



Fiscal Year 2022 Preliminary Proposed Budget

January 15, 2021

July 1, 2021 to June 30, 2022



FISCAL YEAR 2022 PRELIMINARY PROPOSED BUDGET

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

NOTICE OF PUBLIC HEARINGS

You're invited to learn about and comment on our plans to invest in clean water programs for Fiscal Year (FY) 2022 on the following dates and times:

Tuesday, February 2, 2021 @ 7:30 p.m.
Wednesday, February 3, 2021 @ 7:30 p.m.

Out of concern for the safety of our customers, the hearings will be presented virtually via livestream. Details on how to watch and/or participate in the meetings will be posted at <https://www.wsscwater.com/fin>

TIME SCHEDULE FOR THE FY 2022 PROPOSED BUDGET

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 for more information regarding this budget document.

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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 twenty-sixth consecutive year that WSSC Water has received this award.



Table of Contents

	PAGE
Section 1 - WSSC Water Overview, Chair's Letter and Budget Summaries	
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
Section 2 - Proposed Rates, Fees and Charges	
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
Water and Sewer Bill Comparison	2-4
Account Maintenance Fees	2-7
Infrastructure Investment Fees	2-8
System Development Charges	2-9
Miscellaneous Fees and Charges	2-10
Section 3 - Spending Affordability and Long-Range Financial Plan	
Major Assumptions, Workload Indices and Demand Projections	3-1
Long-Range Financial Plan for Water and Sewer Operating Funds	3-3
Section 4 - Explanation of Budget and Summaries	
Budget Formulation	4-1
WSSC Water Budget and Capital Improvements Program Process	4-3
Fund Structure	4-4
How Each Dollar of a Water and Sewer Bill is Spent	4-5
FY 2022 Proposed Budget - By Major Expense Categories	4-6
FY 2022 Proposed Budget - By Sources	4-7
FY 2022 Proposed Budget - By Fund Uses	4-8
Operating Revenue & Expense by Major Source Category and Fund Type	4-9
Capital Funding & Expense by Major Source Category and Fund Type	4-10
Projected Change in Fund Balance	4-11
Expense Trends by Fund	4-12



Table of Contents

Section 5 - Fiscal Guidelines

Fiscal Control	5-1
Expenditures and Allocation of Costs	5-2
Short-term Fiscal and Service Guidelines	5-3
CIP Fiscal Guidelines	5-4
WSSC Water Management	5-7
Guidelines for Revenues and Program Funding	5-8
Water and Sewer Debt Service Guidelines	5-9

Section 6 - Revenues

Economic Outlook	6-1
Ratepayer, Ready-to-Serve and Miscellaneous Revenues	6-5
Revenues and Transfers Impact on Debt Service	6-8
Revenue Trends	6-9

Section 7 - Capital Budget

Expense Categories	7-1
Capital Budget Expense Summary	7-2
Map of Projects in Montgomery County	7-3
Map of Projects in Prince George's County	7-4
Highlighted Projects	7-5
Funding Sources	7-8
Capital Budget Funding Summary	7-9
Impact of Capital Program on the Operating Budget	7-10

Section 8 - Debt Service

Debt Service Program	8-1
Outstanding Debt	8-3
Borrowing Limitation	8-4
Debt Service Trends	8-5

Section 9 - Water Quality and Regulations

Water Quality Capital Projects	9-1
Water Quality Campaigns	9-2
Performance of Key Services	9-5

Section 10 - Organizational Budgets and Measures

Workforce and Compensation	10-1
Comparative Expenses by Organizational Unit - All Operating and Capital Funds	10-3
Organizational Unit and Fund Matrix - All Operating and Capital Funds	10-4



Table of Contents

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

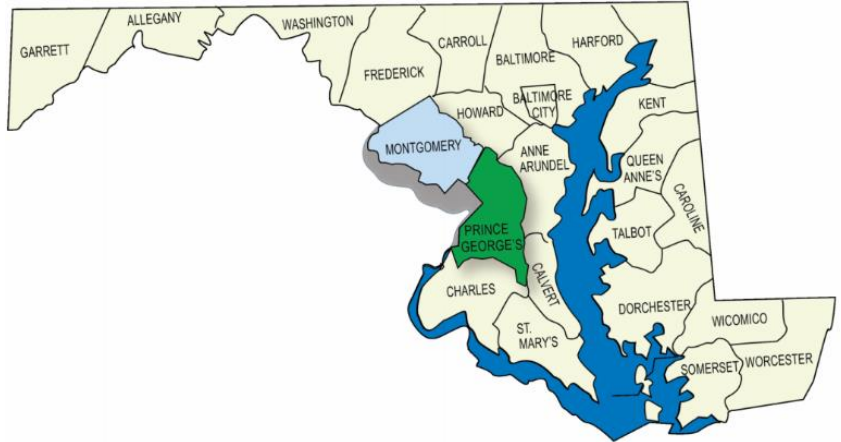
**WSSC WATER OVERVIEW,
CHAIR'S LETTER AND BUDGET
SUMMARIES**

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 and later re-codified into Division II of the Public Utilities Article of the Annotated Code of Maryland. The agency ranks among the largest water and sewer utilities in the country encompassing a service area of nearly 1,400 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 Commission Performance Report contains Key Performance Indicators that are aligned to the Strategic Plan Priorities and Objectives. The report demonstrates WSSC Water's commitment to accountability, which is a Core Value in the Strategic Plan.

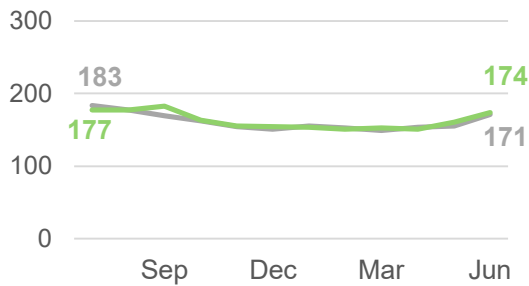
Mission

— FY 2019
— FY 2020

Provide Safe and Reliable Water

Water Production

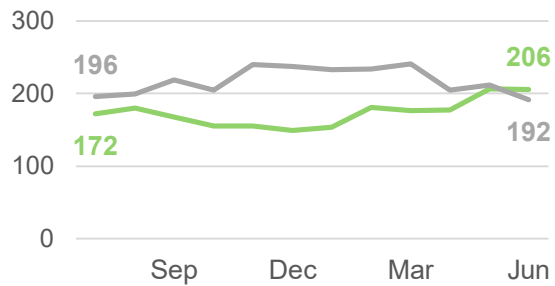
Average gallons of water produced in millions per day



Return Clean Water to Our Environment

Wastewater Treatment

Average gallons of wastewater treated in millions per day



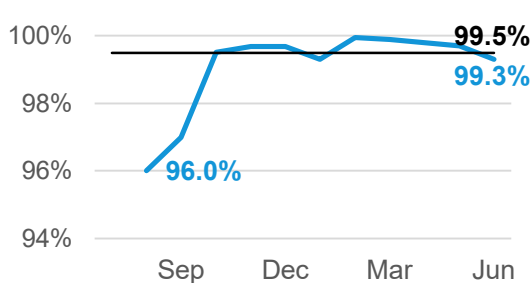
Enhance Customer Experience

— FY 2019
— FY 2020
— Expected Target

Deliver Safe, Reliable and Consistent Service

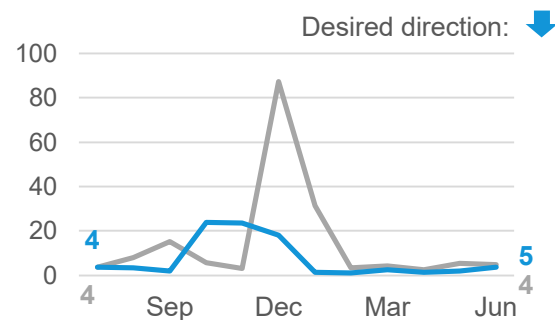
Accounts Billed On-Time*

% 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 FY2020 data presented for these KPIs as the Customer-to-Meter (C2M) system was introduced at the start of FY2020 (July 2019). For Accounts Billed On-Time, first month data available in C2M was August 2019.

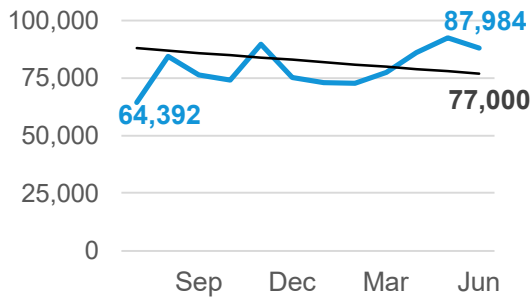
WSSC Water Performance Report

Enhance Customer Experience

— FY 2019
— FY 2020
— Expected Target

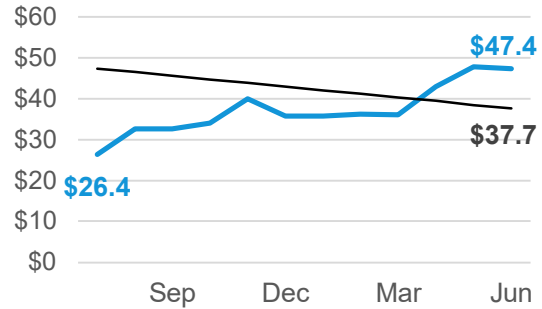
Past Due Accounts*

of accounts more than 30 days past the bill date



Past Due Amount*

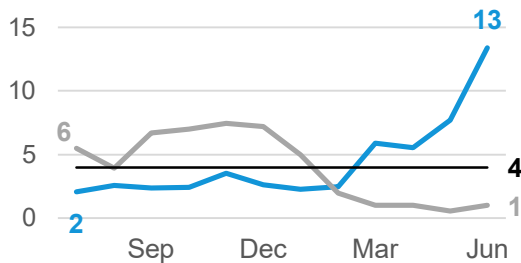
\$ of accounts (millions) more than 30 days past the bill date



Provide Timely Response to Customer Queries

Average Answer Speed

Average minutes customer waits for customer care call center agent

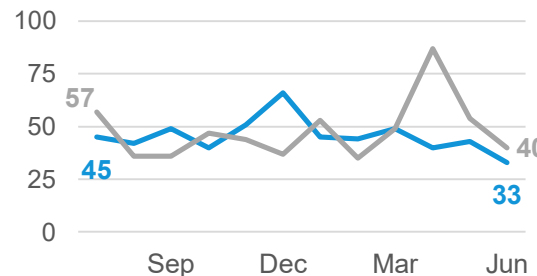


Be a Good Citizen within Our Community

Basement Backups

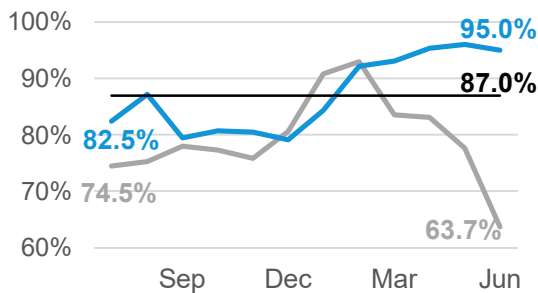
of basement backups

Desired direction: ↓



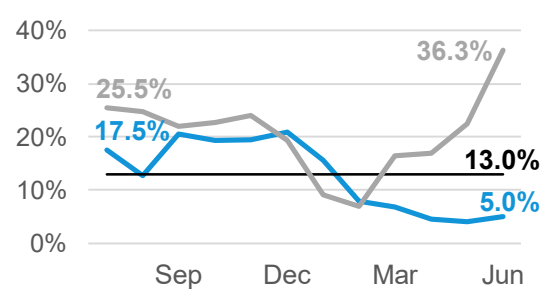
Calls Answered

of calls answered by a customer care agent / total calls



Calls Not Answered

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



WSSC Water Performance Report

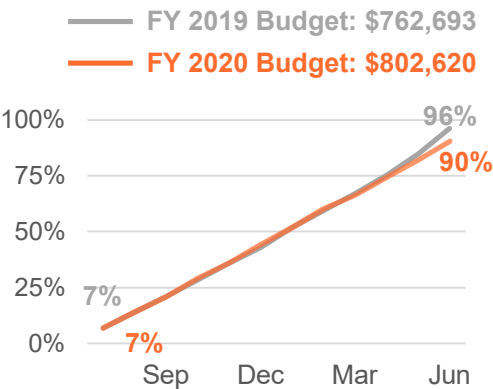
Optimize Infrastructure

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 7 for highlighted projects.

