD in emergency situations.



The Patuxent Raw Water Pipeline project provides for the planning, design and construction of a new 48-inch diameter, 2.5-mile long raw water pipeline from the Rocky Gorge Raw Water Pumping Station to the Patuxent WFP. The work to clean the existing three raw water lines and replace existing valves has already been completed. Construction of the new raw water pipeline is expected to begin in spring 2021. As with any construction project, the work also includes the restoration of any areas disturbed by the construction, including the restoration of paving on any impacted roads. The total estimated cost of the project is \$34.3 million.

### 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 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.

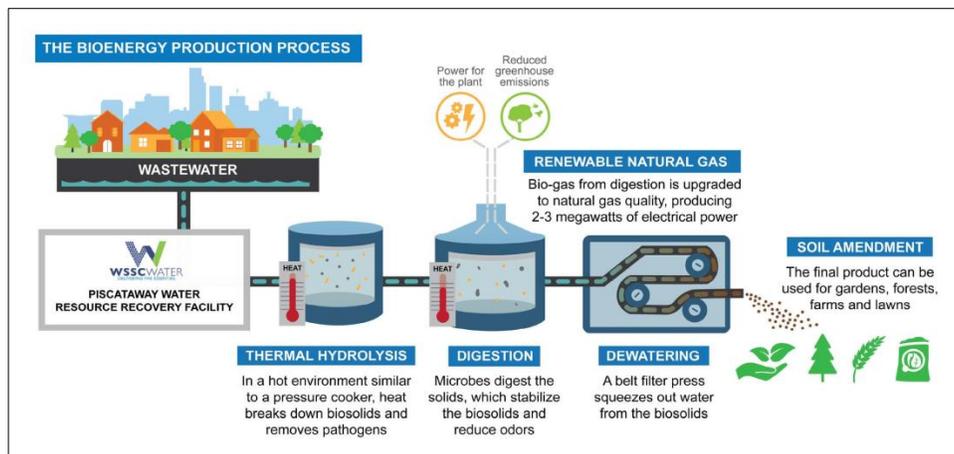
The total estimated cost for the Potomac WFP Consent Decree Program is \$203.0 million, including \$1.0 million for supplemental environmental projects. A portion of this project will be financed by Green bonds. The reduction in solids discharged to the Potomac River addresses the pollution prevention/control and terrestrial and aquatic biodiversity conservation categories from the International Capital Market Association's Green Bond Principles. More information on the utilization of Green bonds for the Potomac WFP Consent Decree Program can be found in WSSC Water's Green Bond Annual Report.

## HIGHLIGHTED PROJECTS (Continued)

### Piscataway Bioenergy

An exciting project currently underway at the Piscataway Water Resource Recovery Facility (WRRF) is transforming the way WSSC Water handles waste from five existing WRRFs. The Piscataway Bioenergy project - the largest and most technically advanced project ever constructed by WSSC Water - will employ innovative technologies to recover resources and produce green energy. In the coming years, our Piscataway WRRF will evolve into a bioenergy production facility that uses efficiency, technology and sustainability to enhance the financial and environmental health of the region. This \$327.2 million project will serve our customers for the next 100 years.

The Piscataway Bioenergy project will transform how WSSC Water handles biosolids - the nutrient-rich organic materials resulting from the wastewater treatment process - from five existing WSSC Water WRRFs. Using cutting-edge “green” technology, the new facility will significantly reduce the amount of biosolids left over from the treatment process, thus reducing costs to haul and dispose of the product. The remaining biosolids will be significantly cleaner (Class A), making the disposal process much easier and allowing the final product to be sold and distributed as fertilizer. With cleaner Class A biosolids, WSSC Water will also save money by eliminating the use of lime, which is currently applied to Class B biosolids to control odor. This new process will save money for our customers by reducing operating costs by more than \$3 million per year.



As an added benefit, the process to create the Class A biosolids will generate renewable fuel to help run the plant. This new process produces methane gas providing green energy that will help run the Piscataway WRRF. The new process will reduce WSSC Water’s greenhouse gas emissions by 15%.

In addition to critical sustainability benefits, WSSC Water’s investment in bioenergy is a conscientious investment decision to spend now in order to save going forward. Bioenergy will demonstrate significant cost savings over the long-term by reducing power consumption from fossil fuels and reducing disposal costs. The Piscataway WRRF will become WSSC Water’s showcase for achieving optimal value by investing in a green future.

Phase One of the project, which includes design, demolition of existing on-site facilities and relocation of existing utilities, is almost complete. Phase Two, the construction of the new facility, recently began in the summer of 2020. The entire project should be complete and operational in spring 2024.

A portion of this project is being financed by low-interest loans through MDE’s Water Quality Financing Administration’s Water Quality Revolving Loan Fund Program and a grant from the Maryland Energy Administration.



## FUNDING SOURCES

The major funding sources for the capital budget are described in Section 6. There are three major types of funding sources for the capital budget: proceeds from bonds and other debt instruments; Pay-As-You-GO (PAYGO) financing; 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 ratepayer 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 is normally conditioned upon specific legislative authority or project approval.

Federal Grants – an award of financial assistance from a federal agency to a recipient in support of a public policy goal, which usually includes some compliance and reporting requirements. For example, U.S. 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 – an award of financial assistance from a state agency to a recipient in support of a public policy goal, which usually includes some compliance and reporting requirements. For example, 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.

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 2022 Proposed Capital Budget is \$703.7 million. The funding is comprised of \$607.8 million in bonds, \$27.6 million in PAYGO and \$68.4 million in grants, contributions and other funding sources. The \$98.3 million increase from the FY 2021 Approved Capital Budget is primarily for bond funded CIP projects. Key changes leading to the increase in bond funding are as follows:

- The ramping up of construction on the Piscataway Bioenergy project
- The addition of five new WWPS and FM replacement projects to address aging assets that are at or beyond their useful lives

Additionally, there is also a significant increase of \$21.8 million in SDC funding for CIP projects. The primary drivers of this increase are the following:

- The addition of two new projects in FY 2022 that are funded in part via SDC funds, for a total of \$6.1 million of new SDC funded expenditures in FY 2022
- Increased utilization of SDC funding by existing projects advancing into periods of heavy construction, such as the Branch Avenue Water Transmission Improvements (\$10.7 million increase) and South Potomac Supply Improvement, Phase 2 (\$7.3 million increase) projects

(\$ in thousands)	FY 2021 Approved	FY 2022 Proposed
<b>Capital Improvements Program:</b>		
Bonds	\$ 311,921	\$ 383,072
PAYGO	31,016	27,585
Federal Grants	1,500	4,120
State Grants	1,500	351
Local Government Contribution	3,675	3,343
SDC	9,530	31,329
Contribution/Other	15,931	17,079
<b>Total Capital Improvements Program</b>	<b>\$ 375,073</b>	<b>\$ 466,879</b>
<b>Information Only:</b>		
Bonds	219,738	224,694
State Grants	20,000	20,000
Contribution/Other	194	290
<b>Total Information Only</b>	<b>\$ 239,932</b>	<b>\$ 244,984</b>
<b>Total Capital Funding</b>	<b>\$ 615,005</b>	<b>\$ 711,863</b>
Adjustment for Developer Contributions	(9,623)	(8,118)
<b>Total Capital Budget Sources</b>	<b>\$ 605,382</b>	<b>\$ 703,745</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 bondholders 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.

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 \$409.7 million. The FY 2022 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 distribution 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 2022 Proposed Operating Budget based upon projects included in the FY 2022 Proposed Capital Budget:

(\$ in thousands)	FY 2021 Approved	FY 2022 Projected	FY 2022 Net Impact
<b>Operating - Water and Sewer Program</b>			
Debt Service Expense	\$ 313,865	\$ 309,045	\$ (4,820)
Major Capital Projects Net Impact	-	196	196
<b>Total</b>	<b>\$ 313,865</b>	<b>\$ 309,241</b>	<b>\$ (4,624)</b>

Major capital projects which will impact the FY 2022 Proposed Operating Budget are summarized below:

- Clarksburg Wastewater Pumping Station & Sewer Improvements - This project provides for the planning, design and construction of a 0.9 MGD WWPS and 1,270 feet of FM. The new WWPS and FM will provide service to the Miles property and the Clarksburg Historic District. Operating and maintenance costs will increase to support this new facility.
- Piscataway Bioenergy - This project provides 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 WRRF. The new bioenergy facility will handle waste from five existing WRRFs, employing innovative technologies to recover resources and produce green energy. Once the new facility is fully operational, it is expected to reduce net operating costs by more than \$3.0 million per year as a result of significantly lower expenditures for energy, biosolids disposal and chemicals.

**SECTION 9**  
**DEBT SERVICE**

## DEBT SERVICE

WSSC Water issues bonds, a long-term debt financing instrument, to fund the planning, design and construction of long-lived additions or improvements to its infrastructure. The 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 and state 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 Fiscal Year (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 Councils of Montgomery and Prince George's Counties, 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.

## DEBT SERVICE PROGRAM

### **Debt Service Budget**

The proposed debt service expense is based upon paying the FY 2022 principal and interest payments on current outstanding debt as of June 30, 2020, budgeted new debt issues approved for FY 2021 and the proposed issuance of \$410.3 million in new debt for FY 2022 (\$208.5 million for water; \$201.2 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 FYs 2022-2027, as well as the Information Only projects included in the CIP document. The FY 2022 Proposed Budget for debt service expenses is \$316.8 million, a decrease of \$8.8 million or 2.7% less than the FY 2021 Approved Budget of \$325.6 million. The decrease is due in part to the current low interest rate environment that is expected to persist through at least FY 2022 based on projections from members of the Federal Reserve Board's Federal Open Market Committee. The FY 2022 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 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 minor small diameter water and sewer line additions. 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 projects serving one residence or providing relief from a residential health hazard.

## DEBT SERVICE PROGRAM (Continued)

### 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 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. The projects involve one or more of the following activities:

- Green buildings
- Pollution prevention and control
- Renewable energy
- Water quality
- Climate change adaptation

In the FY 2022 CIP, the following projects will be financed with Green bonds: 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 nonpoint source pollution.

### Rating Agency Reviews

WSSC Water bonds carry AAA/Aaa/AAA credit ratings from the three major bond rating agencies: Fitch Ratings, Inc., Moody's Investors Service, Inc., and S&P Global Inc., respectively. These high ratings are critical to 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 15.0% 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, the underlying credit worthiness of Montgomery and Prince George's Counties and the pledge of the levy of an unlimited ad valorem tax upon the assessable property of the WSSD for repayment. 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.

## OUTSTANDING DEBT

### 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 \$3.4 billion as of June 30, 2020, a 2.5% increase over the June 30, 2019 figure of \$3.3 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 06/30/19	% of Total	Outstanding 06/30/20	% of Total
Water Supply Bonds <sup>1</sup>	\$ 1,228,099,118	38.8%	\$ 1,373,814,919	42.3%
Sewage Disposal Bonds	1,559,389,018	49.3%	1,484,786,080	45.8%
General Construction Bonds	134,441,864	4.3%	130,874,001	4.0%
Maryland Water Quality Bonds <sup>2</sup>	240,197,781	7.6%	255,869,091	7.9%
<b>Total Bonds</b>	<b>\$ 3,162,127,781</b>	<b>100.0%</b>	<b>\$ 3,245,344,091</b>	<b>100.0%</b>
Water, Sewer and General Notes	177,800,000		177,800,000	
<b>Total Principal Debt Outstanding</b>	<b>\$ 3,339,927,781</b>		<b>\$ 3,423,144,091</b>	

<sup>1</sup>Includes \$53,880,000 in Green Bonds.

<sup>2</sup>Maryland Water Quality Bonds are issued for Water, Sewer and General Construction projects.

### FY 2022 Estimated Debt Outstanding

The estimated principal debt outstanding at the end of FY 2022 is built upon a base of the existing outstanding debt from past issues (as of June 30, 2020), the approved debt issues for FY 2021 and the proposed debt issues in FY 2022, along with the estimated principal payments in FY 2021 and FY 2022. The table that follows shows that the existing outstanding debt of \$3.4 billion as of June 30, 2020 is projected to grow to a total of \$3.9 billion as of June 30, 2022, an increase of 13.5%.

<b>Total Principal Debt Outstanding, June 30, 2020</b>	<b>\$ 3,423,144,091</b>
<b>Less: Estimated Principal Payments</b>	
FY 2021 for All Outstanding Bonds and Notes as of June 30, 2020	(171,419,748)
FY 2022 for All Outstanding Bonds and Notes as of June 30, 2020	(165,602,441)
<b>Total (As of June 30, 2022)</b>	<b>\$ 3,086,121,902</b>
<b>Plus:</b>	
FY 2021 Budgeted New Debt Issues:	
Water Supply Bonds	189,738,000
Sewage Disposal Bonds	220,184,000
General Construction Bonds	600,000
FY 2022 Proposed New Debt Issues:	
Water Supply Bonds	208,478,000
Sewage Disposal Bonds	201,226,000
General Construction Bonds	600,000
<b>Less: Estimated Principal Payments:</b>	
FY 2021 for Budgeted New Issues as of June 30, 2021	(6,178,945)
FY 2022 for Budgeted and Proposed New Issues as of June 30, 2022	(13,803,653)
<b>Total Estimated Debt Outstanding (As of June 30, 2022)</b>	<b>\$ 3,886,965,304</b>

## 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	\$ 124,452,266
3.8% of Total Assessable Tax Base of All Real Property	11,863,018,828
<b>Total Debt Limit (As of June 30, 2020)</b>	<b>\$ 11,987,471,094</b>
<b>Less: Total Estimated Debt Outstanding (As of June 30, 2022)</b>	<b>\$ (3,886,965,304)</b>
<b>Legal Debt Margin</b>	<b>\$ 8,100,505,790</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, 2020 the total outstanding debt of \$3.4 billion represented only 28.6% 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
2020	\$ 313,962,596	\$ 11,987,471	\$ 3,423,144	28.6%
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%

<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.

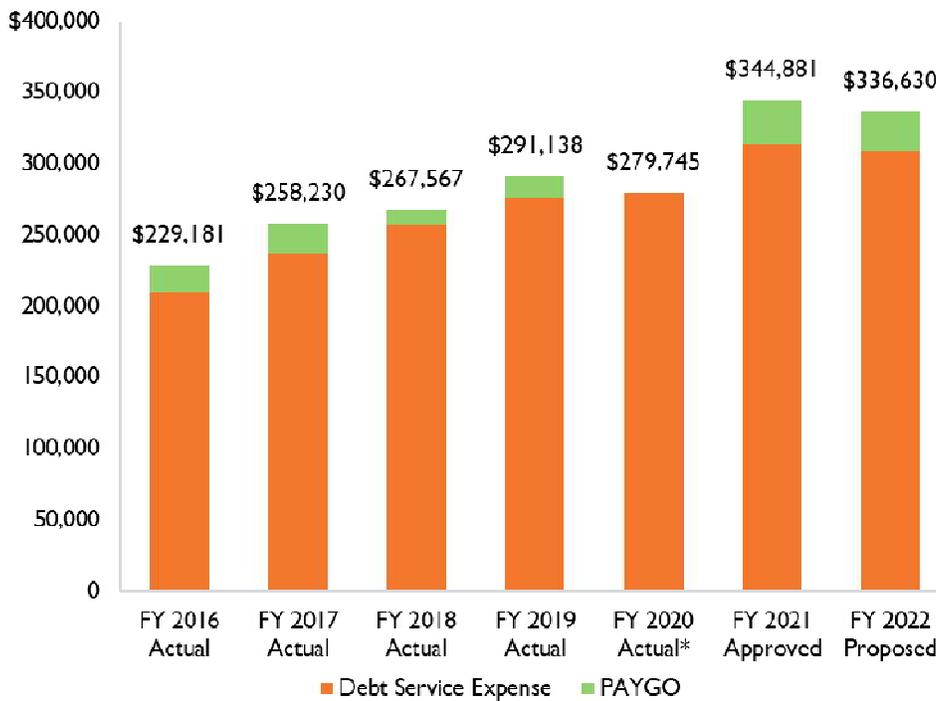
## DEBT SERVICE TRENDS

### Water and Sewer Debt Service (Including PAYGO)

The water and sewer debt service expenses (\$309.0 million in FY 2022) are funded by WSSC Water ratepayers through water consumption and sewer use charges and the IIF. As noted in Section 6, WSSC Water will program in Pay-As-You-GO (PAYGO) financing 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 FYs 2016-2022. WSSC Water's requirements for water and sewer debt service have been increasing, from a total of \$229.2 million in debt service and PAYGO in FY 2016 to an estimated \$336.6 million in FY 2022. This increase is due to the investments WSSC Water is making in its capital-intensive infrastructure, such as system reconstruction work performed under the water and sewer reconstruction programs, SSO Consent Decree work and the Potomac WFP Consent Decree Program.