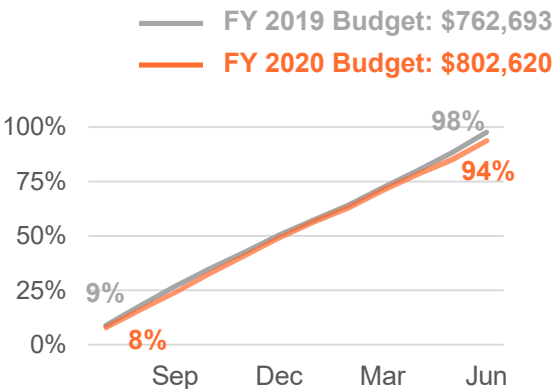
Spend Customer Dollars Wisely

Improve Financial Process Efficiency and Fiscal Sustainability

Water and Sewer Operating Expenses



Water and Sewer Operating Revenue



WSSC Water Performance Report

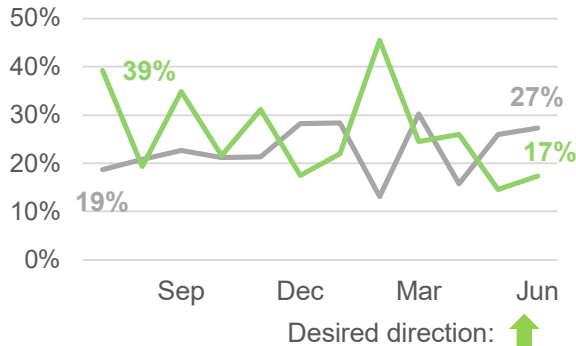
Transform Employee Engagement

— FY 2019
— FY 2020

Acquire the Best People

Monthly Positions Filled

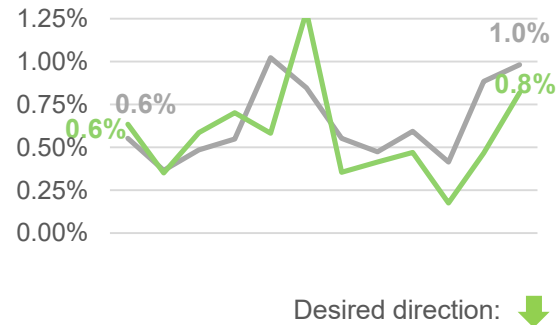
of positions filled / # of actively recruited positions



Retain Top Performers

Monthly Turnover Rate

of employee separations / # of FTEs

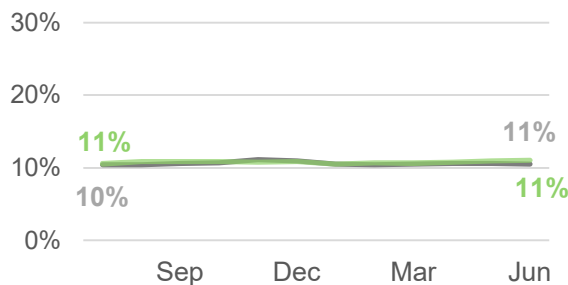


Develop and Grow Talent

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

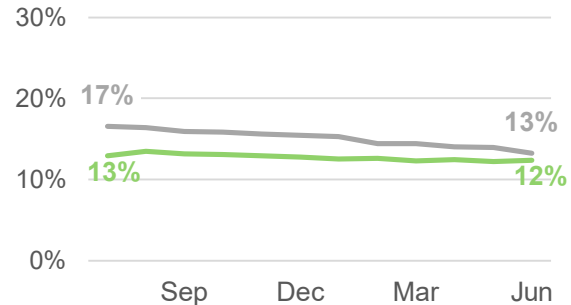
Retirement Eligibility (Full)

Eligible Now



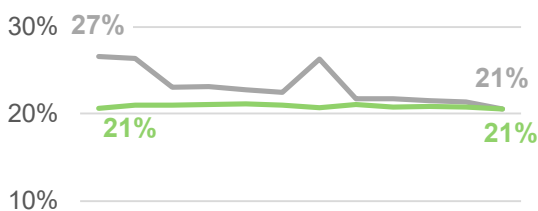
Retirement Eligibility (Early)

Eligible Now



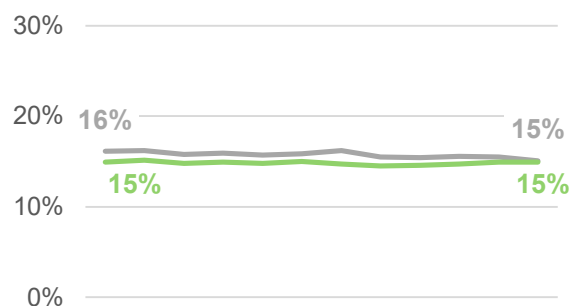
Retirement Eligibility (Full)

Eligible Within 5 Years



Retirement Eligibility (Early)

Eligible Within 5 Years



WSSC Water Performance Report

Protect Our Resources

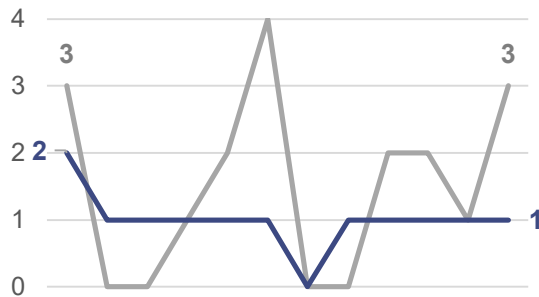
— FY 2019
— FY 2020

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

Maintain Best in Class Operating Environment Safety for Employees

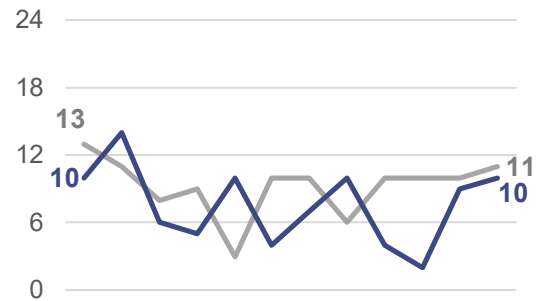
Emergency & Coordinated Responses

of cross-departmental coordinated responses, exercises and drills



Occupational Injuries

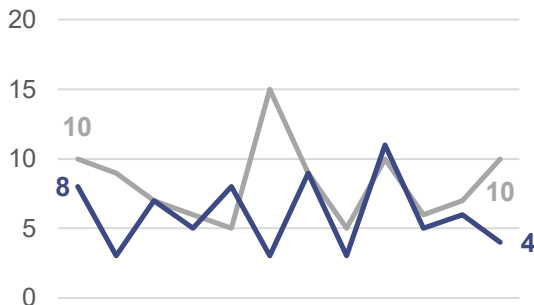
of occupational injuries



Secure Commission's Critical Infrastructure

Sanitary Sewer Overflows

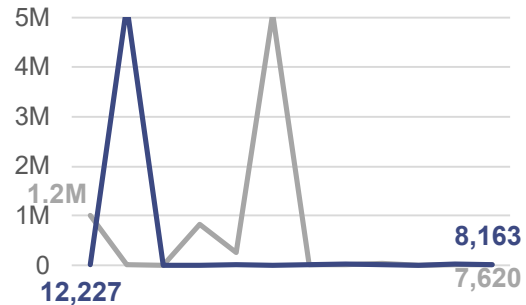
of sanitary sewer overflows



Desired direction: ↓

Sanitary Sewer Overflow Volume

Total gallons of sanitary sewer overflows in millions per month



Desired direction: ↓

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

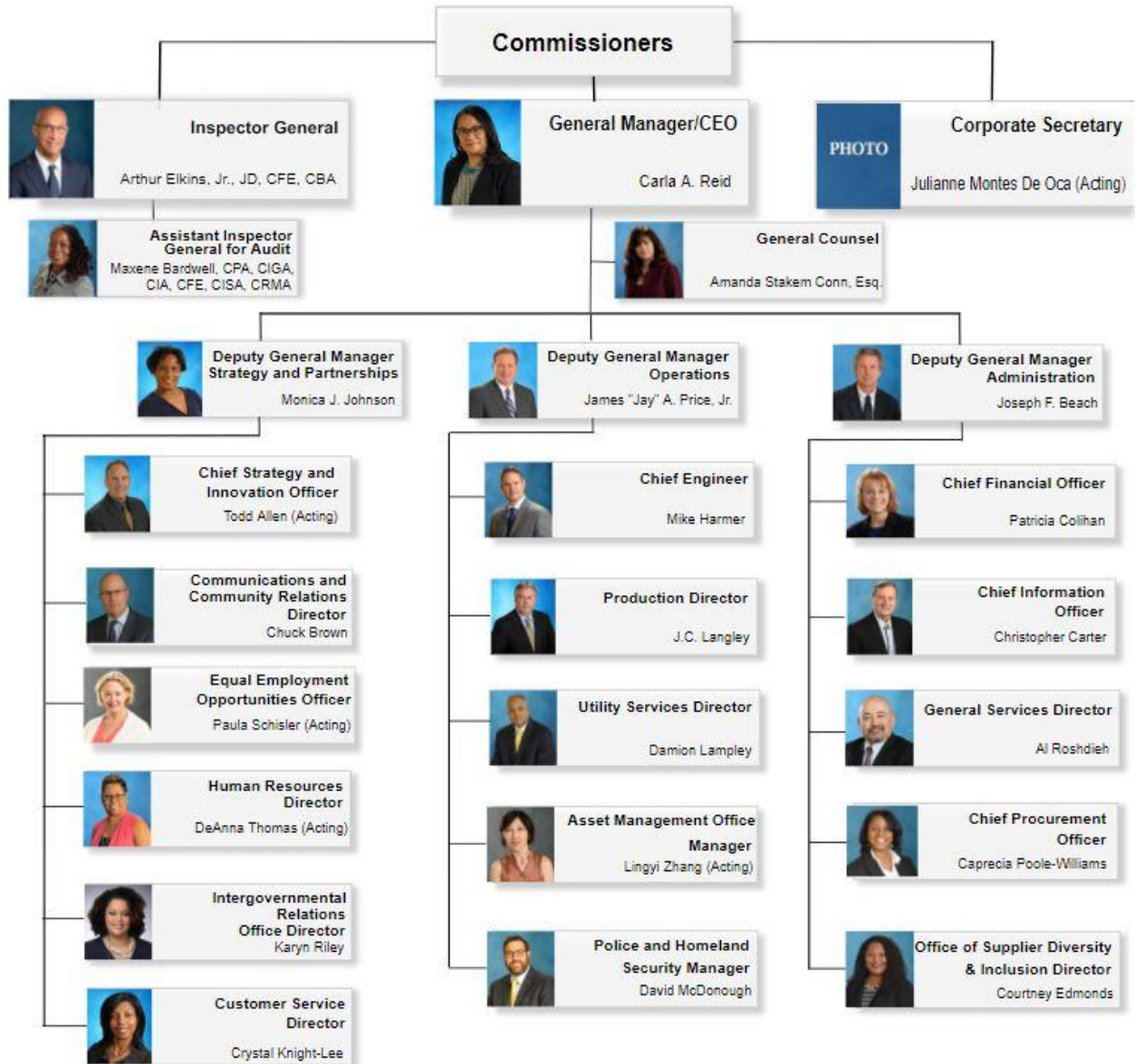


Chris Lawson
Commissioner



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

January 15, 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 Preliminary 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 Preliminary 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 PRELIMINARY PROPOSED CAPITAL AND OPERATING BUDGETS

The FY 2022 Preliminary Proposed Budget for all operating and capital funds totals \$1.553 billion or \$98 million (6.7%) more than the Approved FY 2021 Budget. The Preliminary 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

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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 Preliminary Proposed Capital Budget of \$700.9 million represents an increase of \$95.5 million (15.8%) 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 Preliminary Proposed FY 2022 operating and capital budgets.

The Preliminary 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 2). 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.