**Water and Sewer Debt Service (Including PAYGO)**  
(\$ in thousands)

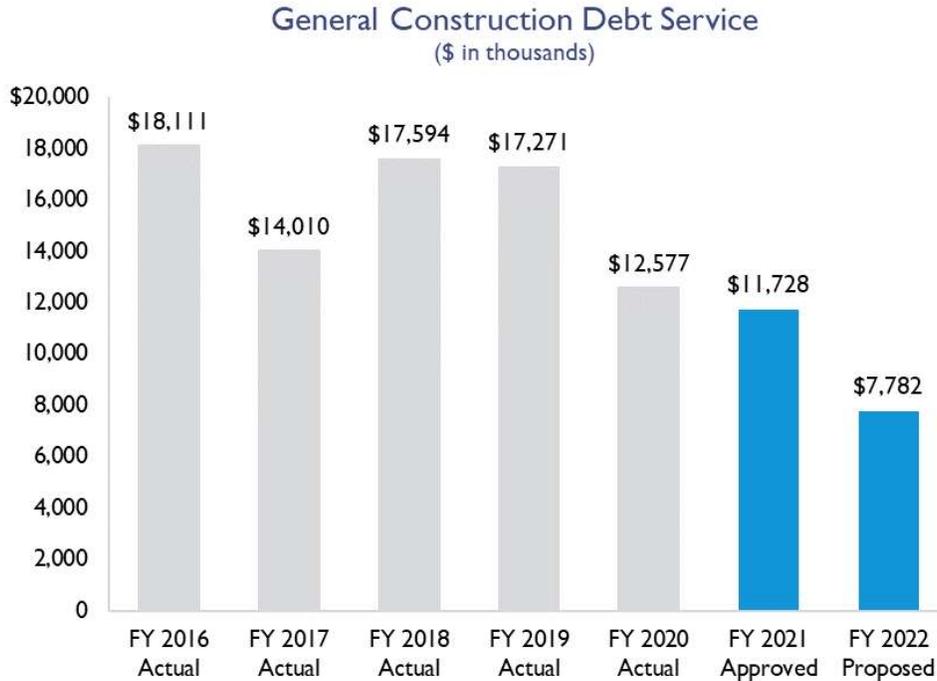


\*In FY 2020, PAYGO was reduced to zero as part of the COVID-19 savings plan.

## DEBT SERVICE TRENDS (Continued)

### General Construction Debt Service

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 \$18.1 million in FY 2016 to an estimated \$7.8 million in FY 2022, a decrease of 57%. Principal and interest expenses on General Construction bonds are paid through FFBC and other revenues.



Note: Debt service expense is net of interfund transfers.

**SECTION 10**  
**WATER QUALITY AND REGULATIONS**

## WATER QUALITY AND REGULATIONS

Water and sewer utilities are heavily impacted by both current and emerging regulations. WSSC Water 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 environmental features will be affected by the proposed construction of a project.

### WATER QUALITY CAPITAL PROJECTS

A further extension of these protections has been funded by the approximately \$150.7 million included in the fiscal year (FY) 2022 Proposed Budget which is attributable to meeting environmental regulations. These projects are mandated by the U.S. Environmental Protection Agency (EPA) under the Clean Water Act through the Maryland Department of the Environment in the form of more stringent state discharge permit requirements. These capital projects are listed in the following table.

Project Name	Phase	Proposed FY 2022 (\$ In thousands)
Sewer Reconstruction Program	Ongoing	\$ 71,083
Blue Plains WWTP: ENR	Construction	116
Blue Plains WWTP: Pipelines & Appurtenances	Ongoing	10,460
Trunk Sewer Reconstruction Program	Ongoing	58,565
Potomac WFP Consent Decree Program	Design	10,500
<b>Total Water Quality Projects</b>		<b>\$ 150,724</b>

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



## WATER QUALITY CAMPAIGNS

WSSC Water takes great pride in providing an essential service to our customers in Montgomery and Prince George's Counties. This commitment to safe, clean water is why WSSC Water continues to report zero drinking water quality violations, a tradition that extends for over 100 consecutive years.

### Drinking Water Source Protection

WSSC Water uses a multi-barrier approach to ensure that we supply safe, reliable and high-quality water to customers. The first step of this approach is protecting the sources of our drinking water, the Patuxent and Potomac rivers. One challenge is that the water in these rivers comes from areas far upstream, where there are multiple land uses and potential pollution sources. Due to the size of the watershed surrounding these two rivers, it is important for WSSC Water to form partnerships with regulatory and administrative agencies for each river. This allows the agency to participate in discussions related to land use policy and ensure source water protection is promoted. These partnerships are also important for raising awareness among partners about concerns related to water quality and safety. WSSC Water plays key roles in the Potomac River Basin Drinking Water Source Protection Partnership and the Patuxent Reservoirs Watershed Protection Group.



### Lead Prevention In Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

WSSC Water adds a corrosion inhibitor (orthophosphate) to the water supply which creates a coating on pipes (including those on customers' property) that prevents the pipes from leaching lead. While it is possible that some homes may have lead service lines or lead solder on the private property, WSSC Water's corrosion control methods can reduce the amount of lead leaching into water from these sources. Information about WSSC Water lead prevention methods can be found at <https://www.wsscwater.com/lead>.

While WSSC Water has not seen any lead levels requiring remediation measures, the following steps are recommended to further reduce the risks:

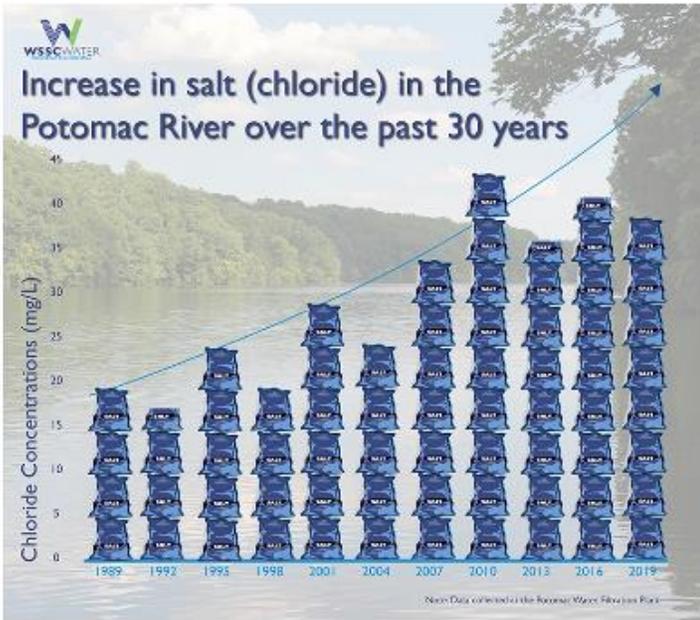
- Run water to flush out any potential lead content: if water has not been used for several hours, run water for 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking
- Use cold water for drinking, cooking and preparing baby formula
- Periodically remove debris from faucet strainers – recommended twice a year
- Have an electrician check the grounding in the home
- Look for alternative sources (e.g. bottled water) or treatment of water if lead levels are elevated
- Get children tested: contact a local health department or healthcare provider to find out how to get children tested for lead, if concerned about exposure

## WATER QUALITY CAMPAIGNS (Continued)

### Saltwise in Winter

Using salt on walkways, driveways and roads is harmful to the environment. Once the ice and snow melt, the salt does not go away. It seeps into the ground and wells, and travels with stormwater into streams, wells and drinking water reservoirs. It also corrodes pipes. It only takes 1 teaspoon of salt (sodium chloride) to permanently pollute 5 gallons of water to a level that is toxic to freshwater ecosystems. Salt in the water does not dissipate.

WSSC Water monitors the water in the Patuxent River reservoirs as well as the Potomac River, the source water for the Patuxent and Potomac WFPs. Sodium chloride levels in WSSC Water's Patuxent River reservoirs have been steadily increasing and, if the trend continues, could pose a problem in the future.



To keep excess salt out of local waterways, please do the following:

- Shovel snow and clear the pavement before snow turns to ice
- Only use salt if there is ice
- Apply the least amount of deicer necessary; a 12-ounce coffee mug full of salt is enough to treat a 20-foot driveway or 10 sidewalk squares
- Scatter the deicer and leave space between the grains
- When pavement temperatures drop below 15 degrees, salt will not work
- Consider using sand for traction
- Choose a deicer with calcium magnesium acetate; this is the most eco-friendly deicer
- Do not pretreat; salt placed on the pavement before a snowfall does not melt it or prevent it from sticking; additionally, weather can change and salt may have to be applied twice if the first application is covered up

## WATER QUALITY CAMPAIGNS (Continued)

### Fats, Oils and 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 FOG 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 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 WRRFs 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 pipes. WSSC Water reminds customers to use the trash can for trash.

### Pharmaceuticals and Other Hazardous Wastes

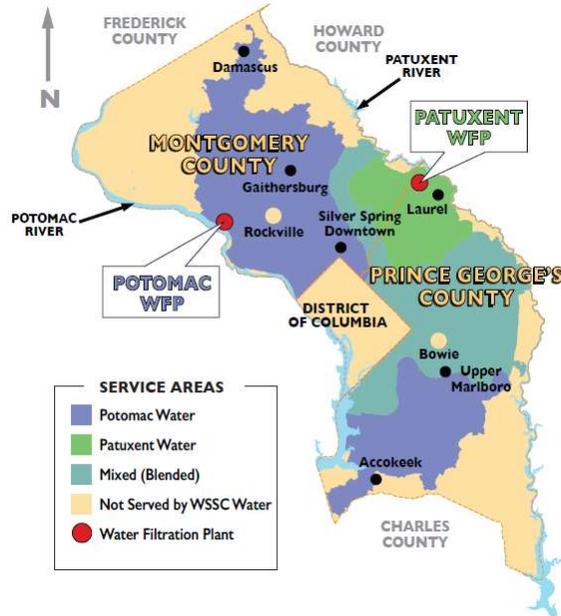
WSSC Water adopted the U.S. Food and Drug Administration recommendations to not dispose of unused or expired pharmaceutical drugs into the sanitary sewer. Any pharmaceutical flushed down the toilet or discharged to the sanitary sewer could potentially make its way into the drinking water source. WRRFs do not treat for many pharmaceuticals. Proper disposal of these items helps prevent future contamination to the environment.

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

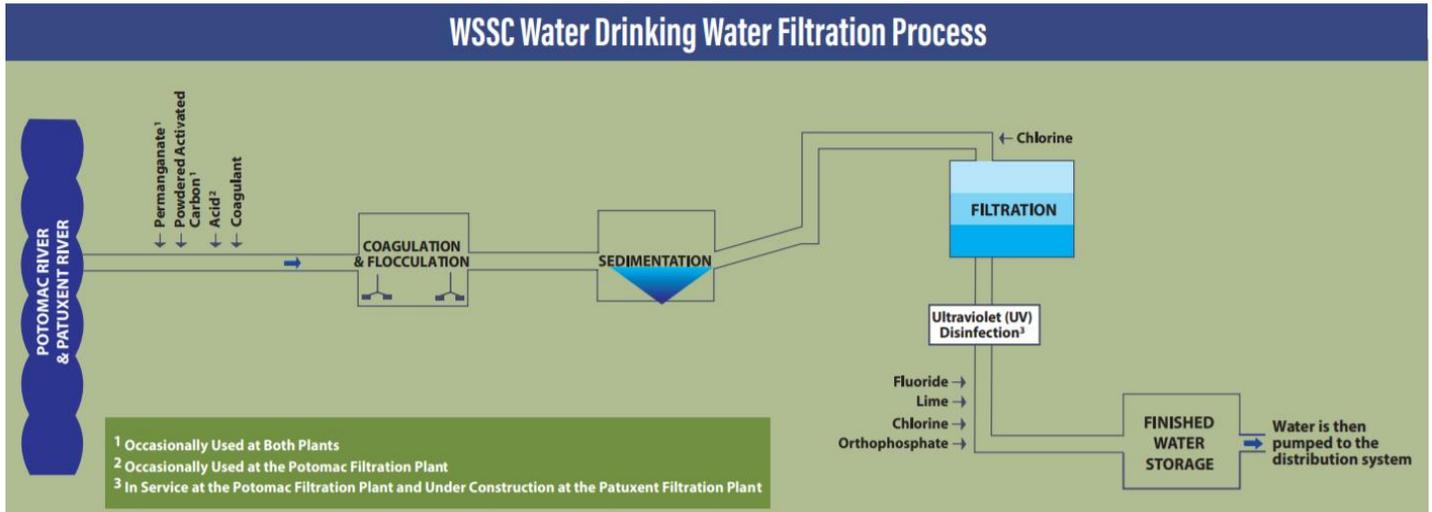
As for other hazardous wastes such as household cleaners, pesticides, paints, motor oil and prescription drugs: never pour them down the drain, in the toilet, on the ground or in storm drains. The best place to take these hazardous substances is to a recycling center. Please contact your County’s solid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

## PERFORMANCE OF KEY SERVICES

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. The Patuxent and Potomac rivers are the sources of all the water we filter and process. The map below shows the approximate service areas of both plants.



WSSC Water drinking water undergoes extensive purification and treatment after it arrives at the plant and before it is sent to the distribution system for delivery. The graph below illustrates the drinking water filtration process.



### Water Filtration and Treatment - Turbidity

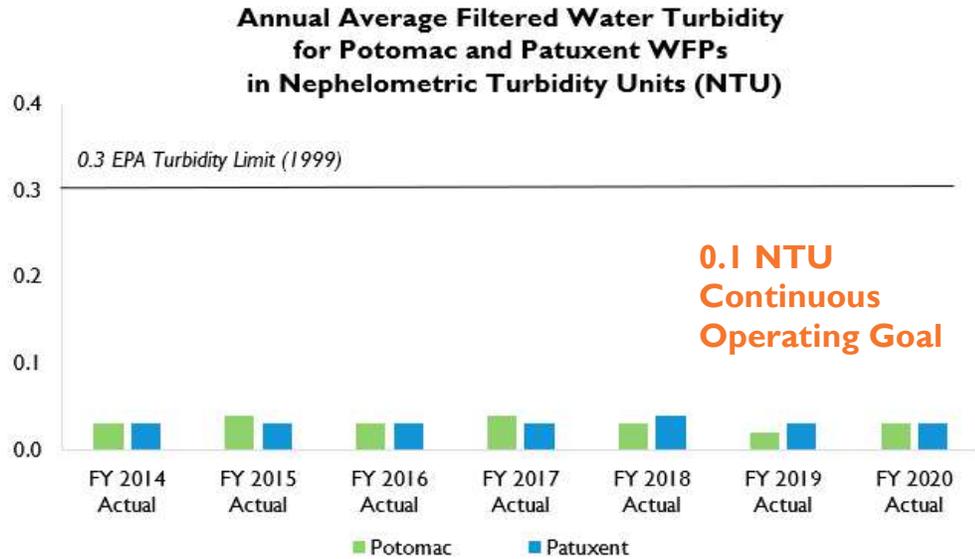
WSSC Water has never exceeded a maximum contaminant level or failed to meet a treatment technique requirement established by the EPA in accordance with the Safe Drinking Water Act.

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 by-products, 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.

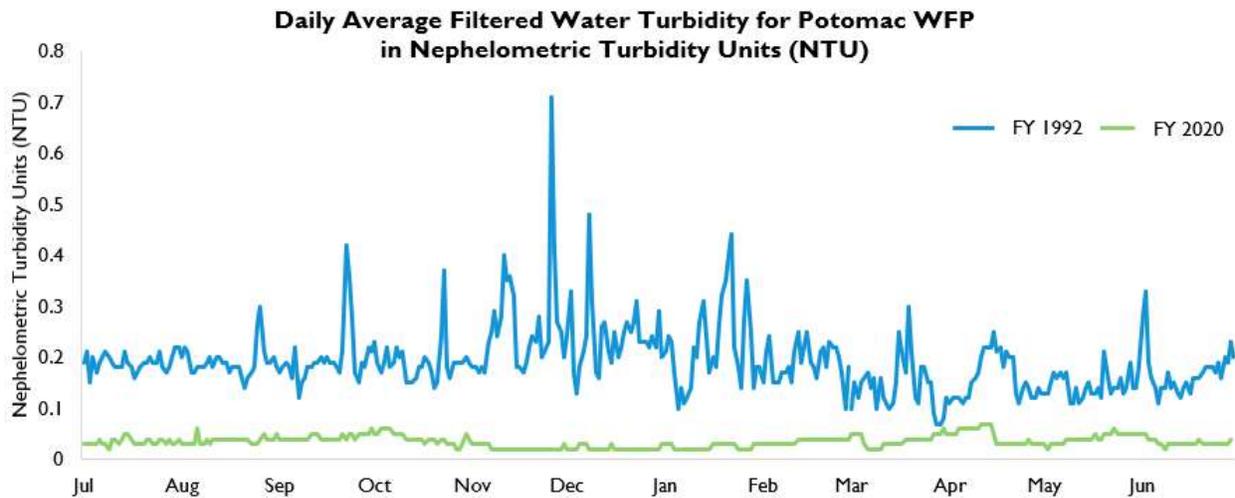
## PERFORMANCE OF KEY SERVICES (Continued)

### Water Filtration and Treatment – Turbidity (Continued)

WSSC Water’s continued participation in the Partnership for Safe Water Program is indicative of our commitment to protecting our drinking water. A primary goal of this program is to maintain filtered water turbidity well below EPA established limits to effectively guard against *Cryptosporidium*. *Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. 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 below shows the average turbidity for the Potomac and Patuxent Water Filtration Plants (WFPs) for FYs 2014-2020. 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.