CUSTOMER AFFORDABILITY

Like many utilities across the country, WSSC Water continues to face the challenge of balancing increasing costs for infrastructure and operations with affordability considerations for our customers. While the average costs to ensure access to 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 Preliminary 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. This year we are

proposing that the unspent balance of this loan program be deposited in the WSSC Water Fund to support customers who are struggling to pay their water and sewer bill.

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;
- Although this budget includes four additional workyears, this is the first proposed net increase in the number of WSSC Water positions since FY 2017, and we have currently frozen the hiring of 30 positions;
- 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 preliminary budget proposes 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)

	<u>FY 2022 Proposed Budget</u>	<u>Prince George's County Limit</u>	<u>Montgomery County Limit</u>
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 Preliminary 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 \$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 Preliminary Proposed Budget will be the subject of continuing analysis and refinement until the Commissioners transmit a proposed budget on or before March 1, 2021. WSSC Water recognizes that an important part of the budget process is seeking input from our customers and other interested stakeholders. In that regard, Public Hearings on WSSC Water's FY 2022 Preliminary Proposed Budget are scheduled to be livestreamed on February 2 and 3, 2021, at 7:30 p.m. Links to access the hearings will be posted on WSSC Water's website.

The purpose of these hearings is to obtain comments from interested citizens before transmittal of the proposed budget to the county executives by March 1, 2021. Persons desiring to speak at either of the hearings should contact WSSC Water's Budget Division at 301-206-8110 to be placed on the list of speakers in advance of the hearings. The public hearing record will remain open until February 15, 2021. Persons who wish to submit a written statement for inclusion in the record of the hearings should e-mail the statement to BudgetGroup@wsscwater.com.

The Preliminary Proposed Budget will receive further consideration by the Commission following the WSSC Water public hearings, and 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:

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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

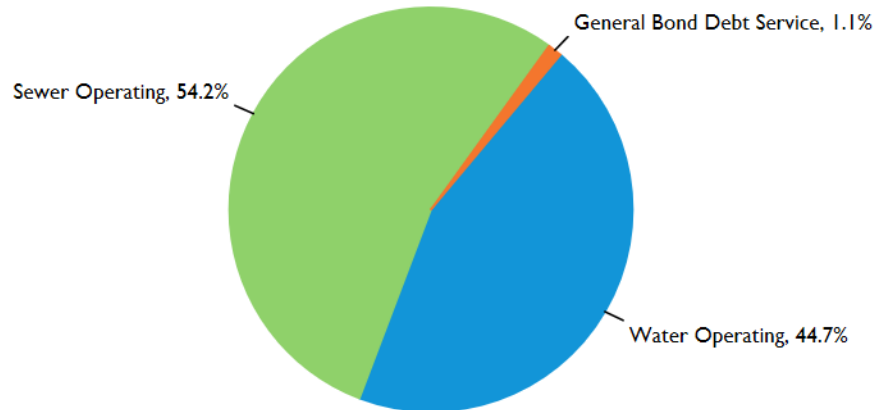
(\$ in thousands)	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed	FY 2022 Over/(Under) FY 2021	% Change
Operating Funds							
Water Operating	\$ 320,088	\$ 339,200	\$ 338,471	\$ 365,190	\$ 380,565	\$ 15,375	4.2 %
Sewer Operating	385,527	419,633	413,421	470,833	461,734	(9,099)	(1.9)%
General Bond Debt Service	19,108	18,847	14,292	13,633	9,794	(3,839)	(28.2)%
Total Operating	\$ 724,723	\$ 777,680	\$ 766,184	\$ 849,656	\$ 852,093	\$ 2,437	0.3 %
Capital Funds							
Water Supply	261,602	210,783	162,378	256,499	291,508	35,009	13.6 %
Sewer Disposal	190,058	152,891	211,729	308,014	384,481	76,467	24.8 %
General Construction	23,555	23,121	20,278	40,869	24,924	(15,945)	(39.0)%
Total Capital	\$ 475,215	\$ 386,795	\$ 394,385	\$ 605,382	\$ 700,913	\$ 95,531	15.8 %
Grand Total	\$ 1,199,938	\$ 1,164,475	\$ 1,160,569	\$ 1,455,038	\$ 1,553,006	\$ 97,968	6.7 %

Comparative Expenses by Major Expense Category

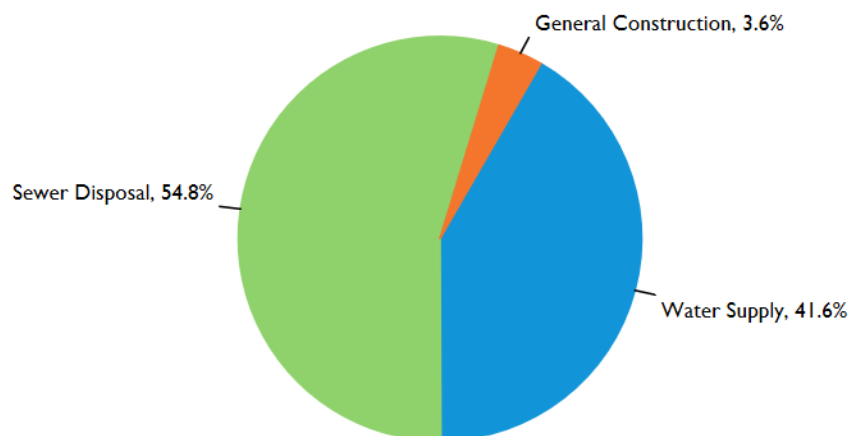
(\$ in thousands)	FY 2020 Actual			FY 2021 Approved			FY 2022 Proposed		
	Capital	Operating	Total	Capital	Operating	Total	Capital	Operating	Total
Expense Categories									
Salaries & Wages	\$ 26,388	\$ 132,574	\$ 158,962	\$ 27,826	\$ 128,369	\$ 156,195	\$ 27,124	\$ 133,525	\$ 160,649
Heat, Light & 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	149,548	282,853	432,401
Grand Total	\$ 394,385	\$ 766,184	\$ 1,160,569	\$ 605,382	\$ 849,656	\$ 1,455,038	\$ 700,913	\$ 852,093	\$ 1,553,006

FY 2022 PROPOSED BUDGET BY FUND

Grand Total = \$1,553,005,756



Operating Funds = \$852,092,882



Capital Funds = \$700,912,874

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
Revenues					
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
Total Operating Revenues	\$ 709,893	\$ 733,562	\$ 740,367	\$ 809,251	\$ 828,527
Other Credits and Transfers					
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
Total Funds Available	\$ 720,216	\$ 763,193	\$ 777,907	\$ 836,023	\$ 842,299
Expenses					
Salaries & Wages	117,144	125,100	131,711	127,726	132,834
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
Debt Service					
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	295,182
Total Expenses	\$ 705,615	\$ 758,833	\$ 751,892	\$ 836,023	\$ 842,299

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
Operating Revenues					
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
Total Operating Revenues	\$ 20,341	\$ 17,204	\$ 13,481	\$ 11,207	\$ 8,558
Other Credits and Transfers					
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)
Total Funds Available	\$ 20,341	\$ 17,204	\$ 13,481	\$ 11,207	\$ 8,558
Expenses					
Salaries & Wages	701	751	863	643	691
Heat, Light & Power	11	-	-	8	8
All Other	802	825	852	1,254	1,313
Subtotal	\$ 1,514	\$ 1,576	\$ 1,715	\$ 1,905	\$ 2,012
Debt Service					
Principal Payments	12,672	13,337	9,445	8,796	5,803
Interest Payments	4,922	3,934	3,132	2,932	1,979
Subtotal	\$ 17,594	\$ 17,271	\$ 12,577	\$ 11,728	\$ 7,782
Total Expenses	\$ 19,108	\$ 18,847	\$ 14,292	\$ 13,633	\$ 9,794

REVENUE AND EXPENSE TRENDS (Continued)

Capital Funds

(\$ in thousands)	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
Funds Provided					
Bonds and Notes Issues/Cash on Hand	\$ 609,678	\$ 338,012	\$ 289,097	\$ 531,659	\$ 604,934
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
Total Capital Funds	\$ 659,456	\$ 377,428	\$ 317,214	\$ 605,382	\$ 700,913
Expenses					
Salaries & Wages	\$ 27,717	\$ 27,293	\$ 26,388	\$ 27,826	\$ 27,124
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	149,548
Total Capital Expenses	\$ 475,216	\$ 386,795	\$ 394,385	\$ 605,382	\$ 700,913

SECTION 2
PROPOSED RATES, FEES AND CHARGES

PROPOSED RATES, FEES AND CHARGES

COMBINED WATER AND SEWER OPERATING FUNDS - PROPOSED RATE IMPACT

5.9% Average Water and Sewer Rate Increase

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

The Fiscal Year (FY) 2022 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 2-5.

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
	Water Rates	Sewer Rates	Combined
(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
	Water Rates	Sewer Rates	Combined
(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

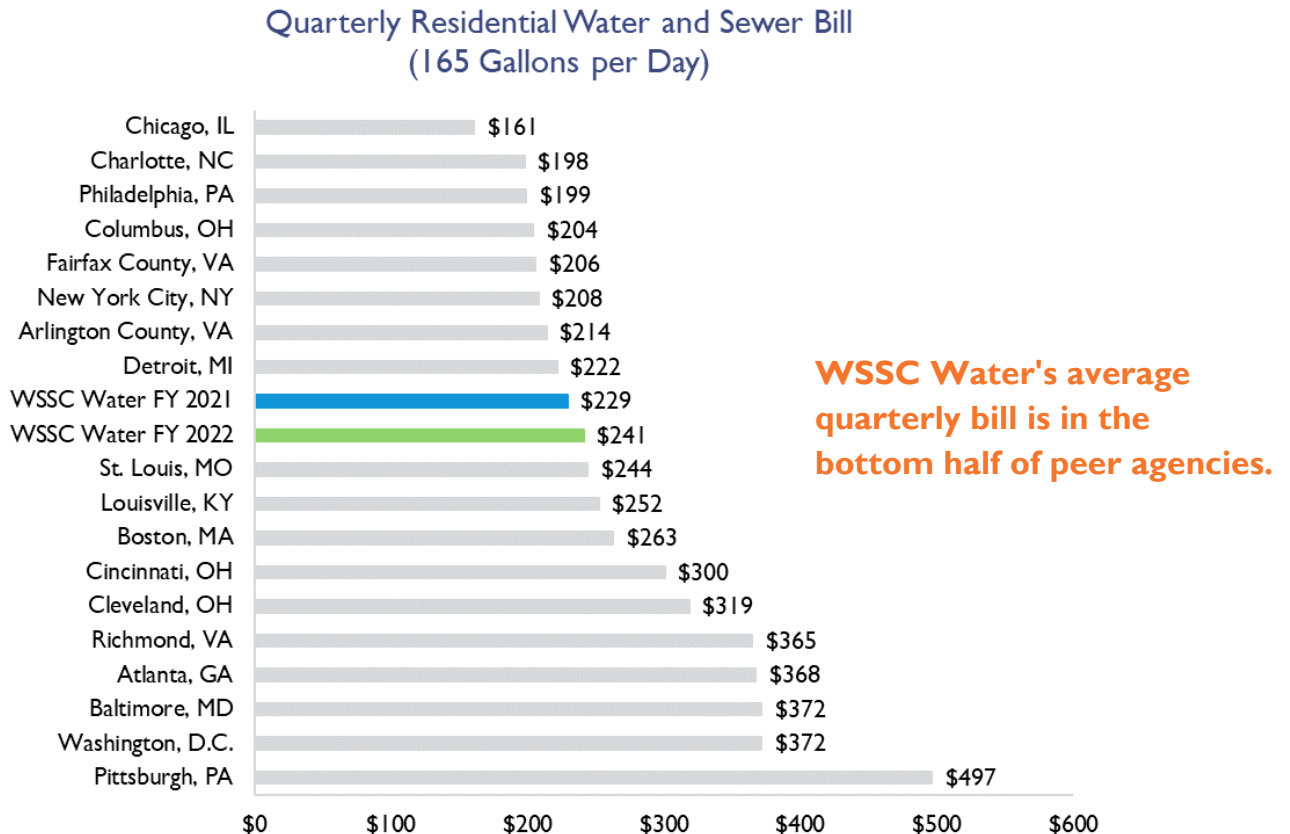
Meter Size	Average Daily Consumption (Gallons Per Quarter)	Approved FY 2018	Approved FY 2019	Approved FY 2020	Approved FY 2021	Proposed FY 2022
3/4" Residential Meter	100 (9,125 gal/qtr)	\$ 122.72	\$ 127.01	\$ 138.94	\$ 145.58	\$ 152.48
3/4" Residential Meter	165 (15,056 gal/qtr)	206.12	213.95	217.83	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 2-7 and 2-8.

WATER AND SEWER BILL COMPARISON

Quarterly Bill Comparison

Presented below is a comparison of WSSC Water's average quarterly residential bill for water and sewer services at 165 gallons per day to the equivalent bill from 18 other cities and communities, both locally and nationally. The consumption level of 165 gallons per day is used for comparison because it represents the average household in WSSC Water's service area, a 3-person household using 55 gallons of water per person per day. The rates 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. Therefore, WSSC Water's rates and fees are competitive both locally and nationally.

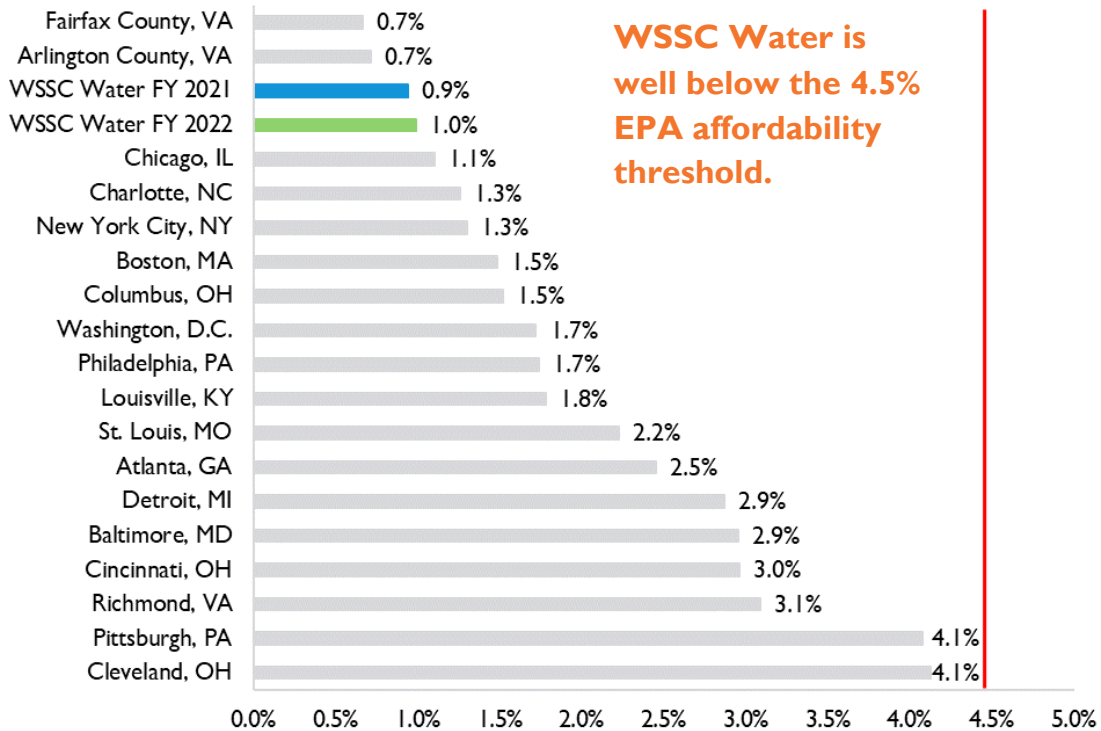


WATER AND SEWER BILL COMPARISON (Continued)

Bill as a Percentage of Median Household Income Comparison

The chart below shows a comparison of the average residential bills as a percentage of median household income for WSSC Water and the 18 other cities and communities analyzed for customers using 165 gallons of water per day. The average annual bill from WSSC Water in FY 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 at the bottom end of the 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 U.S. Environmental Protection Agency (EPA) considers to be affordable for customers.

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



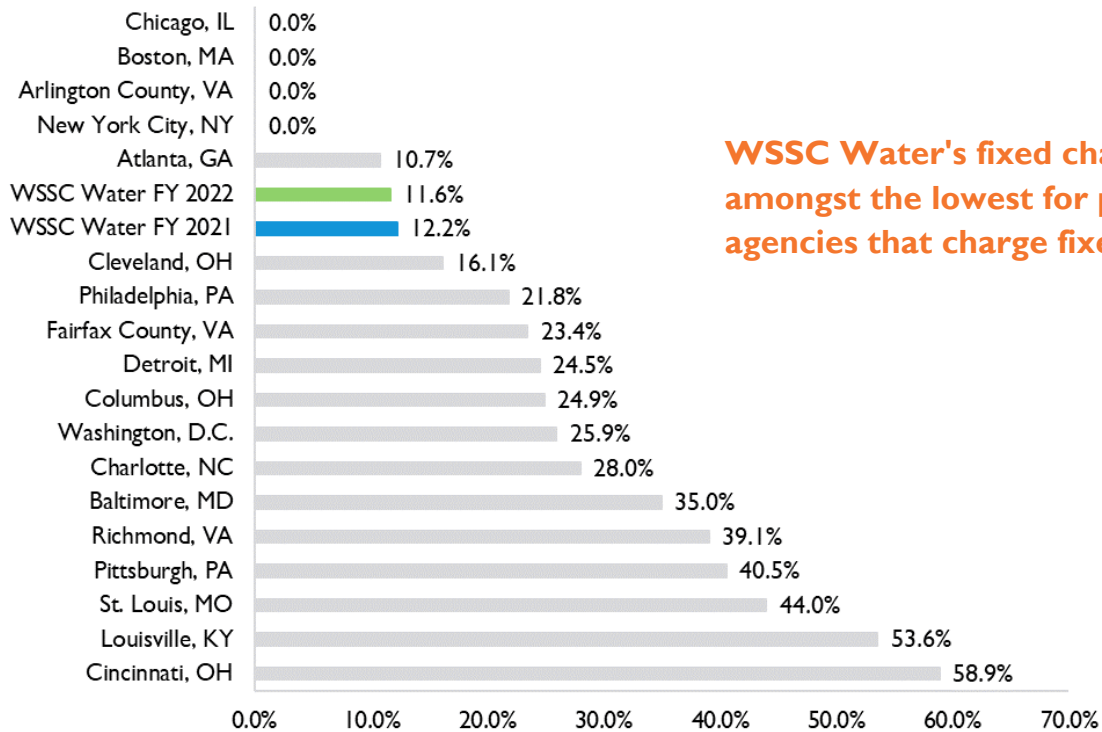
Median household income (in 2019 dollars) 2015-2019. Figures gathered from www.census.gov, 2015-2019 American Community Survey 5-Year Estimates.

WATER AND SEWER BILL COMPARISON (Continued)

Percentage of Bill from Fixed Charges Comparison

A comparison of the percentage of the average residential bill, at 165 gallons per day, that is due to fixed charges is shown below for WSSC Water and the 18 other cities and communities reviewed. Four of the peer agencies (Chicago, Illinois; Boston, Massachusetts; Arlington County, Virginia; and New York City, New York) do not have any fixed fees as part of their water and sewer bills. Of the agencies that do charge fixed fees, WSSC Water has the second lowest percentage of its bill that is derived from those fees. In FY 2021, 12.2% of the average residential bill from WSSC Water was attributable to fixed fees. In FY 2022, that percentage has dropped to 11.6%, as the water and sewer rates have increased but fixed fees have remained the same.

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



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

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 Quarterly Charges	FY 2022 Proposed 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
INSPECTIONS, LICENSES AND PERMITS			
I Inspection Fees - Water/Sewer Connection Hookup, Well/Septic Hookup, Plumbing and Gas-fitting Inspections			
<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
INSPECTIONS, LICENSES AND PERMITS (Continued)			
2 License Fees for the Regulated Trades			
<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
3 Short Form Permit Fee (up to 3 fixtures) - Non-Refundable	113	124	Yes
4 Long Form Permit Transfer Fee (with inspection)	194	213	Yes
5 Tapper License Fees			
Permit Fee	363	363	-
Duplicate	36	36	-
6 Watershed Use Permit Fees			
<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
7 Site Utility Inspection Fees (Non-Minor)			
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
DISCHARGE AND WATER PROTECTION			
8 Septic Hauler Discharge Permit Fees			
<u>Category I - Residential & Septic Waste & 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 <u>plus</u> sewer rate per 1,000 gallons	130	156	Yes
Sewer Rate - Hauled Waste (1,000 gallons of truck capacity)	47	48	Yes
9 Industrial Discharge Control Program Fees By Category			
<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	-
10 Discharge Authorization Permit Fees			
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
11 Discharge Fees - Food Service Establishment			
Full Permit FSE	537	537	-
BMP Permit FSE	152	152	-
12 Cross Connection Fees			
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
METERS AND RELATED SERVICES			
13 Small Meter Replacement Fee (at Customer Request)	\$ 215	\$ 215	-
14 Meter Replacement Fees (Damaged or Stolen Meter)			
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
15 Meter Testing Fees			
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
METERS AND RELATED SERVICES (Continued)			
16 Sub-Meter Installation Fees			
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
17 Water Turn-Off, Turn-On Fees*			
Small Meter Turn-Off	80	80	-
Small Meter Turn-On	100	100	-
Large Meter Turn-Off	203	203	-
Large Meter Turn-On	241	241	-
18 Call Back Fee (small meters, plumbers)	93	93	-
19 Call Back Fee (large meters, plumbers)	301	346	Yes
20 Missed Appointment Fees			
First Missed Appointment or Restoration of Service Turn-On	97	97	-
Each Additional Missed Appointment	110	110	-
21 Meter Reinstallation Correction Fee	388	388	-
22 Sewer Meter Maintenance Fee (per year)	13,803	15,873	Yes
Quarterly Calibrations (per quarter)	3,451	3,969	Yes
23 Property Inspection Fee	119	119	-
24 Warehouse Restocking Fee	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
FIRE HYDRANT SERVICES			
25 Temporary Fire Hydrant Connection Fees			
<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	36	37	
(Minimum charge or Tier 4 rate per 1,000 gallons flat rate)			Yes
Water Consumption - 3" meter	229	242	
(Minimum charge or Tier 4 rate per 1,000 gallons flat rate)			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	-
26 Truck Inspection Fee with Attached Fire Hydrant Meter (for 2 years)	52	52	-
27 Fire Hydrant Inspection Fee (per hydrant)	158	Delete	Yes
Controlled Access Surcharge Fee	30	Delete	Yes
28 Fire Hydrant Flow Test Fees			
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
DEVELOPMENT SERVICES			
29 Feasibility Review Fees (WSSC Water Built)			
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
30 Construction Services Fee	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	-
31 Design Review			
Development is More than 10 Residential Units or Commercial	6,500	6,500	-
Development is 10 Residential Units or Less	3,250	3,250	-
32 Extra Review Fees			
<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
33 Hydraulic Planning Analysis and System Planning Forecast			
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
34 In-House Design Deposit	Deposit	Deposit	-
35 Partial Release Fee	1,468	1,541	Yes
36 Off-Property Service Connection Reimbursement	Reimbursement	Reimbursement	-
37 Service Connection Application and Inspection Fee (per permit)	2,434 water and/or sewer connection	2,434 water and/or sewer connection	-
38 Government Referred Plan Review			
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	-
39 Pre-Screen Fee All Plan Types	394	404	Yes
40 Site Utility (On-site) Review Fees			
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
41 Name/Transfer of Ownership Change Fee	275	303	Yes
42 Variance Review Fee	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
PIPELINE, ENGINEERING AND ENVIRONMENTAL SERVICES			
43 Shutdown/Charge Water Main Fee	\$ 1,177	\$ 1,177	-
Shutdown Complex Water Main Fee	2,144	2,144	-
44 Review and Inspection Fees for Site Work Potentially Impacting WSSC Water Pipelines			
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	-
45 Relocation Fee			
Inspection for MOU project (minimum charge up to 4 hours)	600	600	-
46 Connection Abandonment Fees			
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	-
47 Chlorination Confirmation Test Fee (per first test)	247	247	-
Re-Test or Additional Tests (per hour)	173	182	Yes
48 Re-Test or Additional Tests Chlorination and Pressure Test (per test)	173	182	Yes
Inspector Overtime (per hour)	206	206	-
49 Review Fee for Additional Reviews of Contract Documents As-Builts (per hour)	206	206	-
50 Residential Outside Meter Housing Upgrade/Pipe Alteration	6,805	6,805	-
51 Utility Erosion and Sediment Control Permit Fees (per linear foot)			
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	-
52 Right-of Way Release (or Subordination) Review Fee (per document)	1,335	1,442	Yes
53 Right-of Way Acquisition and Condemnation for SEP Projects	Reimbursement	Reimbursement	-
54 Environmental Site Review Fee			
With Database Search Submitted by Applicant	381	438	Yes
55 Feasibility Report and Committee Review Fee for On-Site Takeover Projects	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
PUBLICATIONS AND ADMINISTRATIVE			
56 Plans, Plats and 200' Reference Maps Copies			
Xerographic bond paper copy (per sheet)	\$ 6	\$ 6	-
57 WSSC Water Plumbing and Fuel Gas Code (Plumbing Code)			
Sale of Plumbing Regulation (per book)	46	51	Yes
58 Contract Specifications, Contract Specification Books, Drawings, Design Manuals, Standard Details and General Conditions			
<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	-
59 Photocopies of WSSC Water Documents Charges			
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)			
60 WSSC Water Pipeline Design Manual Fee	90	90	-
61 WSSD Laws			
Bound Volume	83	83	-
Supplements	45	45	-
62 Transcribed Tape of a Hearing or Meeting Fee	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
OTHER FEES AND CHARGES			
63 Patuxent Watershed Civil Citation Fees (State Mandated)			
First Offense	\$ 150	\$ 150	-
Each Additional Offense within Calendar Year	300	300	-
64 Civil Citation Fees - Sediment Control, Theft of Service and Plumbing Civil Citations (State Mandated)			
First Offense	250	250	-
Second Offense	500	500	-
Third Offense	750	750	-
Each Violation in Excess of Three	1,000	1,000	-
65 Lobbyist Registration Fee (Code of Ethics)	110	121	Yes
66 Dishonored Check Fee & Electronic Payment Fee	46	35	Yes
(applies to all dishonored checks and dishonored electronic payments)			
67 Credit Card Surcharge (Applies to customer payment of any fee/charge by credit card other than water and sewer billing)	2% of amount charged	2% of amount charged	-
68 Protest Filing Fee	847	857	Yes
69 Preparation of Hold Harmless Agreement Fee	1,351	1,486	Yes
70 Connection Redemption Fee	44	22	Yes