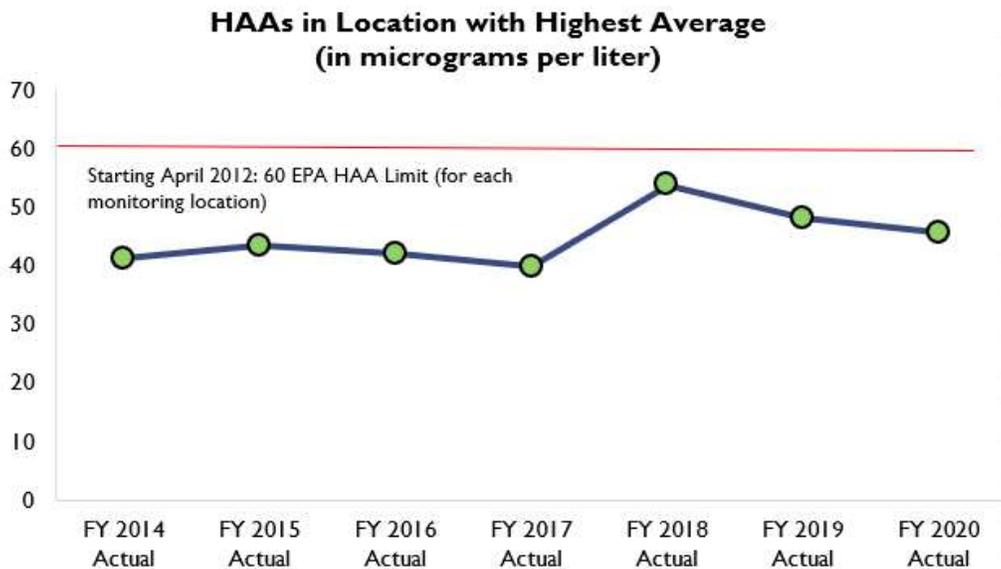
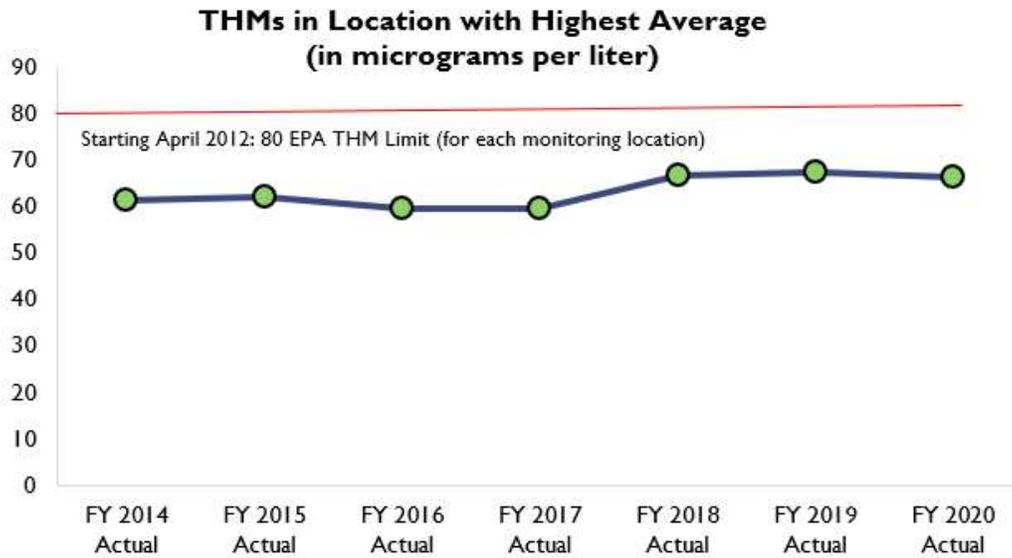
Not only has average turbidity been reduced, but also, as shown in the graph below for the Potomac WFP, the magnitudes of the daily peaks associated with variable raw water quality have been substantially reduced from FY 1992 peak levels. This latter measure is of particular importance in ensuring the reliability of the *Cryptosporidium* barrier. Finally, the ultraviolet disinfection systems at both the Potomac and Patuxent WFPs provide an extra barrier of protection against *Cryptosporidium*.



## PERFORMANCE OF KEY SERVICES (Continued)

### Water Filtration and Treatment – Trihalomethanes and Haloacetic

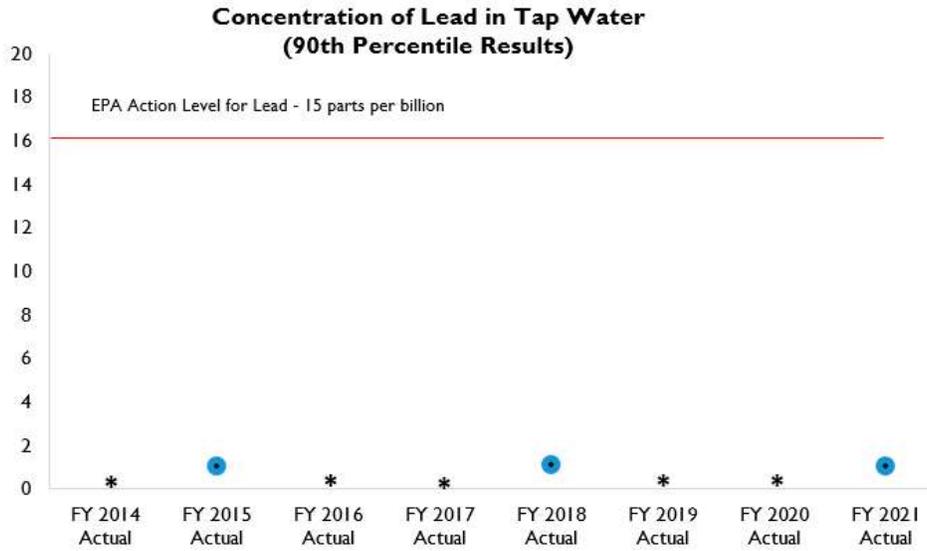
WSSC Water has also been aggressively pursuing enhanced coagulation (optimization of coagulant doses and pH levels to improve total organic carbon removal) to enhance disinfection by-product precursor removal, thereby lessening the formation of potential carcinogens in the finished water. Effective January 2001, the EPA reduced the standard for trihalomethanes (THMs) from 100 to 80 micrograms or lower of total THMs 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 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 By-products 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 by-products 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.



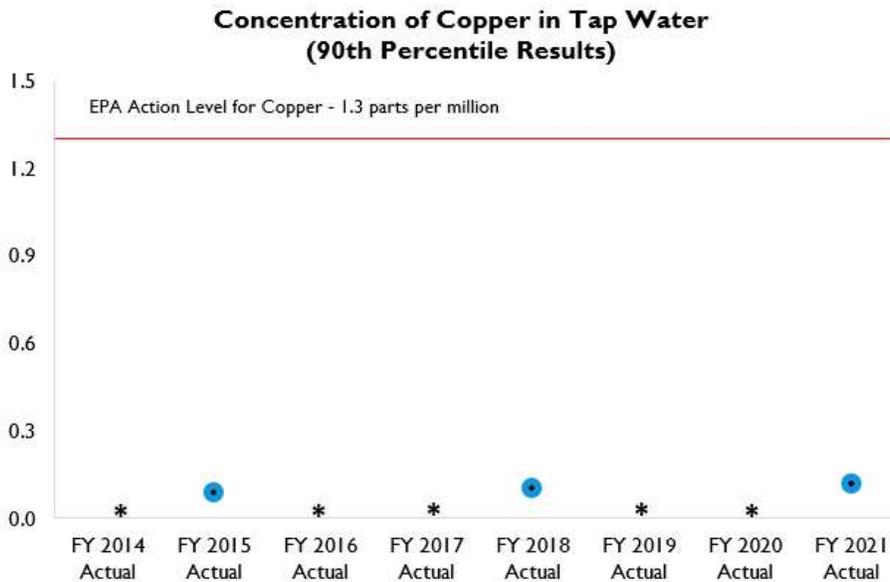
## PERFORMANCE OF KEY SERVICES (Continued)

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

Elevated levels of lead and copper in drinking water can cause serious health problems. WSSC Water 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 2021 with the 90<sup>th</sup> percentile for lead at <1.0 parts per billion. The next round of monitoring will be conducted in early FY 2024.



\*No sampling required in these years.

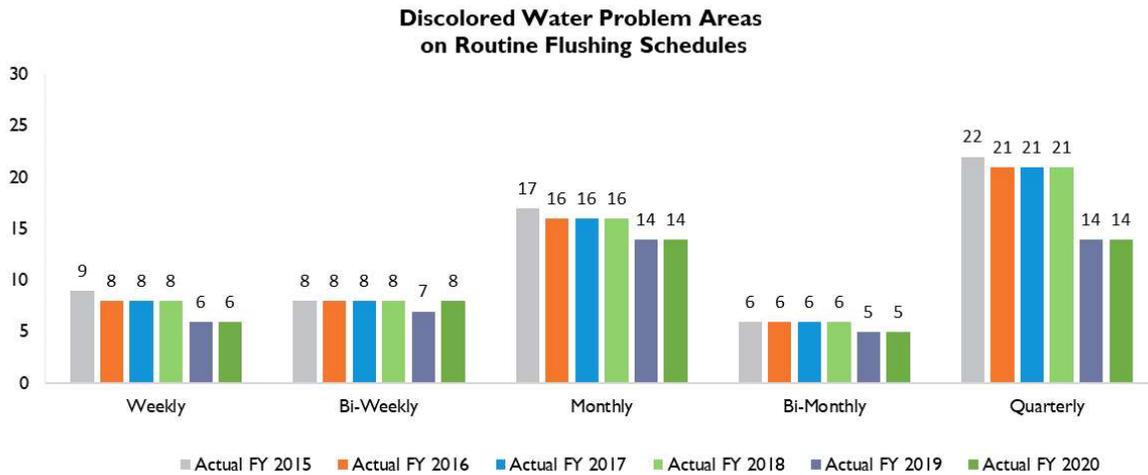
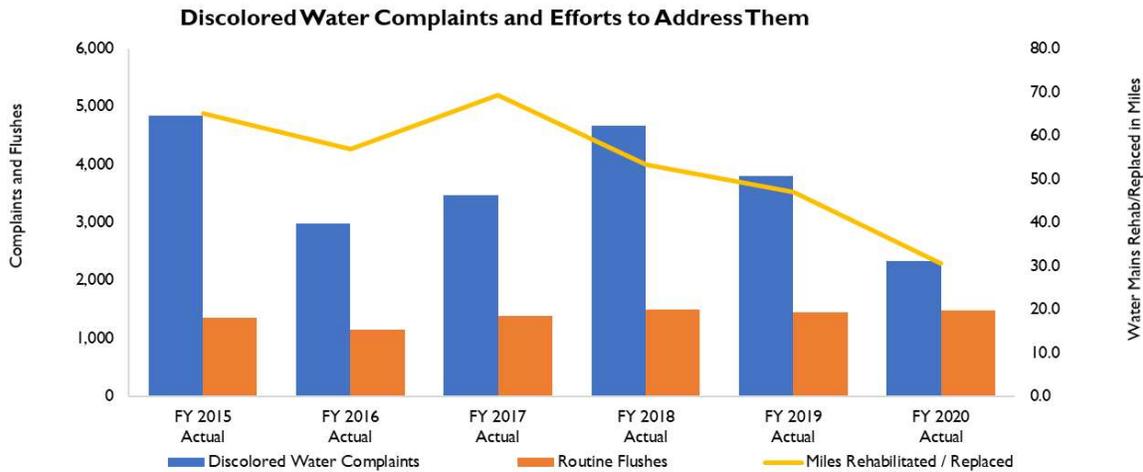


\*No sampling required in these years.

## 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. Cleaning and lining were discontinued in FY 2001 and WSSC Water focused on programmatic replacement of the affected water mains. In FY 2020 the agency replaced 30.6 miles of distribution mains and 4.6 miles of transmission mains. In addition, total discolored water events decreased from 3,802 to 2,333. The total routine flushing of water mains has remained relatively constant from FYs 2015-2020, averaging more than 1,600 a year.

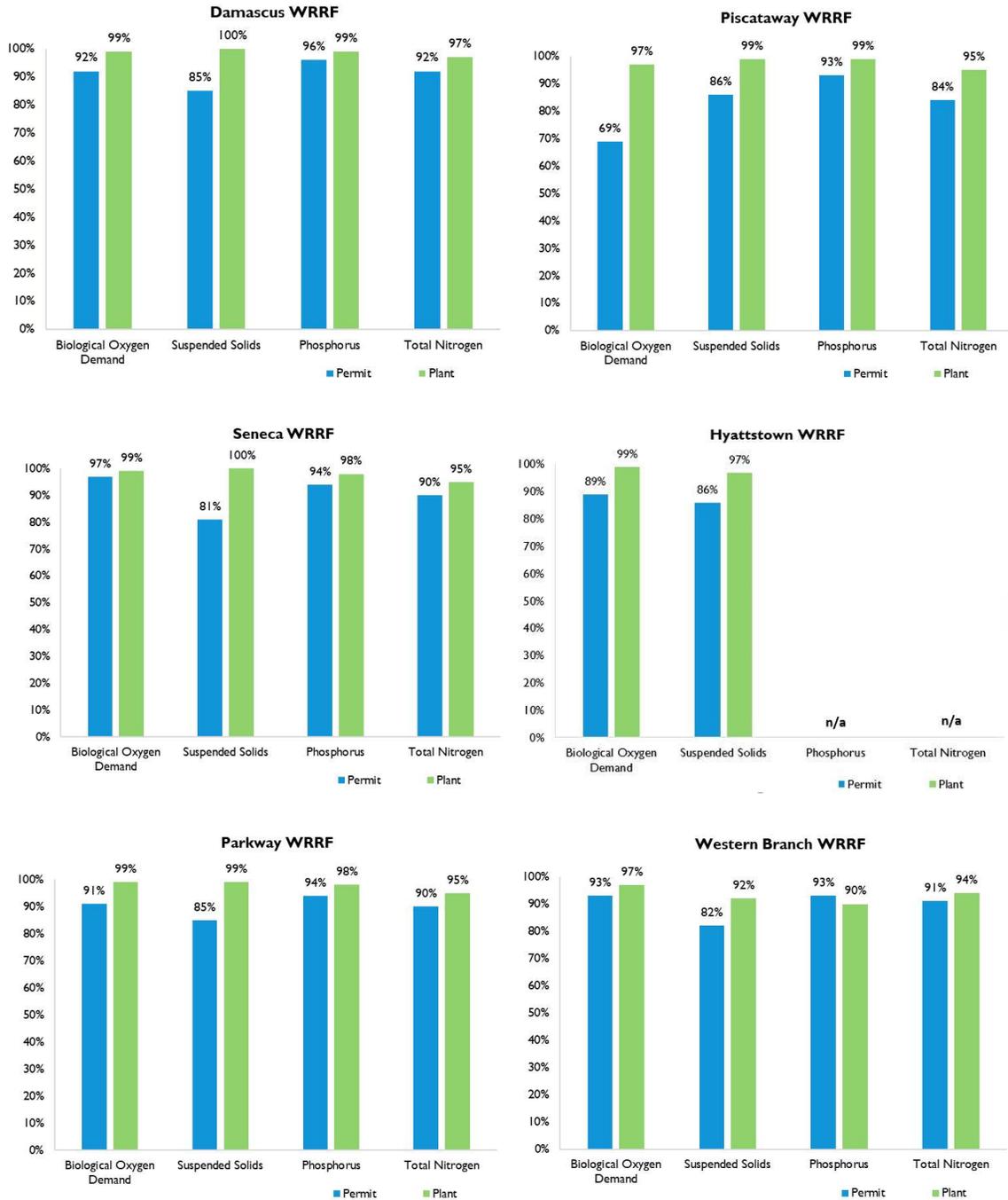


The graph above shows the number of chronic problem areas requiring regular flushing on a weekly, bi-weekly, monthly, bi-monthly or quarterly basis since FY 2015. The number of areas with chronic discolored water problems has remained relatively constant over the years. Apart from the bi-weekly procedures, flushings have decreased in number over the past few years. FY 2020 flushing reductions are attributable to both the impact of the water main replacement programs and reduced water main breaks, resulting in reduced customer complaints.

## PERFORMANCE OF KEY SERVICES (Continued)

### FY 2020 Percentage Removal of Substances Regulated by Discharge Permits

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

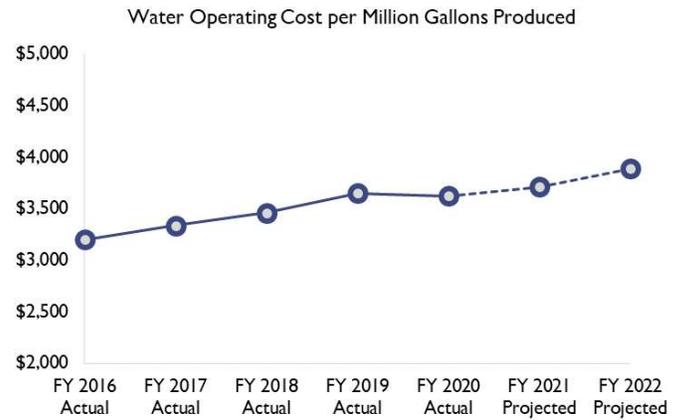
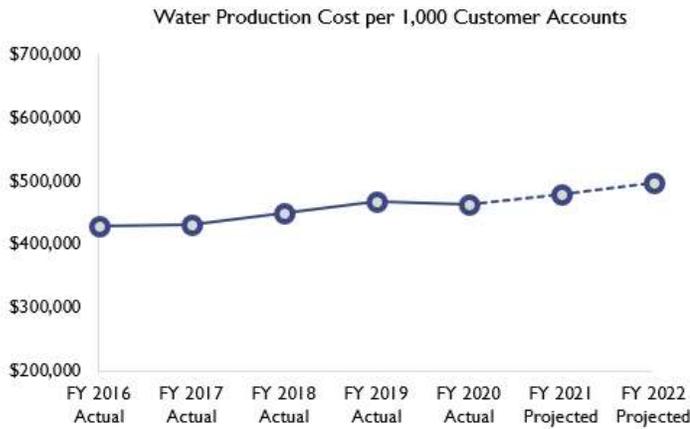


Note: ■ Permit should be less than ■ Plant

## PERFORMANCE OF KEY SERVICES (Continued)

### Water and Wastewater Operations

WSSC Water’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 and consistent with current research findings. Despite 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 Water Operating Cost per Million Gallons Produced, the FY 2020 cost appears slightly lower than in FY 2019 due to reduced energy costs at the WFPs. The Wastewater Operating Cost per Million Gallons of Sewage Treated graph shows the FY 2020 result significantly higher than in FY 2019. The result appears higher due to the FY 2019 all-time-record-setting rainfall and associated infiltration and inflow into the sanitary sewer system, which raised the volume treated and lowered the cost per million gallons treated. The actual treatment costs for FY 2020 were consistent with prior years.



**SECTION II**  
**ORGANIZATIONAL BUDGETS AND MEASURES**

## ORGANIZATIONAL BUDGET AND MEASURES

This section discusses expenses by organizational unit, assumptions related to WSSC Water's workforce and compensation, including retiree benefits. In addition, this section highlights the role, mission and core activities of each organization within the agency. It also provides goals, outcomes and measures for key performance metrics measures by the agency.

### COMPARATIVE EXPENSES BY ORGANIZATIONAL UNIT ALL OPERATING AND CAPITAL FUNDS

Organization	FY 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Change
	Work Years	Amount	Work Years	Amount	Work Years	Amount	
<b>Governance &amp; General Manager's Office</b>							
Commissioners'/Corporate Secretary's Office*	2.0	\$ 260,613	2.0	\$ 389,067	2.0	\$ 410,432	\$ 21,365
Office of the Inspector General*	7.4	1,289,752	10.0	1,569,853	10.0	1,628,871	59,018
General Manager's Office	8.2	1,529,607	8.0	1,428,515	8.0	1,480,154	51,639
General Counsel's Office	25.6	10,813,481	28.0	10,553,926	28.0	10,481,323	(72,603)
<b>Strategy &amp; Partnerships</b>							
Intergovernmental Relations Office	3.8	631,405	4.0	761,095	4.0	778,837	17,742
Strategy & Innovation Office	17.4	3,000,446	19.0	3,156,740	19.0	5,830,574	2,673,834
Communications & Community Relations Office	16.0	2,595,793	19.0	3,062,240	19.0	2,957,801	(104,439)
Human Resources Office	34.4	6,337,223	36.0	7,955,917	36.0	8,049,422	93,505
Equal Employment Opportunities Office	1.0	242,977	1.0	233,664	1.0	237,823	4,159
Customer Service Department	115.1	14,061,223	86.0	13,338,210	94.0	14,197,482	859,272
<b>Operations</b>							
Asset Management Office	4.7	1,634,023	6.0	1,828,820	6.0	1,794,247	(34,573)
Police & Homeland Security Office	33.8	4,959,794	40.0	5,951,654	40.0	5,951,878	224
Engineering & Construction Department	349.2	397,930,450	376.0	571,491,507	376.0	685,173,258	113,681,751
Production Department	311.1	141,838,990	330.0	143,843,456	332.0	152,791,839	8,948,383
Utility Services Department	477.7	94,476,940	512.0	137,722,473	512.0	122,030,861	(15,691,612)
<b>Administration</b>							
Office of Supplier Diversity & Inclusion	8.5	903,320	9.0	1,519,383	9.0	1,292,695	(226,688)
Procurement Office	24.2	2,631,687	27.0	2,691,204	27.0	2,717,721	26,517
General Services Department	88.9	34,123,740	96.0	42,457,998	96.0	41,149,538	(1,308,460)
Finance Department	63.1	7,832,219	64.0	8,167,790	64.0	8,271,660	103,870
Information Technology Department	91.8	66,093,393	103.0	56,460,627	103.0	61,389,484	4,928,857
<b>Other</b>							
Human Resources Non-Departmental	-	24,460,411	-	31,456,610	-	31,665,326	208,716
Finance Non-Departmental							
Debt Service	-	293,268,854	-	325,593,000	-	316,827,000	(8,766,000)
PAYGO	-	-	-	31,016,000	-	27,585,000	(3,431,000)
Other (Social Security, Retirement, etc.)	-	50,409,447	-	53,138,404	-	51,914,428	(1,223,976)
Retirement Trust Chargeback	-	(756,355)	-	(750,042)	-	(769,300)	(19,258)
<b>Total</b>	<b>1,683.9</b>	<b>\$1,160,569,433</b>	<b>1,776.0</b>	<b>\$1,455,038,111</b>	<b>1,786.0</b>	<b>\$1,555,838,354</b>	<b>\$ 100,800,243</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</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</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</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>						
Human Resources Non-Departmental	X	X	X	X	X	X
Finance Non-Departmental						
Debt Service	X	X	X			
PAYGO	X	X				
Other (Social Security, Retirement, etc.)	X	X	X	X	X	X
Retirement Trust Chargeback	X	X				

## WORKFORCE AND COMPENSATION

The workforce and compensation assumptions proposed for Fiscal Year (FY) 2022 incorporate the policy and guideline recommendations discussed in the Section 5.

### Salaries & Wages Summary

	<u>FY 2022 Proposed</u>	
	Work Years	Amount
Base Positions Funded Full Year	1,786	\$ 160,479,528
Overtime		8,088,000
<b>Subtotal</b>		<b>168,567,528</b>
Lapse on Base Positions*		(8,292,449)
<b>Subtotal</b>		<b>160,275,079</b>
Salary Enhancements		826,000
Salary - 6 Commissioners		78,500
<b>Total</b>	<b>1,786</b>	<b>\$161,179,579</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 2022 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 2022. The employer rates are 6.2% for Social Security and 1.45% for Medicare.

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 are set based on various factors, including the fund balance in the Retiree Other Post-Employment Benefits (OPEB) Trust and claims cost experience.

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.

## GOVERNANCE & GENERAL MANAGER'S OFFICE

Governance & General Manager's Office are comprised of the offices listed below.

### Budget Summary

Governance & General Manager's Office	FY 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Commissioners'/Corporate Secretary's Office(*)	2.0	\$ 260,613	2.0	\$ 389,067	2.0	\$ 410,432	-	\$ 21,365
Office of the Inspector General(*)	7.4	1,289,752	10.0	1,569,853	10.0	1,628,871	-	59,018
General Manager's Office	8.2	1,529,607	8.0	1,428,515	8.0	1,480,154	-	51,639
General Counsel's Office	25.6	10,813,481	28.0	10,553,926	28.0	10,481,323	-	(72,603)
<b>Total</b>	<b>43.2</b>	<b>\$ 13,893,453</b>	<b>48.0</b>	<b>\$ 13,941,361</b>	<b>48.0</b>	<b>\$ 14,000,780</b>	<b>-</b>	<b>\$ 59,419</b>

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

## COMMISSIONERS'/CORPORATE SECRETARY'S OFFICE

WSSC Water is governed by a six-member Commission of appointed officials.

The Commission provides oversight of WSSC Water 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 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 and Corporate Functions – The Commission provides public oversight of WSSC Water, conducts the corporate business of the agency, such as adopting rates and fees, reviewing management reports and approving contracts. 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 Commission 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 Commission.

The OIG assesses the effectiveness and efficiency of WSSC Water operations and programs and serves to promote transparency for the agency stakeholders, as well as serving as the 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, 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 Request Audits** – The OIG periodically receives requests for audit work from Commissioners, WSSC Water's Board of Ethics and WSSC Water's 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.

## OFFICE OF THE INSPECTOR GENERAL (Continued)

### Core Activities (Continued)

Fraud, Waste and Abuse Hotline – This activity provides a centralized reporting vehicle for WSSC Water’s 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 includes Certified Fraud Examiners which serves as investigators of occurrences reported through the Fraud, Waste and Abuse 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.

## GENERAL COUNSEL'S OFFICE (Continued)

### 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 offices and departments listed below.

### Budget Summary

Strategy & Partnerships	FY 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Intergovernmental Relations Office	3.8	\$ 631,405	4.0	\$ 761,095	4.0	\$ 778,837	-	\$ 17,742
Strategy & Innovation Office	17.4	3,000,446	19.0	3,156,740	19.0	5,830,574	-	2,673,834
Communications & Community Relations Office	16.0	2,595,793	19.0	3,062,240	19.0	2,957,801	-	(104,439)
Human Resources Office	34.4	6,337,223	36.0	7,955,917	36.0	8,049,422	-	93,505
Equal Employment Opportunities Office	1.0	242,977	1.0	233,664	1.0	237,823	-	4,159
Customer Service Department	115.1	14,061,223	86.0	13,338,210	94.0	14,197,482	8.0	859,272
<b>Total</b>	<b>187.7</b>	<b>\$ 26,869,067</b>	<b>165.0</b>	<b>\$ 28,507,866</b>	<b>173.0</b>	<b>\$ 32,051,939</b>	<b>8.0</b>	<b>\$ 3,544,073</b>

## 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. The office cultivates and maintains key stakeholder relationships with elected, government, community, industry and business stakeholders to champion WSSC Water’s policy interests and obtain resources necessary to fulfill our mission of providing safe and reliable water, life’s most precious resource, and returning clean water to our environment, all in an ethical, sustainable and financially responsible manner.

### 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. Led by the Chief Strategy & Innovation Officer, the office is comprised of the divisions in the following chart.

### 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 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Strategy & Innovation Officer	1.9	\$ 296,643	2.0	\$ 370,524	2.0	\$ 379,228	-	\$ 8,704
Strategic Performance Division	9.7	1,242,329	11.0	1,366,784	11.0	1,424,440	-	57,656
Innovation & Research Division	5.8	1,461,473	6.0	1,419,432	6.0	1,392,306	-	(27,126)
Organizational Development Division(*)	-	-	-	-	-	2,634,600	-	2,634,600
<b>Total</b>	<b>17.4</b>	<b>\$ 3,000,445</b>	<b>19.0</b>	<b>\$ 3,156,740</b>	<b>19.0</b>	<b>\$ 5,830,574</b>	<b>-</b>	<b>\$ 2,673,834</b>

(\*) As of FY 2022, the Organizational Development Division was established.

### Explanation of Major Variances

The FY 2022 Proposed Budget for the office reflects an increase of approximately 85% over the FY 2021 Approved Budget. The increase is primarily due to creation of a new division, Organizational Development, focused on increasing organizational effectiveness through changes in processes and systems.

### Highlights

- Facilitates Project Cornerstone organizational development to stabilize Customer-to-Meter (C2M) billing system and processes
- Initiated a flexible hose pipe liner pilot request-for-proposal planning starting in FY 2022. This innovative pipe liner is ideal for bridge and river crossings because it minimizes impact to the bridge or river and is a more cost-effective approach than a dig and replace option

## STRATEGY & INNOVATION OFFICE (Continued)

### Accomplishments

- Introduced the risk management process across the strategic sourcing lifecycle, provided training and facilitated risk workshop for the strategic sourcing initiatives
- Completed the leak detection technical evaluation and recommended satellite leak detection. Satellite leak detection has moved onto the implementation phase on 1,000 miles of water main. Preliminary results show a significant reduction in cost per leak found over status quo
- Installed and began pilot testing a smart flushing unit; this unit monitors water quality and flushes the system when chlorine or turbidity are outside of specified range until water quality has recovered, avoiding customer complaints, optimizing flushing operations and increasing understanding of how water quality responds to flushing
- Completed design and construction of dewatering flow meters for water removal and accurately tracking the amount of water lost during a dewatering/emptying a pipe; pilot testing is underway
- Completed various plant production improvements by developing innovative products including a solids bin de-clogging air cannon at Patuxent water filtration plant (WFP) and a solids pump repair rigging system, a lime silo high-flow chute adaptor and a sedimentation pump electric hoist crane, all at the Potomac WFP
- Developed C2M Performance Dashboard to provide the ability to drill-down into the high level data
- Prepared weekly COVID-19 situation report for WSSC Water's Operational Continuity Team
- Started the side-stream enhanced biological phosphorus removal pilot at Parkway Water Resource Recovery Facility (WRRF)
- Developed a business and marketing plan for the biosolids WSSC Water will produce at the new Piscataway Bioenergy facility

## OFFICE OF THE CHIEF STRATEGY & INNOVATION OFFICER

The Chief Strategy & Innovation Officer is responsible for leading and managing the Strategy & Innovation Office.

### 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 agency.

## 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 functions include strategic plan workshops, all management meetings and employee outreach efforts.

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 PERFORMANCE DIVISION (Continued)

### Core Activities (Continued)

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 WSSC Water Performance Report, WSSC Water internal dashboards, American Water Works Association utility benchmarking, employee survey analysis and data visualization and analysis training.

## INNOVATION & RESEARCH DIVISION

The Innovation & Research Division focuses on finding new ideas, technologies and process changes to improve operational efficiency, empower employees, develop new products and services, create new tools to compliment safe work practices, share our knowledge and expertise to benefit the industry, expand our partnerships and increase the sustainability of our infrastructure. The office also identifies, evaluates and pursues revenue opportunities created from innovative ideas and research.



### Core Activities

Innovation and Research – This activity researches problems, develops possible solutions and tests results. The division applies ideas and solutions to increase internal and external 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.

## ORGANIZATIONAL DEVELOPMENT DIVISION

Organizational Development (OD) is a new division within the Strategy & Innovation Office focused on increasing organizational effectiveness through changes in processes and systems. OD supports WSSC Water in adapting to change by facilitating cross-organizational teams to achieve anticipated business outcomes for transformational projects. In FY 2022, OD will be focused on supporting the Customer Service, Utility Services and Finance departments in adapting to WSSC Water’s C2M and Mobile Workforce Management systems.

## ORGANIZATIONAL DEVELOPMENT DIVISION (Continued)

### Core Activities

Facilitation – This activity includes leading weekly meeting of business offices to share cross-organizational perspectives on system adaptation and prioritize fixes for quarterly technology releases. It plans OD work activities to improve business outcomes.

Process – This activity comprises of working with business leaders to document and streamline work processes through system re-configurations and robotic process automation. It provides quality assurance and operations support to fulfill tasks generated by systems.

People – This activity develops tailored communication on process and system changes resulting from quarterly releases, provide training on system changes and develop dashboards and data marts to assist managers in making data-driven decisions.

## 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 website.

## COMMUNICATIONS & COMMUNITY RELATIONS OFFICE (Continued)

### Core Activities (Continued)

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 giving campaigns. This activity also communicates WSSC Water’s strategic priorities and values to the agency’s 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.

Web Content Administration – This activity includes overall management of WSSC Water's 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 Office is responsible for planning, administering and evaluating the WSSC Water's personnel related programs and supports the negotiation and management of any collective bargaining agreement. The Human Resources Office develops and maintains the employee benefit structures and the classification and compensation programs, conducts training courses and manages the employee recruitment functions. The Human Resources Office also provides counseling services on a variety of employee relations issues, and adheres to all applicable federal, state and local regulations. It is also responsible for providing a safe and healthy work environment for WSSC Water employees, administering occupational 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 including succession management and tuition 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 the development, administration and communication of all employee and retiree benefit plans, leave programs and deferred compensation plan to ensure they meet all regulatory requirements and interfaces with GCO, payroll and other financial systems. This activity also provides for the employee wellbeing program, which incorporates opportunities for employees to become engaged to make healthier behavioral and lifestyles choices.

## HUMAN RESOURCES OFFICE (Continued)

### Core Activities (Continued)

Employee and Labor Relations – This activity designs, implements and administers WSSC Water's human resources programs including, but not limited to employee relations, labor relations, accommodations, unemployment, onboarding, exit processes, policies and procedures. provides advice and guidance on human resources services to departments and staff offices on resolution of employee relations and labor relations matters. This activity provides support for collective bargaining; compliance with employment regulations; and policy development, implementation and interpretation as well as other assigned duties.

Compensation and Human Resources Information System – This activity develops, plans and manages the compensation program in alignment with WSSC Water's compensation philosophy and regulatory requirements, and manages the human resources information management system. This activity develops and maintains the classification and pay schedules, maintains job descriptions, performs market analysis and job evaluations to determine appropriate grade assignment, addresses salary issues provides report and data analysis and maintains employee records.

Talent Acquisition – This activity includes recruitment, internal staffing (promotions, transfers and voluntary demotions), assessment testing, selection, hiring and onboarding compliance processes. This function is also responsible for internship, apprenticeship and student cooperative program development, implementation and management. This function assists with contingent worker hiring, workforce planning, and statistical analysis of recruitment and staffing activities.

Occupational Safety and Health – This activity provides for the development and supervision of the agency-wide programs to minimize the risk of injuries, accidents and damage to WSSC Water 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 the 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 throughout WSSC Water related to EEO, harassment, diversity and ADR. The EEO Office is responsible for developing a 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

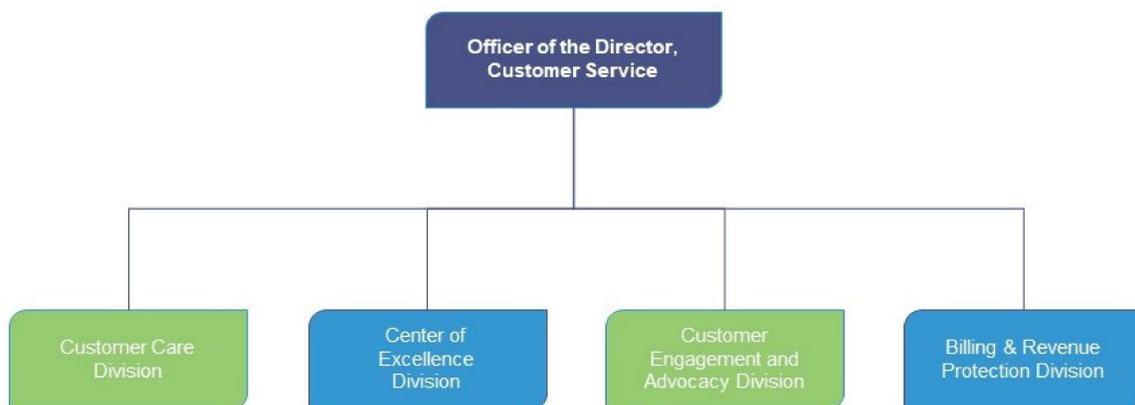
Equal Employment Opportunities – This activity directs the application of WSSC Water's equal employment principles and goals, and outlines the responsibilities of management, supervisory and non-supervisory personnel in fostering a spirit of equal employment opportunity. Also included in the activity 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 and sewer bills. Key priorities include improving the overall customer experience, streamlining operations to improve customer satisfaction and enhancing customer relationships. Led by the Customer Service Director, the department is comprised of the four divisions shown in the chart below.