SECTION 3

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 5-1).
- 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 slightly from 130.1 MGD in FY 2021 to 131.5 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 \$700.9 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
Water Program:							
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	130.1	131.5
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
Sewer Program:							
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
House Connections added:							
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.

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 %
Operating Revenues							
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
Total Operating Revenues	\$ 809,251	\$ 828,527	\$ 876,610	\$ 940,144	\$ 1,000,489	\$ 1,060,642	\$ 1,119,999
Other Credits and Transfers							
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
Total Funds Available	\$ 836,023	\$ 842,299	\$ 888,382	\$ 949,916	\$ 1,008,261	\$ 1,068,414	\$ 1,127,747
Operating Expenses							
Salaries & Wages	127,726	132,834	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	295,182	301,084	307,105	313,247	319,512	325,903
Total Operating Expenses	\$ 491,142	\$ 505,669	\$ 519,473	\$ 533,716	\$ 546,806	\$ 560,370	\$ 576,035
Debt Service							
Bonds and Notes Principal and Interest	313,865	309,045	328,519	352,154	377,451	398,406	418,476
Other Transfers and Adjustments							
Additional and Reinstated	-	-	-	-	5,000	5,000	20,000
PAYGO	31,016	27,585	31,016	44,000	65,000	80,000	80,000
Total Expenses	\$ 836,023	\$ 842,299	\$ 879,008	\$ 929,870	\$ 994,257	\$ 1,043,776	\$ 1,094,511
Net Revenue (Loss)	\$ -	\$ -	\$ 9,374	\$ 20,046	\$ 14,004	\$ 24,638	\$ 33,236
Beginning Fund Balance - July 1	\$ 147,605	\$ 162,291	\$ 162,291	\$ 171,665	\$ 191,711	\$ 205,715	\$ 230,353
Net Increase (Decrease) in Fund Balance	-	-	9,374	20,046	14,004	24,638	33,236
Adjustments	14,686	-	-	-	-	-	-
Ending Fund Balance - June 30	\$ 162,291	\$ 162,291	\$ 171,665	\$ 191,711	\$ 205,715	\$ 230,353	\$ 263,589
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	1,780	1,780	1,780	1,780	1,780	1,780

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 4
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 4-3 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.

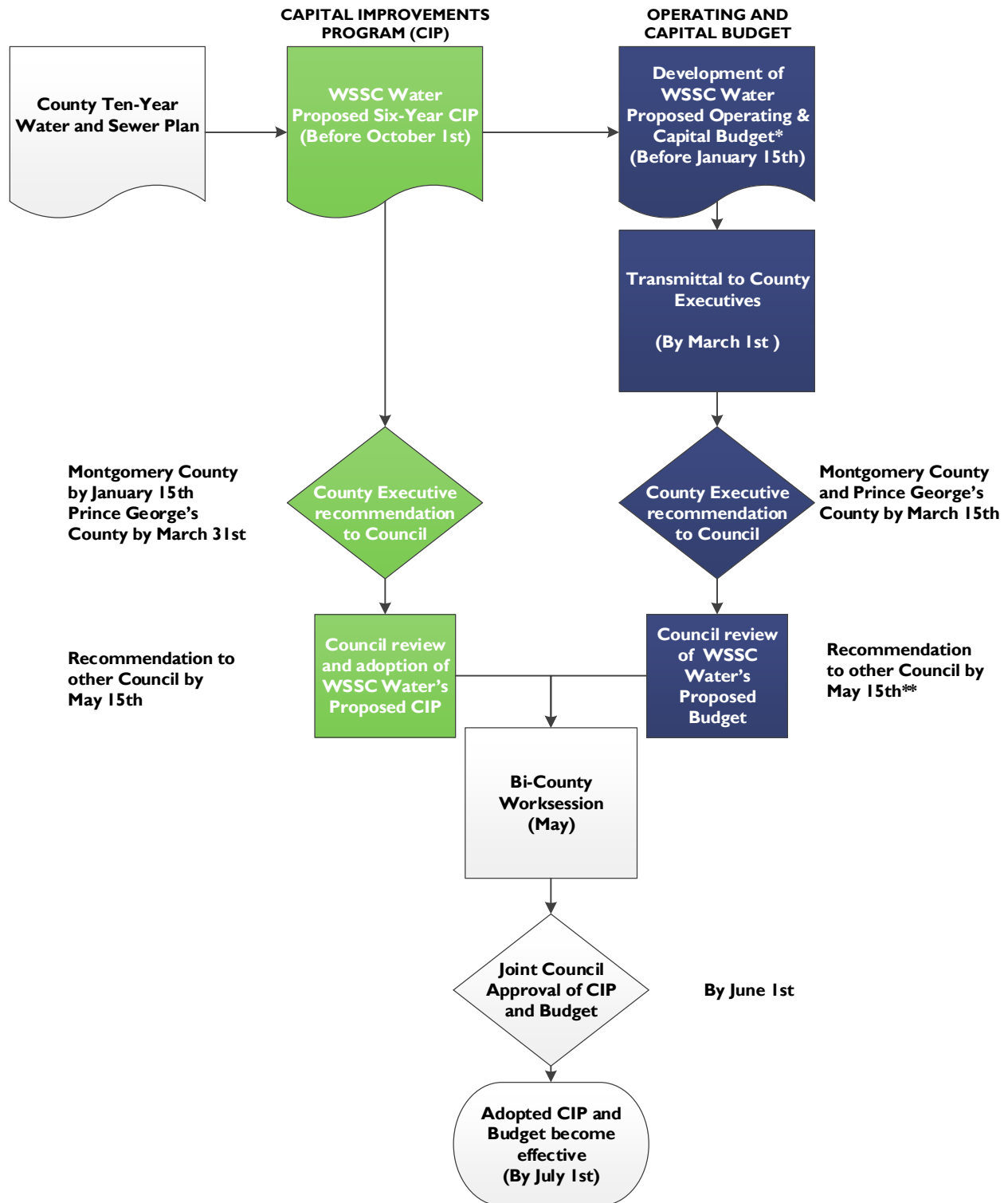
Operating Budget

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.