## 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.

## CUSTOMER SERVICE DEPARTMENT (Continued)

### Budget Summary

Customer Service Department	FY 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, Customer Service	5.1	\$ 755,650	4.0	\$ 722,517	4.0	\$ 728,803	-	\$ 6,286
Customer Care Division	62.5	6,375,763	50.0	5,897,694	54.0	6,671,421	4.0	773,727
Center of Excellence Division	6.2	757,610	5.0	713,446	5.0	724,674	-	11,228
Customer Engagement & Advocacy Division	4.7	559,506	6.0	604,404	6.0	752,998	-	148,594
Billing & Revenue Protection Division	36.6	5,612,694	21.0	5,400,149	25.0	5,319,586	4.0	(80,563)
<b>Total</b>	<b>115.1</b>	<b>\$ 14,061,223</b>	<b>86.0</b>	<b>\$ 13,338,210</b>	<b>94.0</b>	<b>\$ 14,197,482</b>	<b>8.0</b>	<b>\$ 859,272</b>

### Explanation of Major Variances

The FY 2022 Proposed Budget for the department reflects an increase of approximately 6% from the FY 2021 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 with the C2M billing system
- The addition of two new workyears to assist with revenue recovery
- Continued funding for enhancements to financial assistance programs that will provide conservation kits, plumbing inspections for qualified customers and high bill leak adjustment assistance to qualified customers

### Accomplishments

- Improved billing timeliness by billing over 99.5% of customer accounts in a timely manner
- Launched the Here to Help Campaign to improve customer awareness about WSSC Water's financial assistance programs
- Increased funding for financial assistance programs and revised policies to enhance participation

## OFFICE OF THE DIRECTOR, CUSTOMER SERVICE

The Customer Service Director is responsible for leading and managing the Customer Service Department.

### Core Activities

Management and Administration – This activity involves the management and supervision of the 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 and Research & Communications Section. The division responds to general and complex customer requests, such as customer assistance with billing matters, research and analysis and assisting our walk-in customers.



### Core Activities

**Customer Correspondence** – This activity addresses 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 focuses on 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 addresses 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 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 to customer problems or system emergencies. **Strategic Priority:** Enhance customer experience

Objectives	Outcome Measure	FY 2019 Actual / Target	FY 2020 Actual / Target	FY 2021 Target	FY 2022 Target
Respond to customers' telephone calls	Percentage of calls answered (non-emergency calls)	82.8% / 92.0%	85.9% / 95.0%	87.0% *	95.0%

(\*) The decrease in the target from 95.0% in FY 2020 to 87.0% 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 DIVISION

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

### Core Activities

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

Process and 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 Awareness – 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 and 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 and 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 and 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. 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 distribution and sewer collection systems, ensuring continuous delivery of life's most precious resource. The offices and departments that fall under Operations are listed in the table below.

### Budget Summary

Operations	FY 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Asset Management Office	4.7	\$ 1,634,023	6.0	\$ 1,828,820	6.0	\$ 1,794,247	-	\$ (34,573)
Police & Homeland Security Office	33.8	4,959,794	40.0	5,951,654	40.0	5,951,878	-	224
Engineering & Construction Department	349.2	397,930,450	376.0	571,491,507	376.0	685,173,258	-	113,681,751
Production Department	311.1	141,838,990	330.0	143,843,456	332.0	152,791,839	2.0	8,948,383
Utility Services Department	477.7	94,476,940	512.0	137,722,473	512.0	122,030,861	-	(15,691,612)
<b>Total</b>	<b>1,176.5</b>	<b>\$ 640,840,197</b>	<b>1,264.0</b>	<b>\$ 860,837,910</b>	<b>1,266.0</b>	<b>\$ 967,742,083</b>	<b>2.0</b>	<b>\$ 106,904,173</b>

## 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 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.

## POLICE & HOMELAND SECURITY OFFICE (Continued)



### **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.

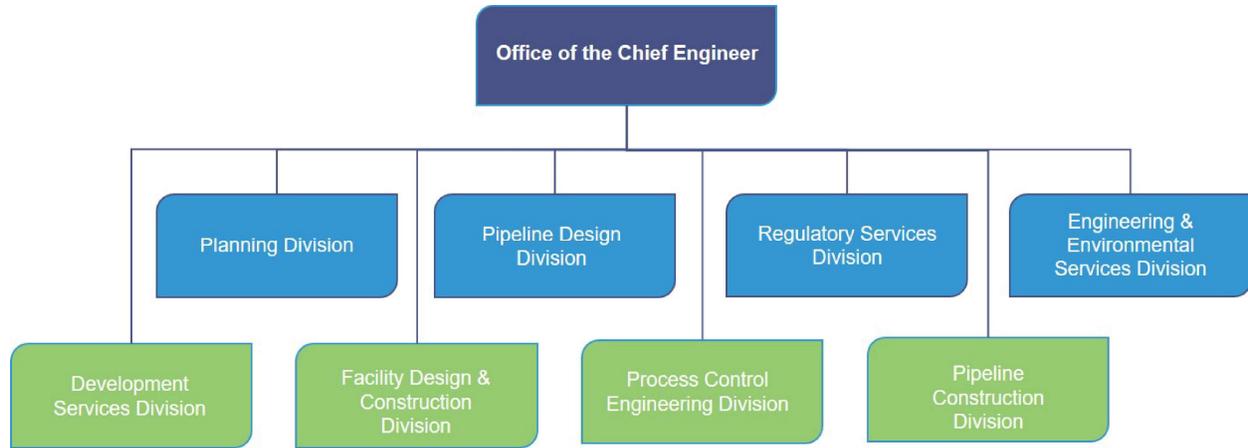
Emergency Management – This activity includes coordination of the entire preparedness cycle - planning, training and exercising, for emergency situations and disasters. This activity is also responsible for assisting in the agency-wide coordination of response to large-scale emergency incidents and disasters and coordinating with state and local government public safety agencies 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. Led by the Chief Engineer, the department is comprised of the eight divisions shown in the chart below.

### Organizational Structure



### Mission Statement

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

### Budget Summary

Engineering & Construction Department	FY 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Engineer	1.4	\$ 247,990	4.0	\$ 4,754,711	4.0	\$ 7,495,254	-	\$ 2,740,543
Development Services Division	52.3	5,668,768	51.0	5,753,519	51.0	5,900,338	-	146,819
Planning Division	13.0	57,734,686	15.0	71,725,328	15.0	69,351,070	-	(2,374,258)
Facility Design & Construction Division	29.6	132,406,747	34.0	144,068,425	34.0	217,885,379	-	73,816,954
Pipeline Design Division	33.0	16,293,234	37.0	28,796,137	37.0	33,246,831	-	4,450,694
Process Control Engineering Division	13.6	2,729,128	14.0	2,724,832	14.0	2,728,070	-	3,238
Regulatory Services Division	72.8	7,359,693	77.0	7,216,071	77.0	7,285,613	-	69,542
Pipeline Construction Division	75.3	163,644,823	82.0	293,262,243	82.0	328,825,295	-	35,563,052
Engineering & Environmental Services Division	58.2	11,845,381	62.0	13,190,241	62.0	12,455,408	-	(734,833)
<b>Total</b>	<b>349.2</b>	<b>\$ 397,930,450</b>	<b>376.0</b>	<b>\$ 571,491,507</b>	<b>376.0</b>	<b>\$ 685,173,258</b>	<b>-</b>	<b>\$ 113,681,751</b>

## ENGINEERING & CONSTRUCTION DEPARTMENT (Continued)

### Explanation of Major Variances

The FY 2022 Proposed Budget for the E&C Department reflects an overall increase of almost 20% from the FY 2021 Approved Budget. The increase is entirely attributable to the capital budget, as the operating budget for the E&C Department decreased by about \$0.1 million. The increase in the capital budget is primarily driven by the annual update to the Capital Improvements Program (CIP), which is \$98.3 million higher overall in FY 2022, as discussed in Section 8. The increase reflects the ramping up of construction on the Piscataway Bioenergy project and the addition of five new wastewater pumping station (WWPS) and force main replacement projects to address aging assets that are at or beyond their useful lives.

### Highlights

- WSSC Water continues to comply with all aspects of the Sanitary Sewer Overflow (SSO) Consent Decree
- A total of 39 miles of sewer assets were identified for rehabilitation as part of the Piscataway Rehabilitation Program and are in various stages of design and construction with completion anticipated in FYs 2023 and 2024
- 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; Construction will be completed for the short-term improvements, leak mitigation and filter drain valve replacements in FY 2021; Final design is underway on the gravity thickeners expansion with construction bid anticipated in the fall of 2021; Final design is underway on the upgrades to the sedimentation basins and backwash treatment system with construction bid anticipated in early 2022
- The Piscataway Bioenergy project started construction in FY 2020 and will continue in FY 2021 with an anticipated substantial completion by November 2024

### Accomplishments

- For the distribution and transmission mains reconstruction programs, the E&C Department completed 32.7 miles of water main rehabilitation in FY 2020
- The final phase (close-out) of the Broad Creek WWPS Augmentation project will be complete by January 1, 2021

## OFFICE OF THE CHIEF ENGINEER

The Chief Engineer is responsible for leading and managing the E&C Department.

### 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 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; administers the System Development Charge (SDC) reimbursement process; and reviews and processes site utility plans, 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 the adequacy of existing mains and requirements for the size and alignment of new water and 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 and 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 main, sewer main, force main, 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 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.

## PLANNING DIVISION (Continued)

### Core Activities (Continued)

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, D.C. 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 all planning work 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.

### Core Activities

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

Facility Construction – This activity funds and manages facility construction projects, including ensuring contract terms, general conditions and specifications are fulfilled; reviewing submittals; 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.

## PIPELINE DESIGN DIVISION (Continued)

### 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 project scope preparation and design, overseeing consultants, performing technical reviews, coordinating community outreach and acquiring rights-of-way permits.

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

### Goals, Objectives and Outcome Measures

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

Strategic Priority: Optimize Infrastructure

Objectives	Outcome Measure	FY 2019 Actual / Target	FY 2020 Actual / Target	FY 2021 Target	FY 2022 Target
Design the number of miles for the Water Reconstruction Program as planned	Miles of water mains designed	26.0 / 25.0	25.6 / 25.0	25.0	25.0
Design the number of miles for the Sewer Reconstruction Program as planned	Miles of sewer mains designed	25.8 / 20.0	25.2 / 25.0	25.0 *	33.0

(\*) 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 pretreatment (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 hazardous materials entering the sewer system; monitors and inspects cross connections to prevent backflow contamination; maintains the Plumbing and Fuel Gas Code; maintains engineering design and meter design standards; reviews and approves plumbing and 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 Fuel Gas 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 and Gas-Fitting 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 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

**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. It also includes inspection of work performed by others, such as developers and relocations by state, County, and municipal agencies.

**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.

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

## Goals, Objectives and Outcome Measures

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

**Strategic Priority:** Optimize Infrastructure

Objectives	Outcome Measure	FY 2019 Actual / Target	FY 2020 Actual / Target	FY 2021 Target	FY 2022 Target
Replace the number of miles for the Water Reconstruction Program as planned	Miles of water mains replaced	43.8 / 43.0	28.1 / 23.0	23.0	29.0
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	16.4 / 35.0	10.1 / 38.0	38.0 *	42.0

(\*) 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 Enterprise Geographic Information System (EGIS) including: development, installation and programmatic oversight; collaboration with government agencies and other entities; and providing GIS data access to WSSC Water employees and other entities.

Electrical and 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.

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 Webmap.

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

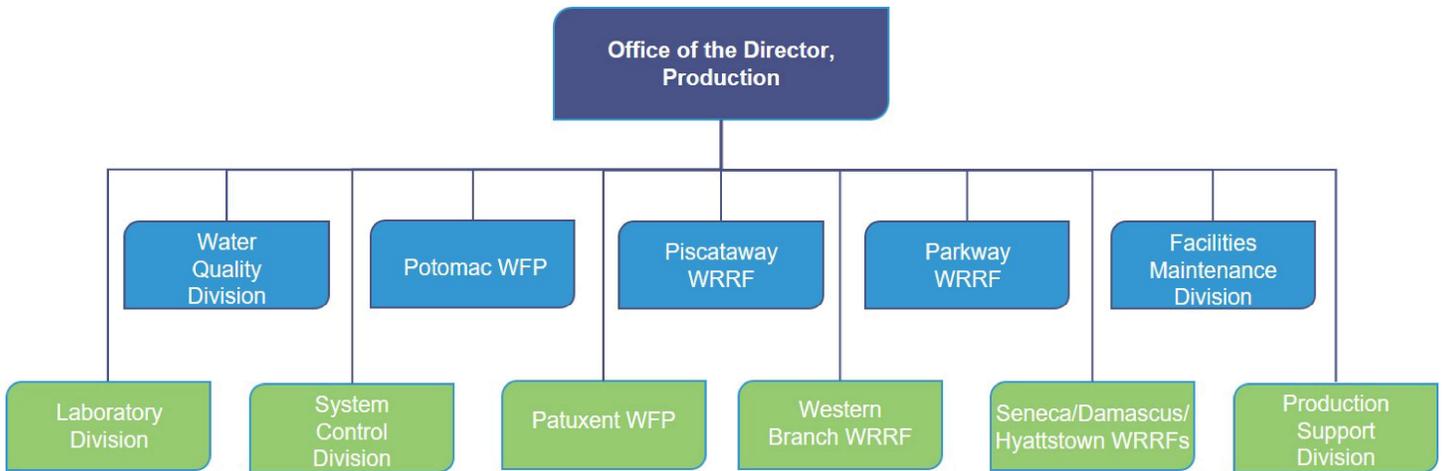
Electronic As-Built Prep – This activity prepares pipeline rehabilitation as-built contracts using AutoCad, including integrating the Global Positioning System (GPS) units to transmit digital appurtenance locations to AutoCad. The AutoCad results are then transmitted to EGIS.

# 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 is comprised of 11 divisions shown in the following chart.



## 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, wastewater resource recovery facilities, biosolids management programs and laboratories.

## PRODUCTION DEPARTMENT (Continued)

### Budget Summary

Production Department	FY 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, Production	3.8	\$ 636,257	4.0	\$ 604,018	4.0	\$ 618,525	-	\$ 14,507
Laboratory Division	29.2	4,267,245	29.0	4,299,048	29.0	4,318,259	-	19,211
Water Quality Division	6.8	919,231	8.0	1,701,874	8.0	1,709,593	-	7,719
Systems Control Division	32.2	5,146,015	32.0	4,662,041	32.0	9,284,912	-	4,622,871
Potomac WFP	33.1	9,392,764	35.0	10,035,773	35.0	9,627,597	-	(408,176)
Patuxent WFP	24.2	4,654,167	26.0	4,767,337	26.0	4,670,399	-	(96,938)
Piscataway WRRF	25.2	9,656,223	26.0	11,458,693	28.0	10,913,482	2.0	(545,211)
Western Branch WRRF	30.4	11,528,023	32.0	9,405,050	32.0	9,715,551	-	310,501
Parkway WRRF	20.1	3,966,800	22.0	3,708,834	22.0	3,819,528	-	110,694
Seneca/Damascus/Hyattstown WRRFs	31.1	6,043,602	32.0	5,943,737	32.0	6,052,612	-	108,875
Facilities Maintenance Division	60.2	17,697,643	68.0	17,605,636	68.0	20,363,828	-	2,758,192
Production Support Division	14.8	67,931,020	16.0	69,651,415	16.0	71,697,553	-	2,046,138
<b>Total</b>	<b>311.1</b>	<b>\$ 141,838,990</b>	<b>330.0</b>	<b>\$ 143,843,456</b>	<b>332.0</b>	<b>\$ 152,791,839</b>	<b>2.0</b>	<b>\$ 8,948,383</b>

### Explanation of Major Variances

The Production Department FY 2022 Proposed Budget reflects an increase of approximately 6.0% over the FY 2021 Approved Budget. The increase is primarily due to new funding for water tank rehabilitation; hydraulic dredging of the Triadelphia Reservoir; facility maintenance projects; and additional DC Water operational costs. This increase is partially offset by decreased chemical costs.

### Highlights

- Two new workyears are included for the new Piscataway BioEnergy facility
- Water tank rehabilitation is underway for three elevated tanks near the City of Bowie, Prince George's County
- Hydraulic dredging will begin at the Triadelphia Reservoir to relieve the undue stresses on the structure of the Brighton Dam caused by the accumulated sediment in the immediate vicinity of the dam intake structure as well as along the incline of the dam and along the northern shoreline
- Expand facility maintenance to include roofing, paving, electrical and HVAC upgrades

### Accomplishments

- FY 2020 marked our 102nd 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 WRRFs earned National Association of Clean Water Agency Peak Performance Awards in 2020

## OFFICE OF THE DIRECTOR, PRODUCTION

The Production Director is responsible for the oversight and operation of the Production Department.

### Core Activities

Management and Administration – 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 WSSC Water's laboratory 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 Environmental Protection Agency certified 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; analyzing the chemical and physical properties of a variety of liquid, solid and gaseous samples; and optimizes treatment processes in order to meet or exceed the requirements of the Safe Drinking Water Act and other federal and state regulations.



## 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.

## WATER QUALITY DIVISION (Continued)

### 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 Safe Drinking Water Act 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 tanks, throttling valves, specialty valves, electrically operated valves and associated instrumentation. The division operates and maintains SCADA systems through the Control Center, monitoring remote water and wastewater facilities to ensure reliable service and minimizing environmental damage. The ultimate goal of the division is to provide reliable and safe water throughout the distribution system. The division also operates and maintains three dams and the raw water reservoirs impounded behind them. Operations on the Patuxent River dams to provide notifications with emergency management personnel during flooding events.

### 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, associated instrumentation and three dams and their impounded raw water.

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 Communications & Community Relations Office for its community outreach events. During drought years and during the current Brighton Dam rehabilitation project, this unit has removed silt from the upper reservoir reaches to regain reservoir storage.

Maintenance Support Services – This activity is associated with monitoring, controlling, and enhancing process systems associated with treatment, distribution, and collection for water and wastewater systems. This activity also monitors real time energy costs to minimize the Commission's electrical costs. In addition, this activity supports project planning, project design, and project construction of new facilities within the WSSD. When necessary, the WSSC Water'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 to meet or exceed rigorous federal water quality standards under the Safe Drinking Water Act as well as monitoring and reporting of the plant discharge pursuant to the requirements of the Federal Clean Water Act. This activity also monitors and controls the chlorine residual levels entering the water system to maintain water safety to the customer tap as well as conducts annual enhanced coagulation to reduce chlorine by-product formation in the water system.

## POTOMAC AND PATUXENT WFPs (Continued)

### Core Activities (Continued)

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 to reduce 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 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
Average daily filtered water to the distribution system (MGD)	161.7	162.6	164.0	163.0

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

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 WRRFs. 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 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
Piscataway WRRF	32.4	26.3	26.2	26.8
Western Branch WRRF	25.8	22.6	22.2	23.1
Parkway WRRF	7.0	6.4	6.5	6.5
Seneca/Damascus/Hyattstown WRRFs	17.7	17.4	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 asset management, centralized purchasing efforts such as chemical contract management, biosolids management, competitive action efforts, safety, training and security.

### Core Activities

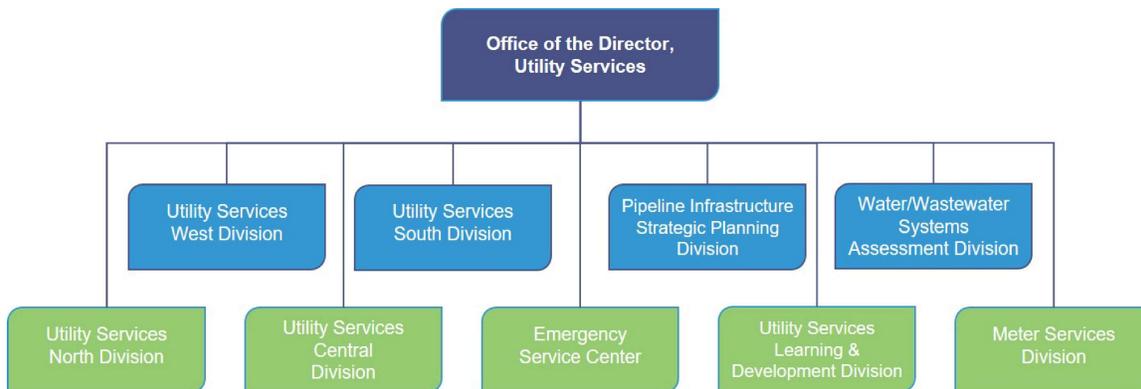
Production Support – This activity includes facility support through asset management, contract management, training and WSSC Water biosolids management. It also includes management of the shared operation and maintenance costs for utilities in other jurisdictions, and shared costs to support coordination 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 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 customers. Led by the Utility Services Director, this department is comprised of the nine divisions shown in the following chart.



## Organizational Structure



## Mission Statement

We are entrusted by our community to maintain the water and wastewater infrastructure and protect the environment – all to serve WSSC Water’s customers.

## UTILITY SERVICES DEPARTMENT (Continued)

### Budget Summary

Utility Services Department	FY 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, Utility Services	11.6	\$ 7,564,110	12.0	\$ 21,003,794	12.0	\$ 21,032,579	-	\$ 28,785
Utility Services North Division	57.3	7,478,622	59.0	9,617,021	59.0	9,212,169	-	(404,852)
Utility Services West Division	57.6	8,596,482	60.0	10,475,461	60.0	10,472,693	-	(2,768)
Utility Services Central Division	63.2	9,076,380	65.0	11,902,255	65.0	11,905,531	-	3,276
Utility Services South Division	54.1	9,692,909	58.0	10,501,933	58.0	10,459,891	-	(42,042)
Emergency Service Center	19.4	1,518,513	18.0	1,614,569	18.0	1,621,074	-	6,505
Pipeline Infrastructure Strategic Planning Division	23.0	3,317,924	33.0	4,912,611	33.0	5,733,428	-	820,817
Utility Services Learning & Development Division	7.7	833,502	8.0	825,898	8.0	888,623	-	62,725
Water/Wastewater Systems Assessment Division	77.1	36,267,113	83.0	38,265,668	83.0	38,346,375	-	80,707
Meter Services Division	106.7	10,131,385	116.0	28,603,263	116.0	12,358,498	-	(16,244,765)
<b>Total</b>	<b>477.7</b>	<b>\$ 94,476,940</b>	<b>512.0</b>	<b>\$ 137,722,473</b>	<b>512.0</b>	<b>\$ 122,030,861</b>	<b>-</b>	<b>\$ (15,691,612)</b>

### Explanation of Major Variances

The FY 2022 Proposed Budget is approximately 11.4% less than the FY 2021 Approved Budget. The primary decreases relate to the postponement of the Advanced Metering Infrastructure (AMI) capital project.

### Highlights

- Implementing leak detection satellite monitoring technology
- Continuing focus on large meter testing, repair and replacement

### Accomplishments

- Expanded large water meter testing, repair and replacement
- Completed Montgomery Village watermain replacement: 1.3 miles of new mains installed
- Completed Forrest Heights watermain replacement: 1.2 miles of new mains installed
- Completed 7 urgent priority projects totaling 2,670 feet

## OFFICE OF THE DIRECTOR, UTILITY SERVICES

The Utility Services Director 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.

# 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 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

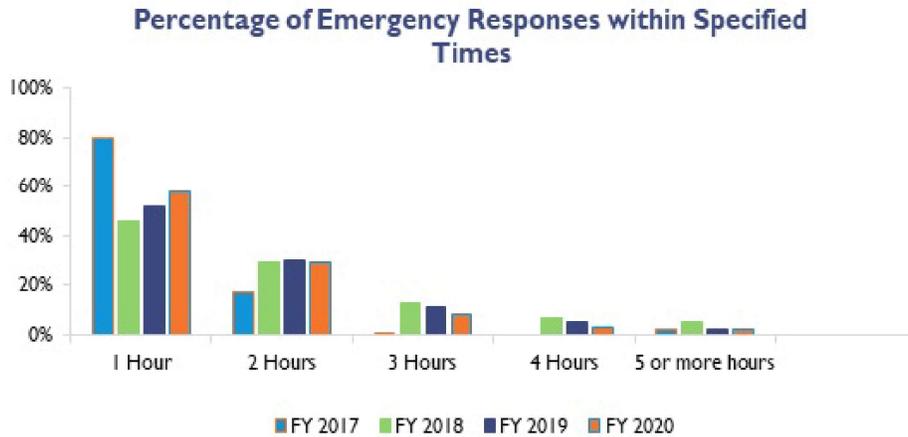
Objectives	Outcome Measure	FY 2019 Actual / Target*	FY 2020 Actual / Target*	FY 2021 Target*	FY 2022 Target
Reduce service interruptions due to water main breaks	Number of breaks per 100 miles of water main	29 / 33	27 / 34	34	34

(\*) FY 2019 through FY 2020 targets assumed breaks only

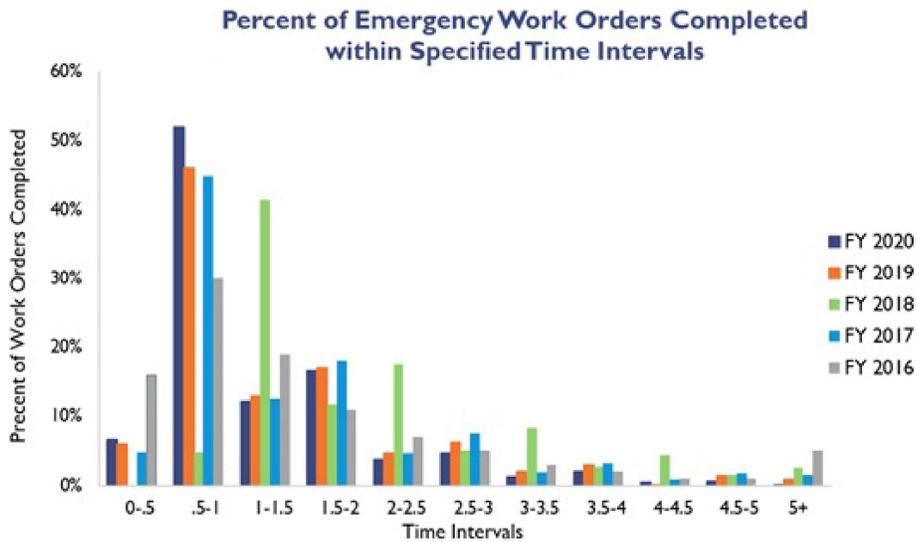
## Emergency Response

During FY 2020, more than 25,500 emergency work orders were initiated in response to customer or system emergencies, a 25.0% decrease from FY 2019. 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 next graph, WSSC Water responded to approximately 58.5% of emergency calls in less than 1-hour and to 87.3% in less than 2-hours with an average response time of 1.1-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 2020 over FY 2019. FY 2020 included a mild winter and the COVID-19 pandemic in the last quarter. Utility Services swiftly responded to the pandemic with schedule modifications and the implementation of telework to ensure staff safety, and timely response to emergencies.

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



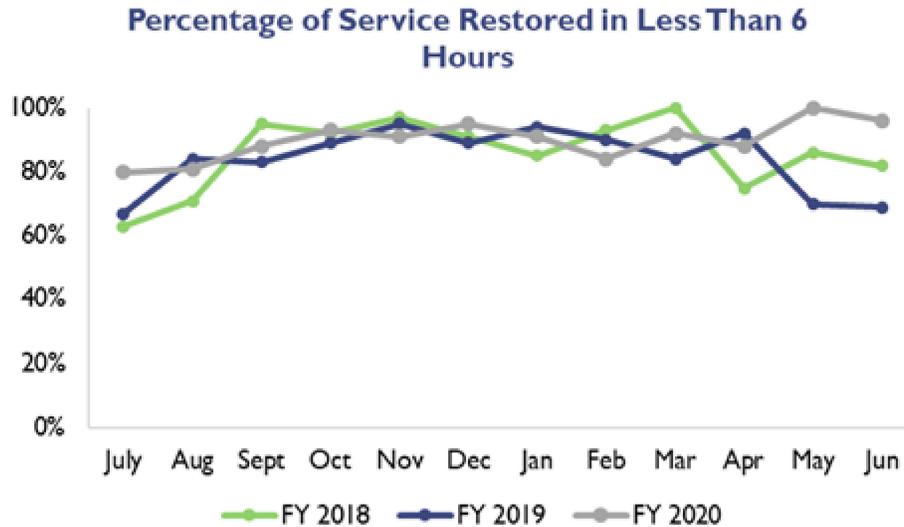
The graph below shows the distribution of emergency work order completion times in FY 2020. Most emergency work orders required less than 2-hours to complete.



### 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 2020, more than 13,000 customers, or approximately 2.8% 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 that follows 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 2020, the average time customers were without water service was 4-hours, with 90% having water service restored within the targeted 6-hour goal.

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



### Sewer Line Blockage

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 sanitary sewer system from suffering a second backup. When a customer reports a sewer backup, a maintenance crew responds to confirm the backup and determine the cause. Once confirmed, a crew is dispatched to address the problem, generally within 2-hours. The customer is notified the following business day that a follow-up line blockage investigation has been initiated. The sewer main is immediately re-cleaned to avoid another backup during the investigation process, and a closed-circuit television inspection of the sewer line is performed within 5 days of the backup to evaluate the structural integrity. 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 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 FY 2020, the agency was successful in preventing a second backup in 76.0% of these cases. The Proactive Maintenance Program, along with preventive maintenance optimization and the use of new technologies such as the smart covers, 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 2020, more than 600 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, E & C and Communications & Community Outreach.

## EMERGENCY SERVICE CENTER (Continued)

### Core Activities

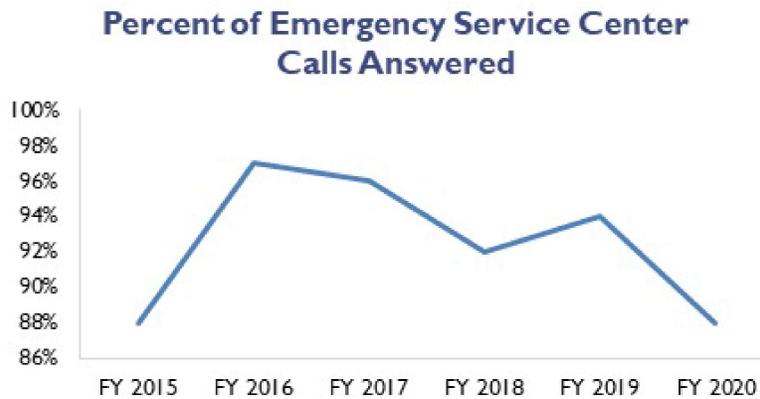
Radio Dispatching – This activity communicates with field inspectors and WSSC Water crews to investigate reports of emergencies and receive updates on field maintenance activities 24/7; updates maintenance records and arranges for resolution of problems; and operates base radio station equipment, dispatch emergency work orders to maintenance crews, cleaning companies, plumbers and other agency personnel as required.

Emergency Calls – This activity includes receiving and managing water and sewer related calls from customers within the WSSD.

### Customer Calls to the Emergency Service Center

During FY 2020, WSSC Water answered 88% of customer calls for emergency maintenance assistance, as shown in the graph below. This is a decrease from 94% calls answered in FY 2019. Transition from desktops to laptops, desk phones to AvayaOneX and telework during the pandemic contributed to a decrease in calls answered. The agency's goal continues to be a 95% response rate.

A GIS application enables customers to report emergencies using their smart phones. The system complements the Maintenance Management Information System by placing needed information about leaks and other emergencies at the emergency dispatchers' fingertips, thereby allowing representatives to provide consistent and knowledgeable responses.



The Center uses the Customer Notification System 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.

### 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.

# PIPELINE INFRASTRUCTURE STRATEGIC PLANNING DIVISION (Continued)

## Goals, Objectives and Outcome Measures

Goal: Complete planned water main replacement miles

Strategic Priority: Optimize Infrastructure

Objectives	Outcome Measure	FY 2019 Actual / Target	FY 2020 Actual / Target	FY 2021 Target	FY 2022 Target
Replace the number of miles of water main by in-house staff as planned	Miles of water main replaced by inhouse crews vs. planned	3.3 / 2.0	2.5 / 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 and 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 Acoustic Fiber Optic (AFO) monitoring of major pipelines.

## WATER/WASTEWATER SYSTEMS ASSESSMENT DIVISION (Continued)

### 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 maintenance sewer cleaning and other measures to eliminate repetitive backups and overflows.

**Field Maintenance** – This activity provides for the proactive cleaning and/or televising of sewer mains Proactive Maintenance Program; preventive sewer cleaning in order to reduce or eliminate the possibility of future sewer backups or overflows; corrective sewer main and service cleaning on an emergency basis; and closed circuit television 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** – This activity provides 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 and Replacement** – This activity provides 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

Objectives	Outcome Measure	FY 2019 Actual / Target	FY 2020 Actual / Target	FY 2021 Target	FY 2022 Target
Inspect the number of PCCP miles as planned	Miles of PCCP inspection performed vs. planned	19.1 / 19.1	18.0 / 18.0	18.0	18.0
Install acoustical fiber optic line to monitor PCCP water transmission mains as planned	Miles of AFO line installed vs. planned	1.3 / 3.4	0.0 / 3.5	10.0	10.0

### Activity Indicators

Workload Data	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
Miles of sewer mains cleaned for preventive maintenance	691	649 / 650	650	650
Miles of mainline sewer televised for preventative maintenance program (WSSC Crews)	48	51 / 60	60	60
Miles of mainline sewer televised for proactive maintenance program (by contract)	158	193 / 225	200	200
Manholes inspected (by contract)	4,790	946 / 6,000	5,500 *	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.

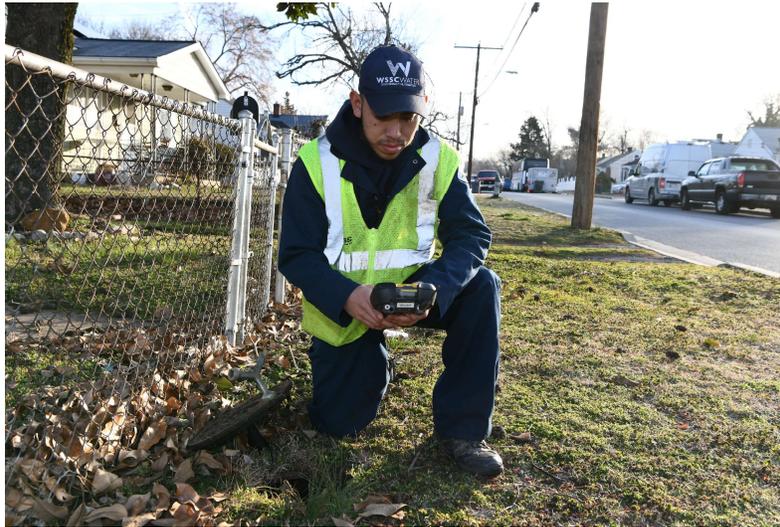
Flow Test – This activity involves routine inspection of the water distribution system and performing fire flow tests for outside agencies.

Small and Large Meter Testing, Repair and 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 and 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. The primary function of this activity is to ensure that all activated meters are assigned an account number and properly billed.

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



## 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. Administration is comprised of the departments and offices listed below.