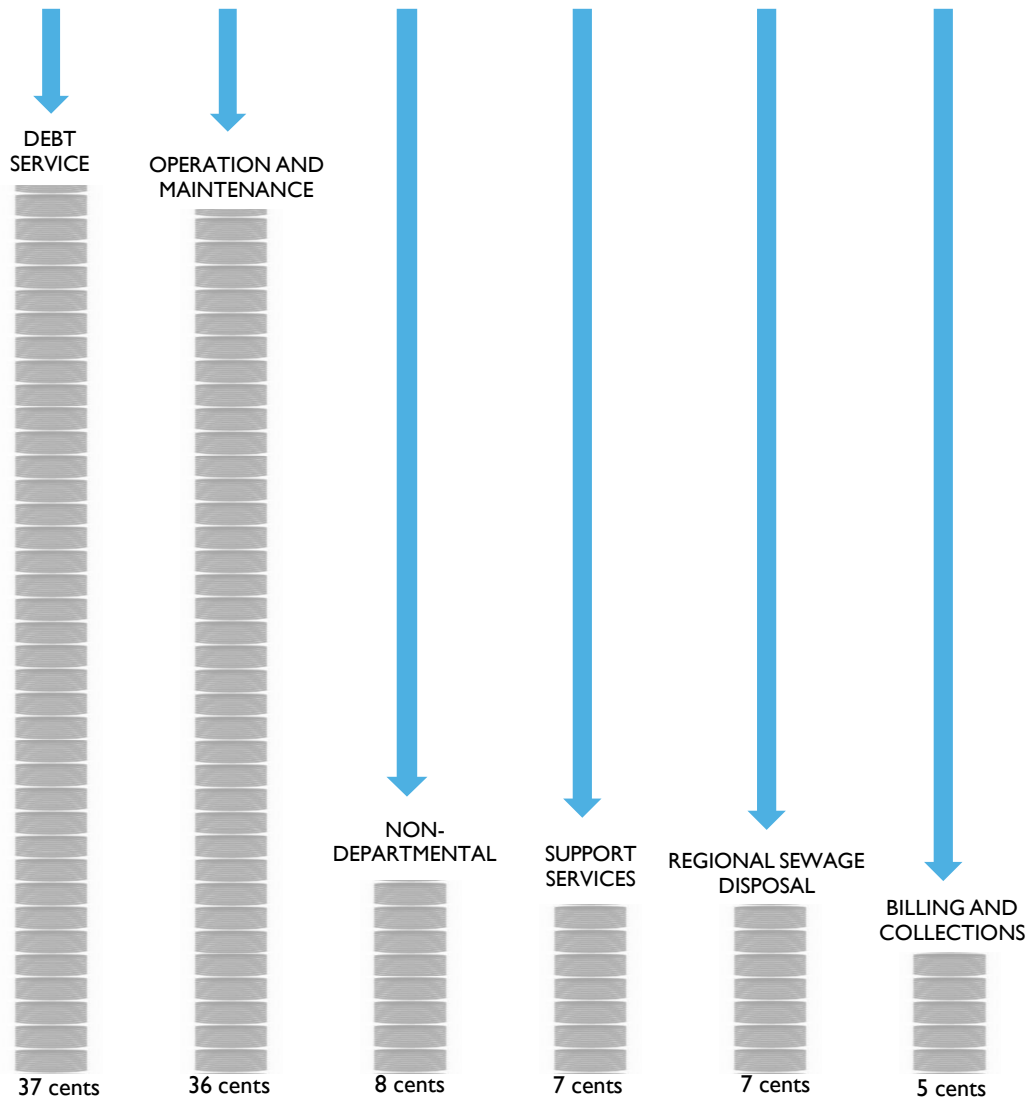
Sewer

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

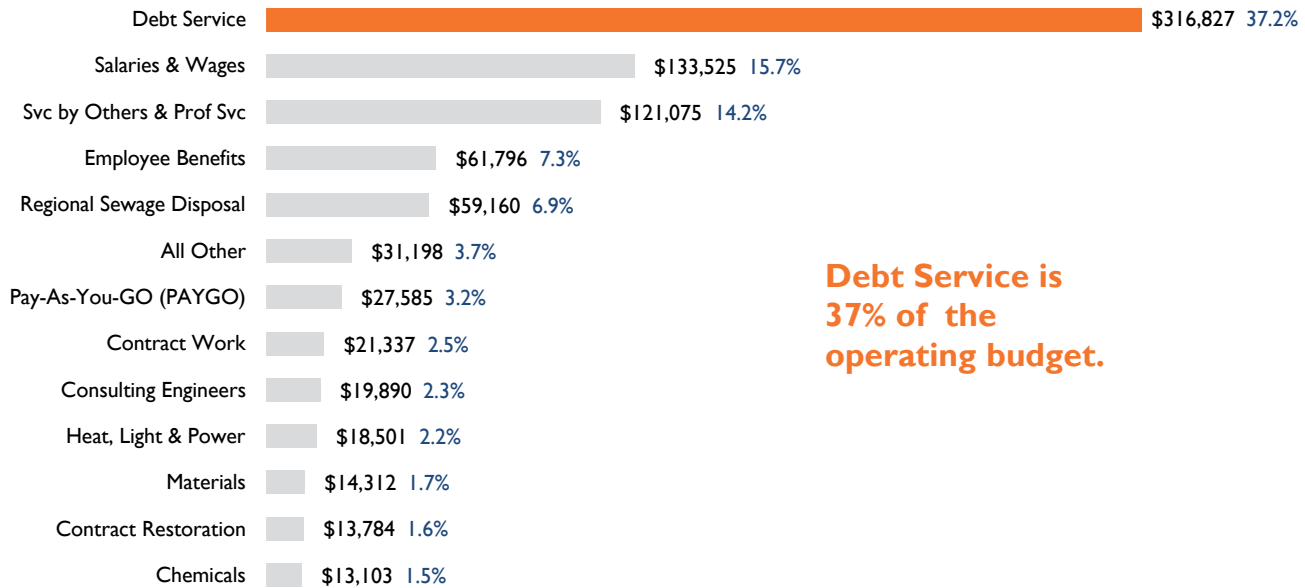
WSSC Water issues General Construction Bonds (Capital Fund) to pay for the construction of minor water and sewer lines (water distribution lines less than 15 inches in diameter and sewer lines less than 14 inches in diameter) and support facilities. General Bond Debt Service Fund revenues - customer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



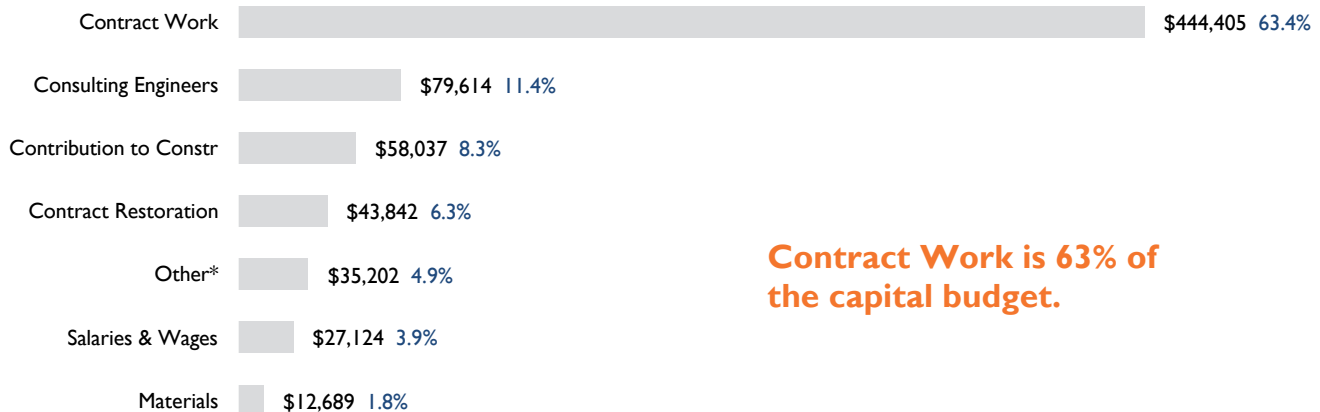
FY 2022 PROPOSED BUDGET – BY MAJOR EXPENSE CATEGORIES

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



Includes Water Operating, Sewer Operating and General Bond Debt Service

Total Capital Budget = \$700,913 (\$ in thousands)

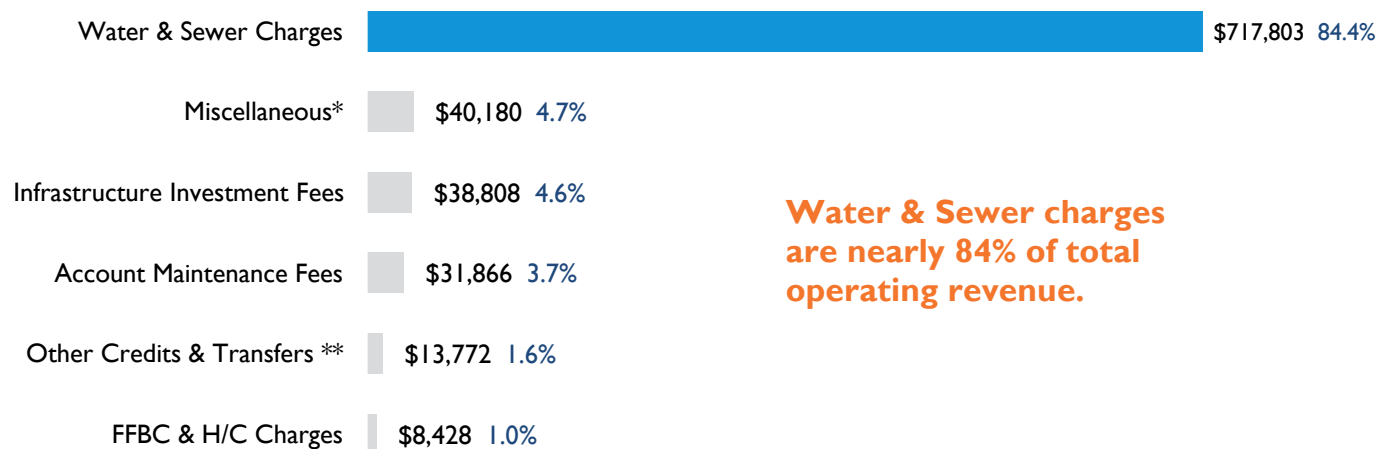


(*) Includes Land, Professional Services, Water Meters and Non-Departmental Accounts

Includes Water Supply, Sewage Disposal and General Construction Bond

FY 2022 PROPOSED BUDGET – BY SOURCES

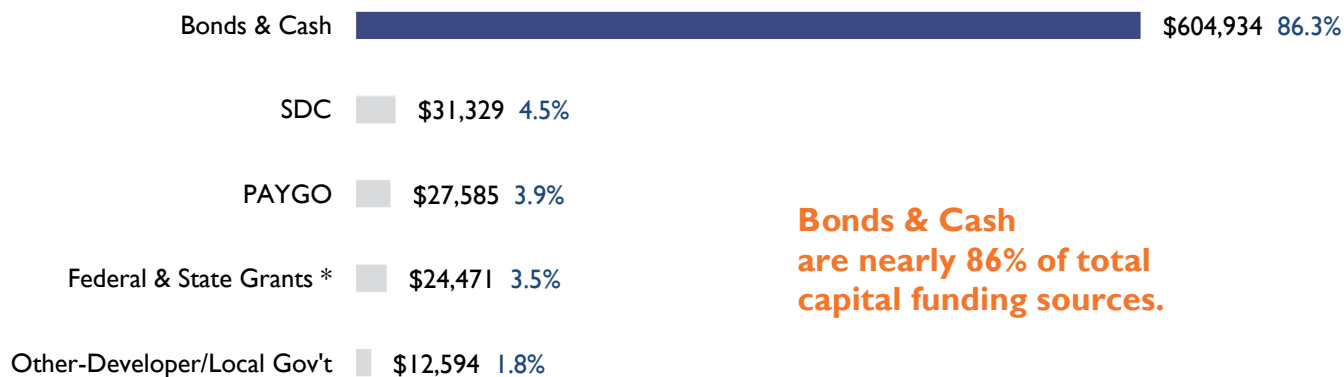
Total Operating Revenue = \$850,857 (\$ in thousands)



(*) 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

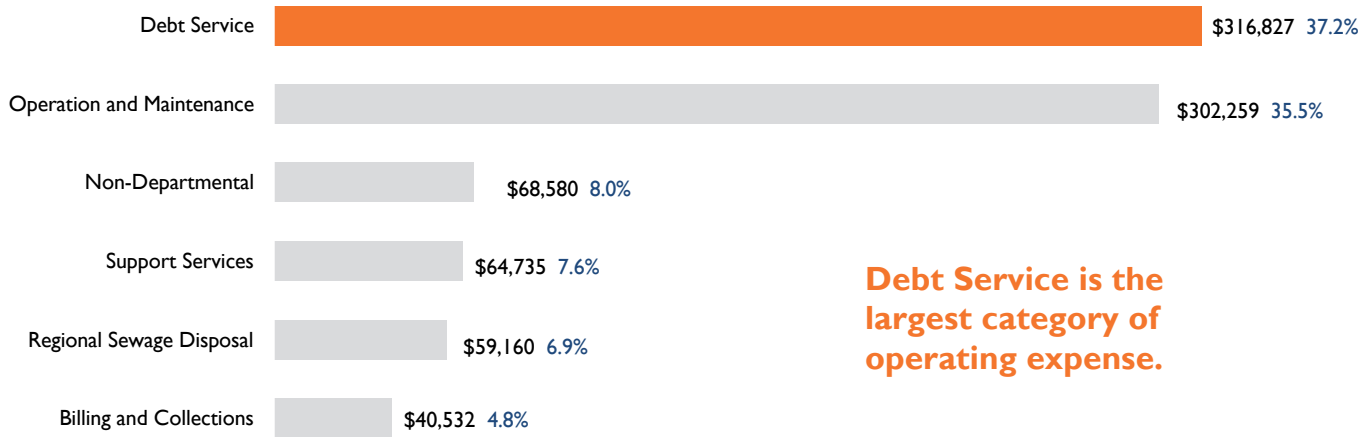
Total Capital Funding Sources = \$700,913 (\$ in thousands)



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

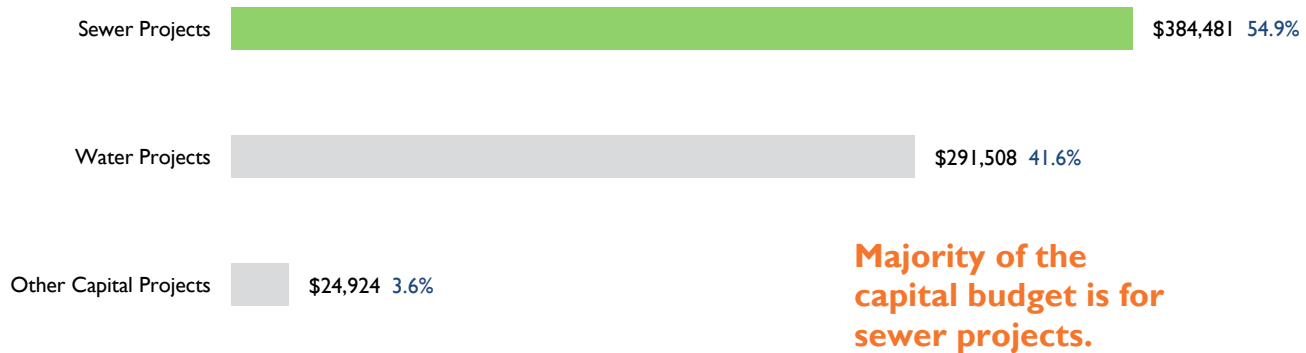
FY 2022 PROPOSED BUDGET – BY FUND USES

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



Includes Water Operating, Sewer Operating and General Bond Debt Service

Total Capital Uses = \$700,913 (\$ in thousands)



Includes Water Supply, Sewage Disposal and General Construction Bond

OPERATING REVENUE & EXPENSE BY MAJOR SOURCE CATEGORY AND FUND TYPE

	Water Operating		Sewer Operating		General Bond Debt Service		Total		
(\$ in thousands)	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
Operating Revenues									
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)%
Total Operating Revenues	\$ 351,994	\$ 373,864	\$ 457,257	\$ 454,663	\$ 11,207	\$ 8,558	\$ 820,458	\$ 837,085	2.0 %
Other Credits and Transfers									
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 %
Total Funds Available	\$ 365,190	\$ 380,565	\$ 470,833	\$ 461,734	\$ 11,207	\$ 8,558	\$ 847,230	\$ 850,857	0.4 %
Operating Expenses									
Salaries & Wages	69,910	72,721	57,816	60,113	643	691	128,369	133,525	4.0 %
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	147,938	144,357	147,244	1,254	1,313	286,247	296,495	3.6 %
Total Operating Expenses	\$ 222,217	\$ 231,200	\$ 268,925	\$ 274,469	\$ 1,905	\$ 2,012	\$ 493,047	\$ 507,681	3.0 %
Debt Service									
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 %
Total Debt Service	\$ 133,004	\$ 140,498	\$ 180,861	\$ 168,547	\$ 11,728	\$ 7,782	\$ 325,593	\$ 316,827	(2.7) %
Other Transfers									
PAYGO	9,969	8,867	21,047	18,718	-	-	31,016	27,585	(11.1)%
Total Expenses	\$ 365,190	\$ 380,565	\$ 470,833	\$ 461,734	\$ 13,633	\$ 9,794	\$ 849,656	\$ 852,093	0.3 %
Net Revenue (Loss)	\$ -	\$ -	\$ -	\$ -	\$ (2,426)	\$ (1,236)	\$ (2,426)	\$ (1,236)	(49.1)%
Fund Balance - July 1									
Net Increase (Decrease) in Fund Balance	\$ 34,469	\$ 41,201	\$ 113,136	\$ 121,090	\$ 21,818	\$ 19,392			
Adjustments	-	-	-	-	(2,426)	(1,236)			
Fund Balance - June 30	6,732	-	7,954	-	-	-			
Fund Balance - June 30	\$ 41,201	\$ 41,201	\$ 121,090	\$ 121,090	\$ 19,392	\$ 18,156			

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
Funds Provided									
Bonds & Notes Issues/Cash on Hand	\$ 235,617	\$ 250,910	\$ 255,183	\$ 329,390	\$ 40,859	\$ 24,634	\$ 531,659	\$ 604,934	13.8 %
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 %
Total Funds Provided	\$ 256,499	\$ 291,508	\$ 308,014	\$ 384,481	\$ 40,869	\$ 24,924	\$ 605,382	\$ 700,913	15.8 %
Construction Costs									
Salaries & Wages	16,095	15,442	8,568	8,402	3,163	3,280	27,826	27,124	(2.5) %
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	70,089	11,771	12,440	147,307	149,770	1.7 %
Total Construction Costs	\$ 256,499	\$ 291,508	\$ 308,014	\$ 384,481	\$ 40,869	\$ 24,924	\$ 605,382	\$ 700,913	15.8 %

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	
Water Operating									
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	-	-	%
Sewer Operating									
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	-	-	%
General Bond Debt Service									
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
Expenses					
Salaries & Wages	\$ 117,144	\$ 125,100	\$ 131,711	\$ 127,726	\$ 132,834
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	295,182
Subtotal	\$ 438,048	\$ 467,695	\$ 472,147	\$ 491,142	\$ 505,669
Debt Service					
Principal Payments	151,057	153,565	154,238	177,022	170,902
Interest Payments	106,445	121,819	125,507	136,843	138,143
Subtotal	\$ 257,502	\$ 275,384	\$ 279,745	\$ 313,865	\$ 309,045
Other Transfers					
PAYGO	10,065	15,754	-	31,016	27,585
Total Expenses	\$ 705,615	\$ 758,833	\$ 751,892	\$ 836,023	\$ 842,299

General Bond Debt Service Fund

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

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
Expenses					
Salaries & Wages	\$ 27,717	\$ 27,293	\$ 26,388	\$ 27,826	\$ 27,124
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	149,548
Total Expenses	\$ 475,216	\$ 386,795	\$ 394,385	\$ 605,382	\$ 700,913

SECTION 5
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

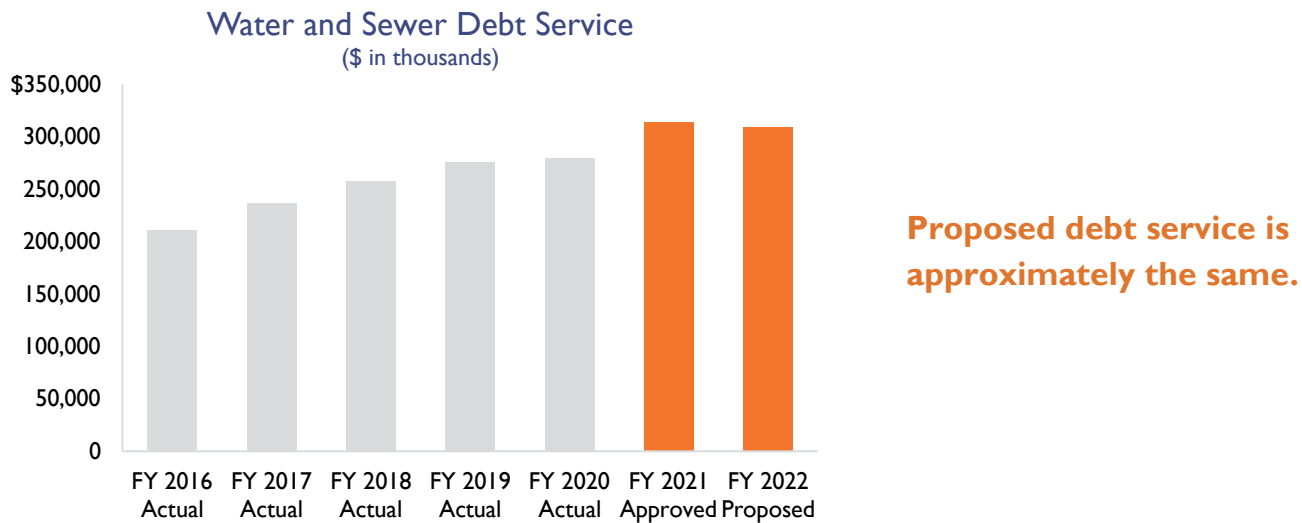
The Account Maintenance Fee (AMF) is a fixed fee that recovers the cost of service associated with maintaining and servicing customer accounts. These expenses include the cost of purchasing, maintaining, reading and replacing meters; processing meter readings; generating and mailing customer bills; and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

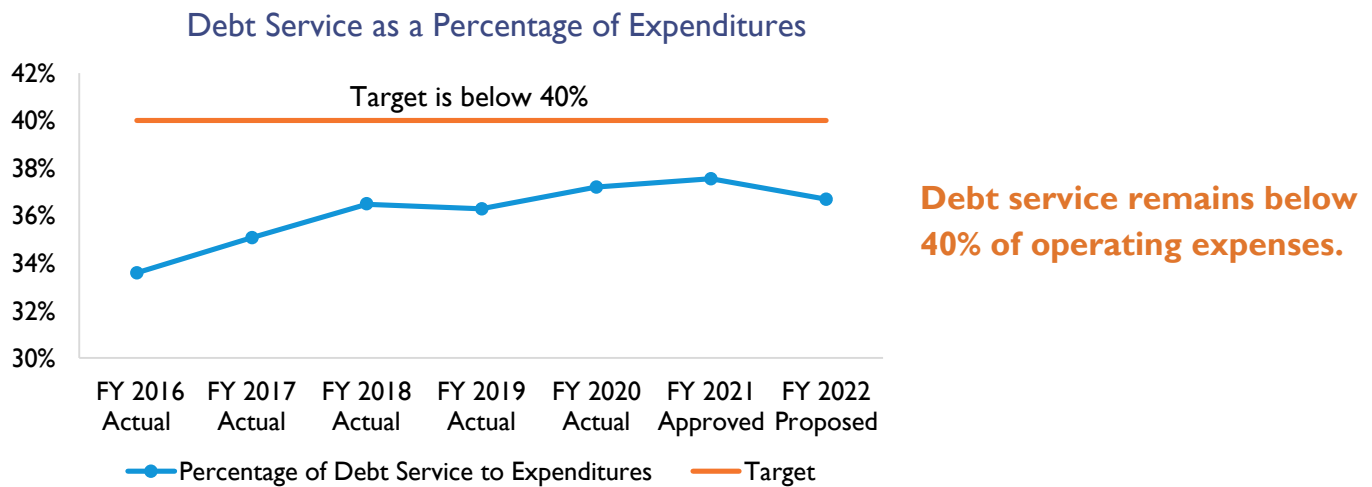
Infrastructure Investment Fee

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

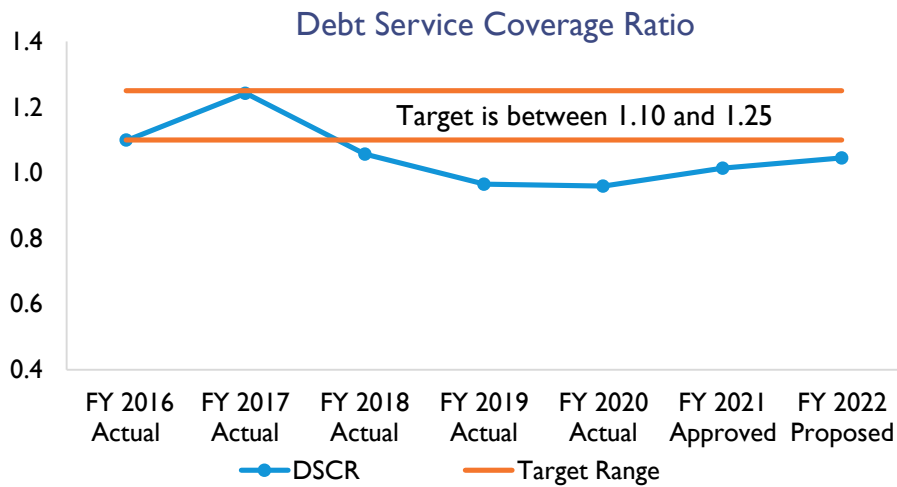


The largest expenditure in the FY 2022 proposed water and sewer operating budget is debt service. Debt service decreased slightly in FY 2022 due to lower interest rate projections and bond refunding. Ongoing water and sewer rehabilitation programs aimed at addressing WSSC Water's aging infrastructure 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 6

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.

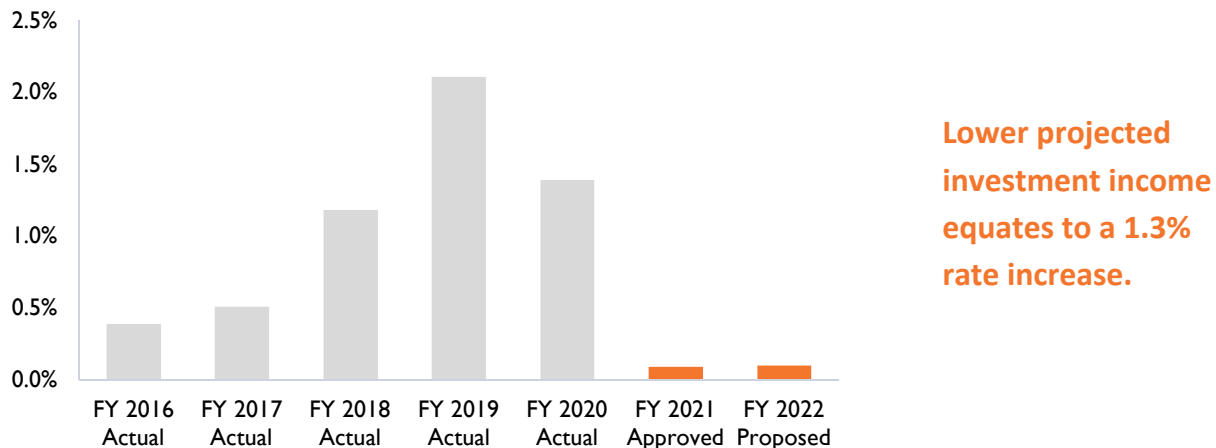
COVID-19 Impact to Assumptions

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



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

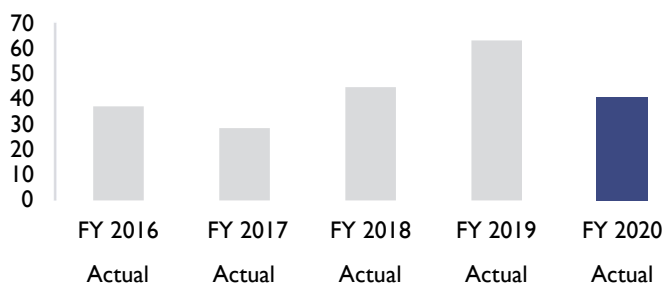
Based on WSSC Water's research, the agency's FY 2022 population served will increase by 0.5% from FY 2021. The agency assumes that the population will grow annually at 0.4% beyond FY 2022.