### Budget Summary

Administration	FY 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of Supplier Diversity & Inclusion	8.5	\$ 903,320	9.0	\$ 1,519,383	9.0	\$ 1,292,695	-	\$ (226,688)
Procurement Office	24.2	2,631,687	27.0	2,691,204	27.0	2,717,721	-	26,517
General Services Department	88.9	34,123,740	96.0	42,457,998	96.0	41,149,538	-	(1,308,460)
Finance Department	63.1	7,832,219	64.0	8,167,790	64.0	8,271,660	-	103,870
Information Technology Department	91.8	66,093,393	103.0	56,460,627	103.0	61,389,484	-	4,928,857
<b>Total</b>	<b>276.5</b>	<b>\$ 111,584,359</b>	<b>299.0</b>	<b>\$ 111,297,002</b>	<b>299.0</b>	<b>\$ 114,821,098</b>	<b>-</b>	<b>\$ 3,524,096</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 diverse and small businesses to ensure that the agency has a vendor base that is reflective of the community it serves.

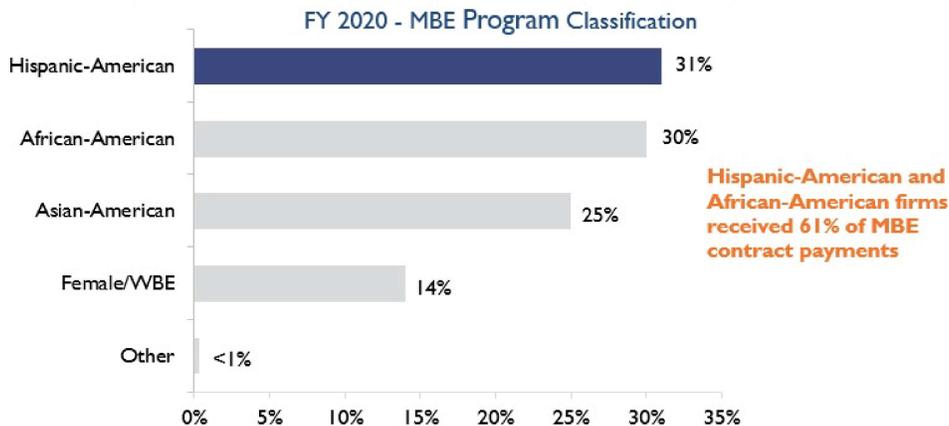
### Mission Statement

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

### 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 2020, WSSC Water’s contract payments by business classification to MBE firms, including Women Business Enterprise (WBE), totaled \$136 million (28%) compared to \$152 million (29%) in FY 2019. The breakdown of the FY 2020 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.

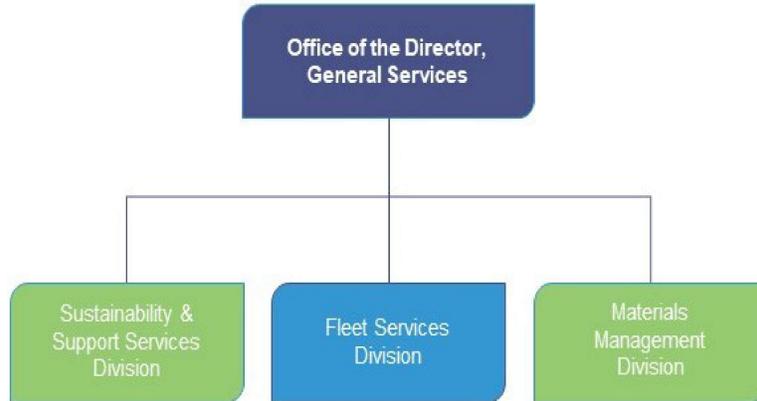
Operations and Administration – This activity involves implementing, maintaining and administering programs for the agency's supplier portal, procurement card program and verification of vendor bonding and insurance. This activity also involves risk management and operations analysis; monitoring and 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 who are responsible for managing all pre-award and post-award contracting functions, including procurement forecasting, statement(s) of work and specification development support, change orders, task orders and cure notices. This activity is also responsible for ensuring suppliers meet the performance requirements, and the policies and procedures of a contract in terms of quality, quantity, schedule and price.

# GENERAL SERVICES DEPARTMENT

The General Services 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. Led by the Office of the Director, the department is comprised of three divisions shown in the following chart.

## 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 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, General Services	3.1	\$ 540,046	4.0	\$ 582,486	4.0	\$ 640,531	-	\$ 58,045
Sustainability & Support Services Division	11.6	19,662,598	17.0	26,849,090	17.0	26,850,321	-	1,231
Fleet Services Division	44.8	10,052,878	47.0	11,369,267	47.0	10,541,992	-	(827,275)
Materials Management Division	29.4	3,868,218	28.0	3,657,155	28.0	3,116,694	-	(540,461)
<b>Total</b>	<b>88.9</b>	<b>\$ 34,123,740</b>	<b>96.0</b>	<b>\$ 42,457,998</b>	<b>96.0</b>	<b>\$ 41,149,538</b>	<b>-</b>	<b>\$ (1,308,460)</b>

## Explanation of Major Variances

The FY 2022 Proposed Budget reflects a decrease of approximately 3% over the FY 2021 Approved Budget. The decrease is primarily attributed to a projected decrease in the energy cost, decreased rental cost due to the cancellation of the rental lease and the reduced request for trucks and automobiles.

## Highlights

- A remote facilities renovation plan is underway to identify available or under-utilized space and needs requirement
- Will be enhancing the warehouse online ordering application with modern e-commerce features that improve customer experience and product identification while also pushing orders to supervisors for approval
- Lead an agency wide effort to establish an Enterprise Document Management Program

## GENERAL SERVICES DEPARTMENT (Continued)

### Highlights (Continued)

- Implementing production and multifunctional devices technology to improve efficiency and reduce cost for agency wide printing

### Accomplishments

- WSSC Water obtained approval from the Maryland Public Service Commission to sell biogas and purchase natural gas from Washington Gas on a wholesale basis
- Climate Change vulnerability assessments were completed on 18 critical facilities and upgrades on 8 of these facilities were recommended
- Implemented a warehouse document management system to track, manage and store documents and reduce paper
- Provided an agile response to the COVID-19 pandemic emergency situation by securing and issuing critical personal protective equipment supplies, including face masks, hand sanitizer, gloves and surface disinfectants

## OFFICE OF THE DIRECTOR, GENERAL SERVICES

The General Services Director is responsible for the oversight and operation of the General Services Department.

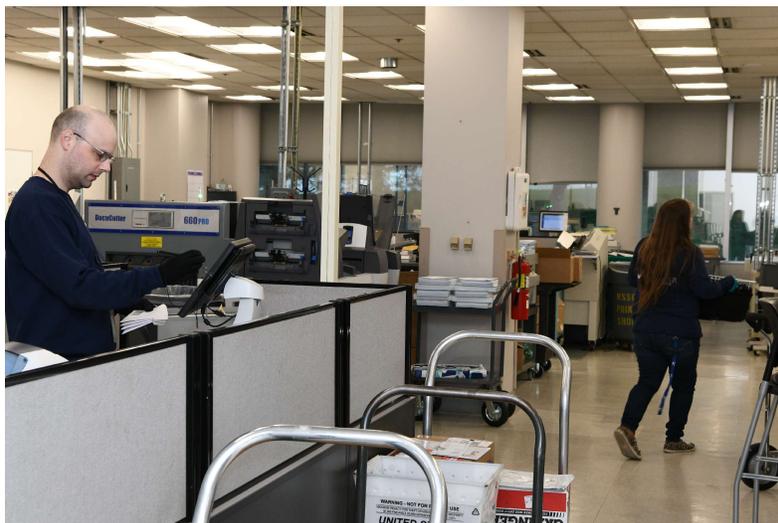
### Core Activities

Management and Administration – This activity manages and supervises the three divisions in this department.

General and Administrative – 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.



## SUSTAINABILITY & SUPPORT SERVICES DIVISION (Continued)

### Core Activities

Sustainable Planning Services – This activity provides sustainability services for WSSC Water, which includes space planning, 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 – 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 document 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 facilities; and the development and maintenance of the Climate Change Program.

## FLEET SERVICES DIVISION

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. This activity also includes purchasing and inventorying 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 DIVISION (Continued)

### Activity Indicators

Workload Data	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
Equipment fleet managed (pieces of equipment)	726	714	737	715
Vehicle fleet managed (number of vehicles)	935	942	950	925
Scheduled preventative maintenance completed on vehicles and equipment	3,384	3,360	3,374	3,350
Other (non-preventative maintenance) vehicle and equipment repairs	6,632	6,600	4,893	6,600

## MATERIALS MANAGEMENT DIVISION

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

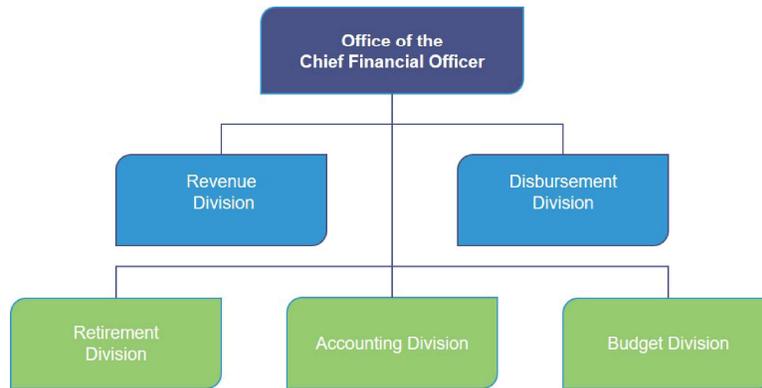
Warehousing – This activity involves administrative and physical functions associated with the storage and distribution of goods and materials required to support construction, maintenance and repair operations. These functions include receipt, identification, inspection, cycle counting, storage and 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 available resources are efficiently allocated and productively used to provide value to agency customers at the lowest possible price. Led by the Chief Financial Officer, the department is comprised of the divisions listed below.

### 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 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Financial Officer	2.1	\$ 628,757	4.0	\$ 1,324,270	4.0	\$ 1,194,447	-	\$ (129,823)
Retirement & Investments Division	5.6	907,019	6.0	926,642	6.0	935,178	-	8,536
Revenue Division	14.1	1,505,823	14.0	1,455,080	14.0	1,506,731	-	51,651
Accounting Division	18.7	2,113,132	17.0	1,709,688	17.0	1,816,642	-	106,954
Disbursements Division	13.6	1,406,839	14.0	1,327,576	14.0	1,362,267	-	34,691
Budget Division	9.0	1,270,649	9.0	1,424,534	9.0	1,456,395	-	31,861
<b>Total</b>	<b>63.1</b>	<b>\$ 7,832,219</b>	<b>64.0</b>	<b>\$ 8,167,790</b>	<b>64.0</b>	<b>\$ 8,271,660</b>	<b>-</b>	<b>\$ 103,870</b>

### Accomplishments

- WSSC Water successfully retained its AAA bond rating from all major credit rating agencies in the fall of 2020
- Pension and OPEB funds weathered investment market volatility throughout the COVID-19 pandemic and remained well-funded
- Disbursements' implementation of a virtual credit card program decreased the supplier payment period
- Payroll created, tested and delivered COVID-19 payroll elements
- A \$100.0 million line of credit was established to ensure liquidity in the event of COVID-19 related revenue shortfalls
- A successful bond sale included \$47.5 million of Green bond proceeds
- WSSC Water was awarded the Government Financial Officers Association Distinguished Budget Presentation award for the 26th consecutive year

## 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 and Capital Funding – This activity administers Maryland Water Quality 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 Maryland Water Quality loan administration.

## RETIREMENT & INVESTMENTS DIVISION

The Retirement & Investments 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 the 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 WSSC Water'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 WSSC Water, 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.

### Core Activities

General Ledger – This activity maintains WSSC Water’s books and records in a standard that allows the reporting of its operations and financial conditions in accordance with Generally Accepted Accounting Principles.

Research, Special Handling and Special Studies – This activity performs special analyses and studies on both regular and as-needed bases to support management initiatives and rate 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 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 procurement card policy compliance, travel regulations and 1099-Miscellaneous reporting.

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 1st, and an operating and CIP budget by March 1st of each year to both Counties. Preparation includes developing assumptions, workload projections, guidance policies, project costs, expenditure timelines, procedures and formats, performance measures and analyzing the results, while maintaining relationships with the Counties regarding budgetary and fiscal policies. The budgets are presented to the General Manager, Commissioners and County staffs.

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 Groups.

### Goals, Objectives and Outcome Measures

Goal: Produce a sound, affordable capital spending program

Strategic Priority: Spend Customer Dollars Wisely

Objectives	Outcome Measure	FY 2019 Actual / Target	FY 2020 Actual / Target	FY 2021 Target	FY 2022 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	36.3% / 36.3%	37.2% / 38.2%	37.3%	36.8%

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

Strategic Priority: Spend Customer Dollars Wisely

Objectives	Outcome Measure	FY 2019 Actual / Target	FY 2020 Actual / Target	FY 2021 Target	FY 2022 Target
Maintain a debt service coverage ratio greater than 110%	Ratio of debt service coverage	97% / 101%	104% / 100%	101%	104%

Goal: Minimize borrowing costs

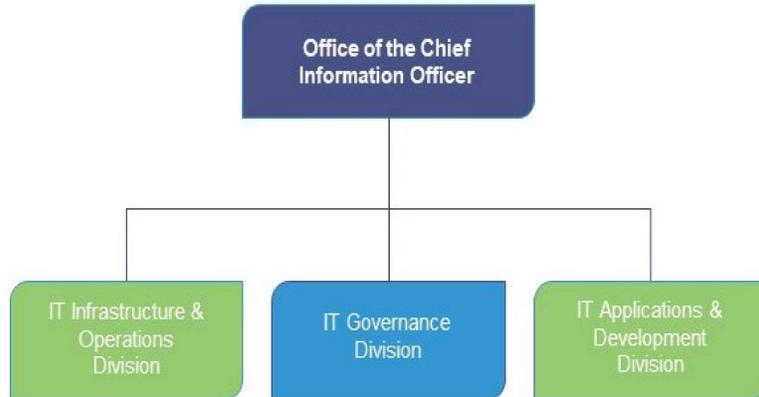
Strategic Priority: Spend Customer Dollars Wisely

Objectives	Outcome Measure	FY 2019 Actual / Target	FY 2020 Actual / Target	FY 2021 Target	FY 2022 Target
Maintain Fitch Ratings, Moody's Investor Service, and/or S&P Global Ratings bond ratings of AAA/Aaa/AAA	Bond ratings: (Fitch Ratings / Moody's Investor Service / S&P Global Ratings)	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, is comprised of the divisions shown in the following chart.

## Organizational Structure



## Mission Statement

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 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Information Officer	8.6	\$ 3,286,447	10.0	\$ 3,682,042	10.0	\$ 5,503,563	-	\$ 1,821,521
IT Infrastructure & Operations Division	32.3	16,197,729	35.0	18,302,944	35.0	18,499,463	-	196,519
IT Governance Division	16.2	25,598,832	18.0	12,367,679	18.0	10,479,651	-	(1,888,028)
IT Applications & Development Division	34.7	21,010,385	40.0	22,107,962	40.0	26,906,807	-	4,798,845
<b>Total</b>	<b>91.8</b>	<b>\$ 66,093,393</b>	<b>103.0</b>	<b>\$ 56,460,627</b>	<b>103.0</b>	<b>\$ 61,389,484</b>	<b>-</b>	<b>\$ 4,928,857</b>

## Explanation of Major Variances

The FY 2022 Proposed Budget reflects an increase of approximately 9% from the FY 2021 Approved Budget. The increase is primarily due to the enhancements to the cybersecurity network, installation of the IT paving tracking solutions for the E&C Department, replacement of the aging Maintenance Management Information System with a new asset/work management system for the Utility Services Department, upgrade of the E-Business Suite project, and provision of overall support to the Project Cornerstone post-production phase.

## Highlights

- Mitigate cybersecurity risks to the agency via new end-user security awareness training, sensitive data redaction and logging, security event and incident management, artificial intelligence threat detection, privileged account management and risk reduction of identity theft through two-step authentication

## INFORMATION TECHNOLOGY DEPARTMENT (Continued)

### Highlights (Continued)

- Transition operational responsibility for the Project Cornerstone Release I suite to the IT Applications & Development Division
- Facilitate numerous business unit improvements and operational efficiencies through the E-Business Suite upgrade project
- Implement a single dashboard to manage all of WSSC Water's Oracle deployments and provides management and automation support for Oracle applications, databases, middleware, hardware and engineered systems
- Redesign the WSSC Water website to elevate the agency's brand, improve customer navigation and experience and increase end-user engagement
- Re-engineer the invoice management process to effectively and efficiently receive, monitor, approve and pay supplier invoices in a safer and timelier manner in order to take advantage of timely payment discounts
- Replace the 30-year old legacy radio dispatch console infrastructure, which supports daily operations of the entire WSSC Water radio-equipped fleet
- Transition the management of IT assets from a standalone system to the shared ServiceNow platform to improve IT hardware catalog, integration of asset request workflows with deployment workflows and improved visibility of IT assets by merging financial data with discovery data
- Upgrade the Avaya contact center phone system infrastructure to ensure reliability and continuity of mission critical services to Customer Service Agents

### Accomplishments

- Replaced aging server platform with a hyper-converged infrastructure architecture to allow WSSC Water to run the IT industry's latest virtualization models, and provide network segmentation for better IT application security and provide reliable seamless disaster recovery
- Replaced outdated equipment at Brighton Dam and depots to upgrade the wi-fi, which improves the coverage footprint and increases productivity
- Established a statement of work working group to provide consistent high-quality documents for review by other offices
- Won an award in the Technology Innovations: Operations category from the AT&T Special Districts Awards Program recognizing the outstanding job done by WSSC Water's IT Department in adapting the agency to telework as a result of the COVID-19 pandemic

## OFFICE OF THE CHIEF INFORMATION OFFICER

The Office of the Chief Information Officer develops, maintains and supports the IT Strategic Plan while assessing technology solutions and implementation priorities to meet 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.

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 of goods and services in order to provide readily accessible IT services to the agency.

## OFFICE OF THE CHIEF INFORMATION OFFICER (Continued)

### Goals, Objectives and Outcome Measures

Goal: Manage the IT budget in the most cost-effective and fiduciary manner

Strategic Priority: Spend Customer Dollars Wisely

Objectives	Outcome Measure	FY 2019 Actual / Target	FY 2020 Actual / Target	FY 2021 Target	FY 2022 Target
IT invoices approved within IT to support net 30 payments	Percentage of IT invoices approved within 15 calendar days	N/A	80% / 85%	90%	95%

## 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 and software; computer infrastructure; and customer service and 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 and platform technologies. The IT solution center 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 ongoing production and oncall support.

### Goals, Objectives and Outcome Measures

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

Strategic Priority: Optimize Infrastructure

Objectives	Outcome Measure	FY 2019 Actual / Target	FY 2020 Actual / Target	FY 2021 Target	FY 2022 Target
Ensure high availability of critical business systems	Percentage of time that the critical systems are available	99.9% / 97.0%	99.9% / 97.0%	97.0%	97.0%
Ensure high availability of the network	Percentage of time that the network is available across all WSSC Water sites	99.9% / 97.0%	99.9% / 97.0%	97.0%	97.0%

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

Portfolio Management – The Enterprise Program Management Office assists the senior leadership team in the prioritization of project proposals which strongly support the realization of WSSC Water's strategic priorities.

Business Analysis – This activity includes analyzing and documenting current business processes and workflows in as-is diagrams, outlining process improvements, making recommendations to streamline business processes and workflows and documents the proposed 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 – This activity includes 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 lifecycle. 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 developing, testing and benchmarking of a toolkit and methodology.

Organizational Readiness – The activity ensures 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 agency.

### Core Activities

Customer Care Information Systems – This activity maintains and supports Assessment Information System; Maintenance Management Information System; Fats, Oils and Grease Program and Primavera/Analytics.

Innovation and 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 and enterprise reporting function; back-end data warehousing; and analytical support to business users to enable strategic use of information across WSSC Water.

Application and Database Services – This activity supports 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.

## IT APPLICATIONS & DEVELOPMENT DIVISION (Continued)

### Core Activities (Continued)

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 and Logistics – This activity maintains all the Oracle EBS 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 – This activity supports hundreds of applications in variety of databases ranging from mainframe, Oracle and SQL Server. The Database Administration team provides support for Oracle Enterprise Resource Planning, EBS, ePermitting, GIS, SCADA, as well as in-house custom developed applications in various platforms. The Database Administration team supports various departments throughout WSSC Water and outside vendors.

### Goals, Objectives and Outcome Measures

Goal: Provide reliable computing services to all users in order to deliver information and data in the timeframes required to support decisions Strategic Priority: Optimize Infrastructure

Objectives	Outcome Measure	FY 2019 Actual / Target	FY 2020 Actual / Target	FY 2021 Target	FY 2022 Target
Ensure the availability of applications to support the agency	Percentage of time that the critical systems are available	99.9% / 97.0%	99.9% / 97.0%	97.0%	97.0%

## 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 2020 Actual		FY 2021 Approved		FY 2022 Proposed		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Human Resources Non-Departmental	-	\$ 24,460,411	-	\$ 31,456,610	-	\$ 31,665,326	-	\$ 208,716
Finance Non-Departmental								
Debt Service	-	293,268,854	-	325,593,000	-	316,827,000	-	(8,766,000)
PAYGO	-	-	-	31,016,000	-	27,585,000	-	(3,431,000)
Other (Social Security, Retirement, etc.)	-	50,409,447	-	53,138,404	-	51,914,428	-	(1,223,976)
Retirement Trust Chargeback	-	(756,355)	-	(750,043)	-	(769,300)	-	(19,257)
<b>Total</b>	-	<b>\$ 367,382,357</b>	-	<b>\$ 440,453,971</b>	-	<b>\$ 427,222,454</b>	-	<b>\$ (13,231,517)</b>

### Explanation of Major Variances

The FY 2022 Proposed Budget decrease for Finance Non-Departmental is primarily the result of decreased debt service due to lower interest rates and decreased PAYGO due to financial challenges related to the COVID-19 savings plan.

## HUMAN RESOURCES NON-DEPARTMENTAL

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

## FINANCE NON-DEPARTMENTAL

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

## RETIREMENT TRUST CHARGEBACK

Retirement Trust Chargeback accounts for Retirement & Investments Division expenses related to the operations of the retirement trust that will be paid by the trust.

# **APPENDICES**

## CUSTOMER CHARACTERISTICS

### Top 20 Customers - Water and Sewer Consumption

Name of Customer	FY 2020 Annual Consumption*	FY 2020 Total Collected Amount
National Institutes of Health	1,198,000	\$ 11,511,175
Howard County Department of Public Works	1,014,000	3,849,597
University of Maryland	836,000	8,285,994
U.S. Navy	536,000	2,487,853
Leisure World	348,000	2,097,525
General Services Administration (GSA)	263,000	2,551,046
Advanced Conservation Technologies	263,000	1,471,217
National Institute of Standards and Technology (NIST)	233,000	2,181,655
Andrews Air Force Base	227,000	2,185,965
Gaylord Hotels	211,000	2,077,394
Southern Management Corp	204,000	1,408,099
Franklin Park Apartments	190,000	1,192,543
MGM Resorts	161,000	1,641,429
Fort Detrick - Forest Glen Annex	149,000	1,522,633
Jefferson at Orchard Pond	139,000	973,950
Prince George's Hospital	133,000	1,326,712
Quincy Village Apartments	122,000	1,227,661
Krieger Blvd LLC	121,000	874,723
MedImmune LLC	120,000	1,212,419
Riderwood	115,000	1,152,812
<b>Total</b>	<b>6,583,000</b>	<b>\$ 51,232,401</b>

\*In thousands gallons, rounded to the nearest thousands

Total collected amount represents water and sewer usage charges

## ACTIVE CUSTOMER ACCOUNTS

WSSC Water Active Customer Accounts for Montgomery County and Prince George's County as of the end of the fiscal year.

	FY 2017	FY 2018	FY 2019	FY 2020
Customer Accounts Both Counties	459,751	460,072	460,825	463,755
Percent Change (%)		0.1%	0.2%	0.6%
<b>By Type of Customer*</b>				
Residential	439,601	440,164	440,087	442,536
Percent Change (%)		0.1%	0.0%	0.6%
Commerical and Industrial	17,169	16,921	16,852	17,455
Percent Change (%)		-1.4%	-0.4%	3.6%
Government and Other	2,981	2,987	3,886	3,764
Percent Change (%)		0.2%	30.1%	-3.1%
<b>By Type of Property*</b>				
Single-Family Residence	341,245	341,514	341,093	341,776
Townhouse	90,355	90,880	91,244	92,883
General Commercial	17,164	16,915	16,844	17,446
Garden Apartment	4,070	3,911	3,890	3,861
Multi-Unit (Individually Metered)	2,625	2,630	2,619	2,615
High-Rise Apartment	458	442	442	426
Other	3,834	3,780	4,693	4,748
	459,751	460,072	460,825	463,755

\* Data source: WSSC Water's Customer-to-Meter (C2M) customer billing system

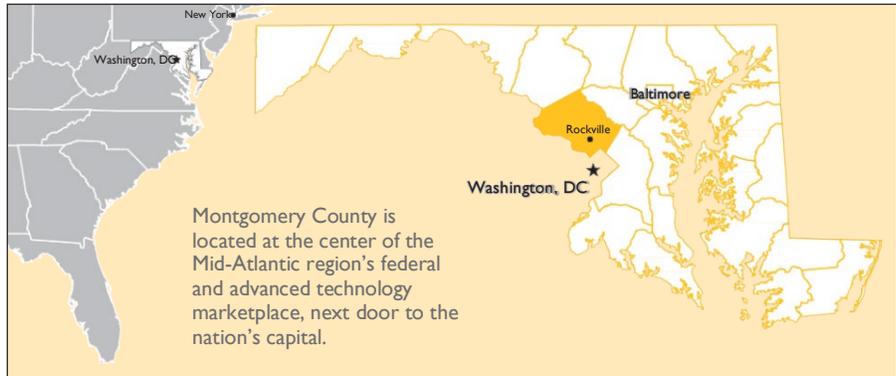
The following pages include economic facts for Montgomery County and Prince George's County, published by the Maryland Department of Commerce.

# 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



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# Brief Economic Facts MONTGOMERY COUNTY, MARYLAND

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

Civilian Labor Force (2018 avg.)	Labor Mkt.	
	County	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)		
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.	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
-------------------------	------------	---------

#### 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
<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		
<b>Major Tax Credits Available</b>		
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.	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>

**Occupied Units (2013-2017)** 369,242 (65.6% owner occupied)

### 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
<b>Land – cost per acre</b>			
Industrial	\$146,200	\$2,500,000	\$972,430
Office	\$350,000	\$7,323,262	\$2,494,334
<b>Rental Rates – per square foot</b>			
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

1801 Rockville Pike, Suite 320

Rockville, Maryland 20852

Telephone: 240.641.6700

Email: [connect@thinkmoco.com](mailto:connect@thinkmoco.com)

[thinkmoco.com](http://thinkmoco.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 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



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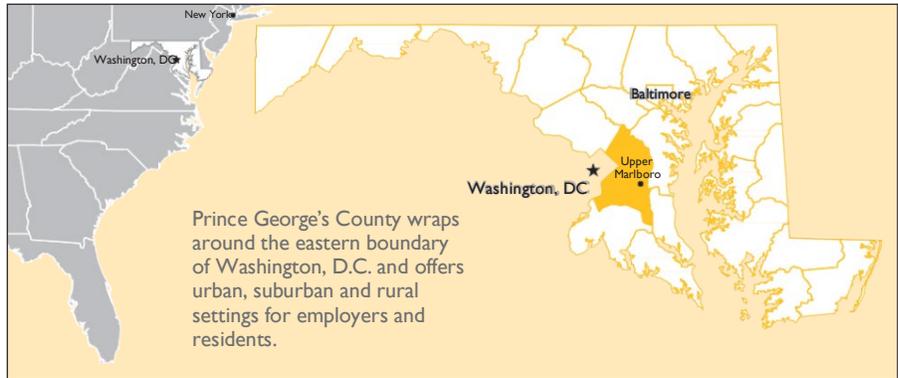
# Brief Economic Facts

## 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		Maryland part of Washington DC metro*	Maryland
	Households	Population		
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



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# Brief Economic Facts PRINCE GEORGE'S COUNTY, MARYLAND

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

Civilian Labor Force (2018 avg.)	Labor Mkt.	
	County	Area*
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.	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
-------------------------	------------	---------

#### 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		
<b>Major Tax Credits Available</b>		
Enterprise Zone (incl. Focus Area), Job Creation, More Jobs for Marylanders (Tier 1), R&D, Biotechnology and Cybersecurity Investment, Revitalization, Arts & Entertainment Dist.		

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

Distribution	Percent Households		
	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
<b>Land – cost per acre</b>			
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

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Largo, Maryland 20774

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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 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



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## APPENDIX B - GLOSSARY

Account Maintenance Fees	(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 Workyears	Employee workyears that are funded in the adopted budget and may be filled during the budget year.
Balanced Budget	A financial plan showing estimated or planned revenues equaling expenses.
Biosolids	Solids produced as a by-product of treating sewage to produce clean water; also referred to as sludge.

## APPENDIX B - 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, D.C., 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.
Commission	A six-member Commission governing WSSC Water, comprised of three Commissioners appointed from each County by the County's Executive, confirmed by their respective County Councils. Each Commissioner serves a four-year term.

## APPENDIX B - GLOSSARY

Consumer Price Index	(Also referred to as CPI) A measure that examines the change in the cost of a fixed basket of consumer goods and services, such as housing, utilities, transportation, food and medical care. The CPI is calculated by taking price changes for each item in the predetermined basket of goods and averaging the changes; the goods are weighted according to their importance. The CPI is a commonly accepted indicator of inflation, as changes in CPI are used to assess price changes associated with the cost of living.
Cryptosporidium	A microbial contaminant of raw water that can potentially cause chronic or fatal intestinal disorders. In 1993, <i>Cryptosporidium</i> 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.
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.

## APPENDIX B - 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.
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.

## APPENDIX B - 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 Charge	(Also referred to as 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.

## APPENDIX B - 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.
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 Charge) 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 resource recovery facility.
Infiltration	Groundwater that flows into sewer lines due to defective pipes or manholes.
Inflow	Surface stormwater from rainfall that flows into sewer lines due to defective pipes or manholes.
Information Only Projects	The CIP document contains an Information Only Projects section. Projects in this section are not required to be in the CIP under Section 23-301 of the Public Utilities Article, WSSD Laws, Annotated Code of Maryland, but may be included for any number of reasons such as: fiscal planning purposes; the reader's improved understanding of the full scope of a specific set of projects; or in response to requests from County governments. Expenditures for Information Only projects are not included as part of the CIP six-year program costs, but are shown separately on the bottom line of the financial summary in the front section of the CIP for informational purposes.
Infrastructure Investment Fees	(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.

## APPENDIX B - GLOSSARY

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, D.C. 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.
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 <i>Cryptosporidium</i> 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.

## APPENDIX B - GLOSSARY

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 comply with WSSC Water's Plumbing and Fuel Gas Code.
Potomac WFP Consent Decree	A court-enforced legal document that was negotiated between WSSC Water, the Maryland Department of the Environment, the U.S. Environmental Protection Agency, the U.S. 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.

## APPENDIX B - GLOSSARY

Quintile	A quintile is a statistical value that divides a dataset into five equal parts, each representing 20% (1/5 <sup>th</sup> ) of the range of a given population. So, the first quintile represents the lowest 20% of the range (0% to 20%); the second quintile represents the second 20% of the population (20% to 40%); and so on.
Ready-to-Serve Charge	Comprised of the Account Maintenance Fees and the Infrastructure Investment Fees.
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.
Sanitary Sewer Overflow Consent Decree	A court-enforced legal document that was negotiated between WSSC Water, the Maryland Department of the Environment, the U.S. Environmental Protection Agency, the U.S. 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 1993 to pay for growth-related CIP projects. (FY 1994 was the first year that the SDC was in effect.)

## APPENDIX B - GLOSSARY

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 in diameter and larger, wastewater resource recovery facilities, 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, 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.
Significant Industrial User	(Also referred to as SIU) Defined by the U.S. 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 resource recovery facilities.

## APPENDIX B - GLOSSARY

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 1996 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 by-products when the chlorine used to treat the raw water reacts with certain normally occurring organic contaminants present in the raw water.
Trunk Sewer	As defined in the 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.

## APPENDIX B - GLOSSARY

U. S. 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.
Washington Suburban Sanitary Commission	(Also referred to as WSSC Water or agency) 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 and 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.
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 in diameter 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.

## APPENDIX C - ACRONYMS

ADC	Average Daily Consumption	GBDS	General Bond Debt Service
ADR	Alternative Dispute Resolution	GFOA	Government Finance Officers Association
AFO	Acoustic Fiber Optic	GIS	Geographic Information System
AMF	Account Maintenance Fee	GPD	Gallons per Day
AMI	Advanced Metering Infrastructure	GPS	Global Positioning System
AWWA	American Water Works Association	HAA	Haloacetic Acid
C2M	Customer-to-Meter	H/C	House Connection
CAP	Customer Assistance Program	ICPRB	Interstate Commission on the Potomac River Basin
CEO	Chief Executive Officer	IIF	Infrastructure Investment Fee
CIO	Chief Information Officer	IT	Information Technology
CIP	Capital Improvements Program	LEED	Leadership in Energy and Environmental Design
CIU	Categorical Industrial User	MBE	Minority Business Enterprise
COOP	Continuity of Operations Plans	MDE	Maryland Department of the Environment
CPI-W	Consumer Price Index for Urban Wage Earners & Clerical Workers	MGD	Million Gallons per Day
CSC	Customer Service Center	MOU	Memorandum of Understanding
CSIS	Customer Service Information System	MVR	Meter, Vertical Turbine
DC Water	District of Columbia Water and Sewer Authority	MWCOG	Metropolitan Washington Council of Governments
DSCR	Debt Service Coverage Ratio	NTU	Nephelometric Turbidity Units
E&C	Engineering & Construction Department	OIG	Office of the Inspector General
EBS	E-Business Suite	OPEB	Other Post-Employment Benefits
EEO	Equal Employment Opportunity	OSDI	Office of Supplier Diversity & Inclusion
EGIS	Enterprise Geographic Information System	PAYGO	“Pay-As-You-GO” Financing
ENR	Enhanced Nutrient Removal	PCCP	Pre-stressed Concrete Cylinder Pipe
EPA	U.S. Environmental Protection Agency	PMO	Project Management Office
FFBC	Front Foot Benefit Charge	REDO	Reconstruction Debt Service Offset
FICA	Social Security & Medicare	SAG	Spending Affordability Guidelines
FM	Force Main	SCADA	Supervisory Control and Data Acquisition
FOG	Fats, Oils and Grease	SDC	System Development Charge
FOMC	Federal Open Market Committee	SEP	System Extension Permit
FSE	Food Service Establishment	SIU	Significant Industrial User
FTE	Full time equivalent = Workyear	SLBE	Small, Local Business Enterprise
FY	Fiscal Year	SSES	Sewer System Evaluation Survey
GAAP	Generally Accepted Accounting Principles	SSO	Sanitary Sewer Overflow
		THM	Trihalomethanes
		UT	Ultrasonic

## APPENDIX C - ACRONYMS

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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