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.

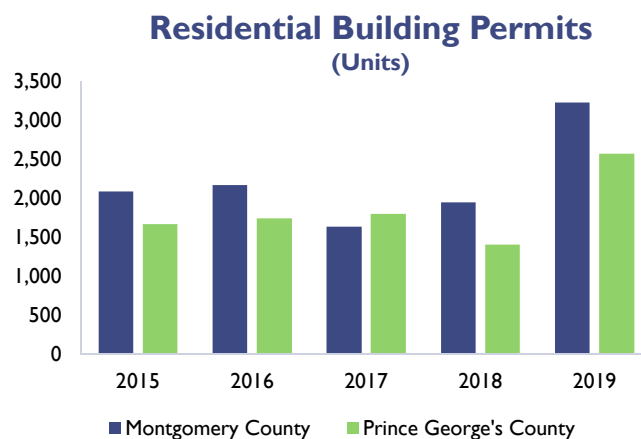
Prior to the COVID-19 public health emergency, the Maryland Bureau of Revenue Estimates anticipated the continued slowing of underlying economic growth due to several factors, including: the reduction of federal government jobs; restraint on demand due to trade barriers; and the impact of wage and employment 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.

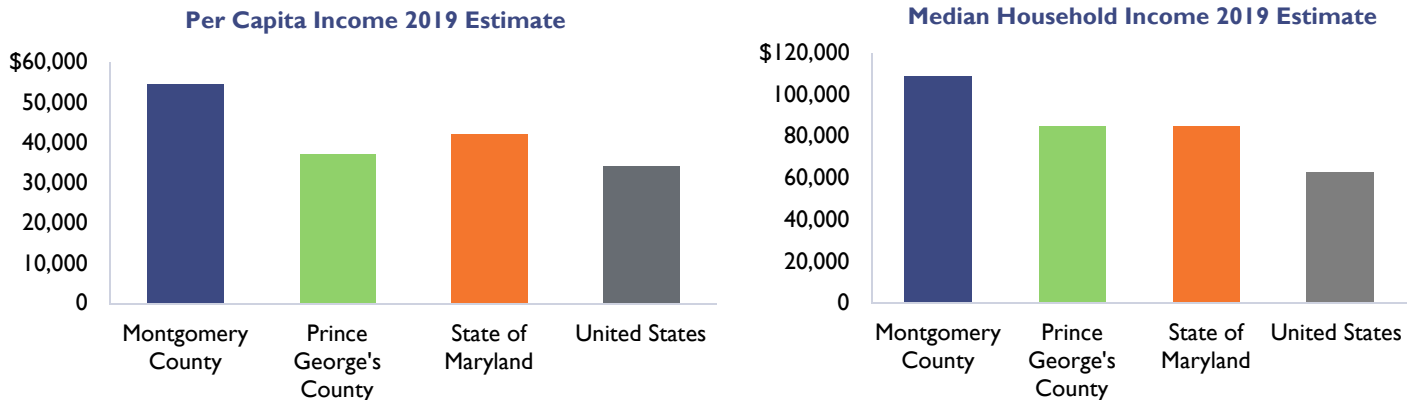
ECONOMIC OUTLOOK (Continued)

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

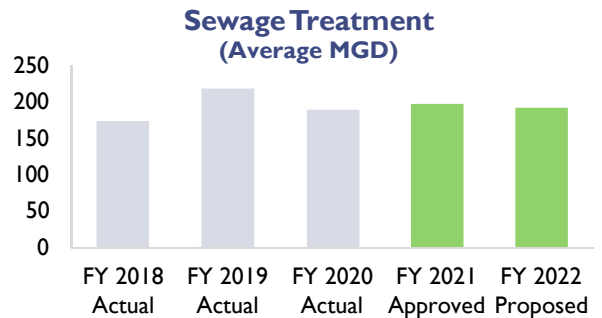
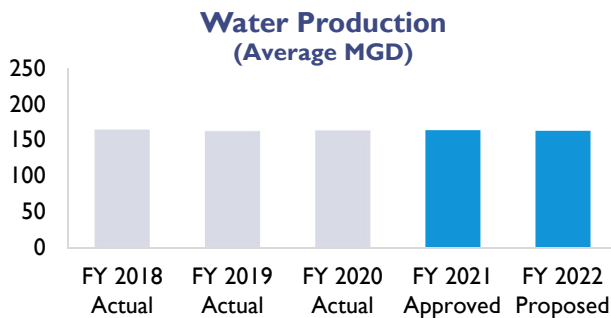
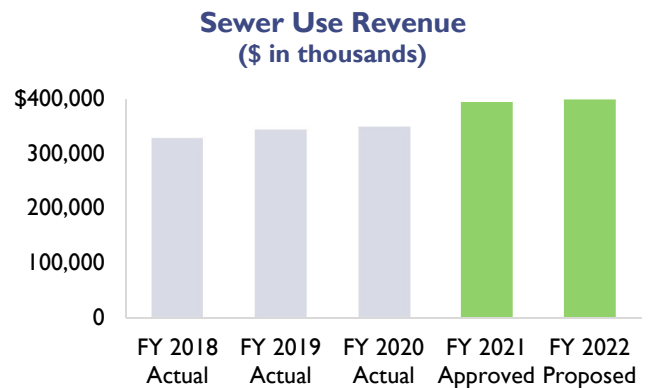
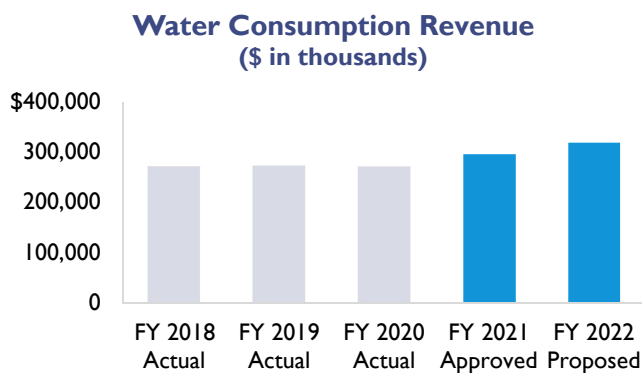
Revenues from the Water and Sewer Operating Funds are estimated at \$828.5 million in FY 2022. This is a \$19.3 million increase, or 2.4%, from the FY 2021 Approved Budget, primarily attributed to an increase in water and sewer use charges.

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 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.

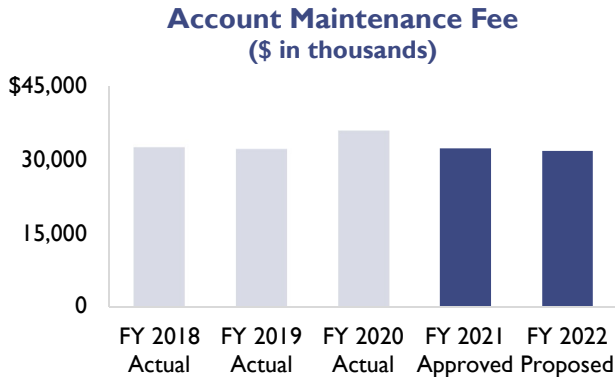
Sewer Use Charges – revenue is derived from applying an increasing rate schedule per 1,000 gallons of metered water use. The rate charged for each account is based upon the average daily water consumption during each billing period. The proposed range of FY 2022 rates is \$7.58 to \$13.96 per 1,000 gallons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

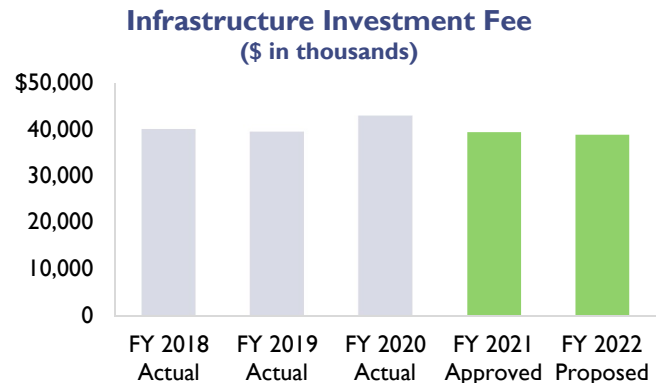
The AMF currently in place was developed in a 2014 study which resulted in a revised fee in FY 2016 based on meter size.

Infrastructure Investment Fee

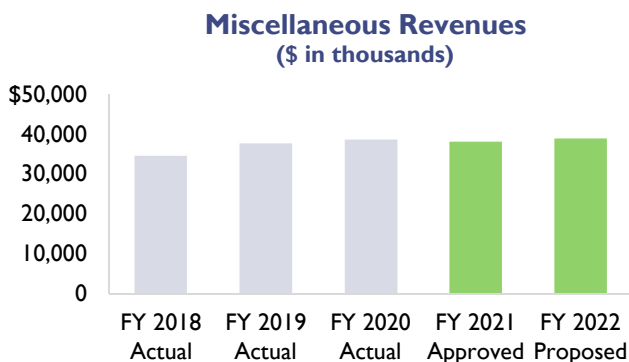
The Infrastructure Investment Fee (IIF) is a fixed fee that funds a portion of the debt service associated with the agency's water and sewer main reconstruction programs in the approved CIP.

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

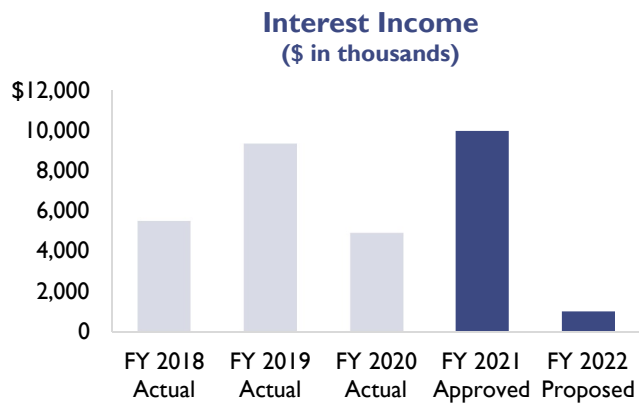


Miscellaneous Revenues are derived from: plumbing and inspection fees; Rockville sewer use; late payment of bills; repair of agency property (e.g., sewer mains) damaged by individuals; relocation of WSSC Water's sewer lines and/or facilities for the benefit of other parties (e.g., state or County departments 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
Subdivision		
First 150 Feet	\$4.00	\$6.00
Next 150 Feet	3.00	4.50
Over 300 Feet	2.00	3.00
Business		
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
Operating Revenues					
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
Total Operating Revenues	\$ 709,893	\$ 733,562	\$ 740,367	\$ 809,251	\$ 828,527
Other Credits and Transfers					
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
Total Funds Available	\$ 720,216	\$ 763,193	\$ 777,907	\$ 836,023	\$ 842,299

General Bond Debt Service Fund

(\$ in thousands)	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Proposed
Operating Revenues					
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
Total Operating Revenues	\$ 20,341	\$ 17,204	\$ 13,481	\$ 11,208	\$ 8,558
Other Credits and Transfers					
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)
Total Funds Available	\$ 20,341	\$ 17,204	\$ 13,481	\$ 11,208	\$ 8,558

SECTION 7
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

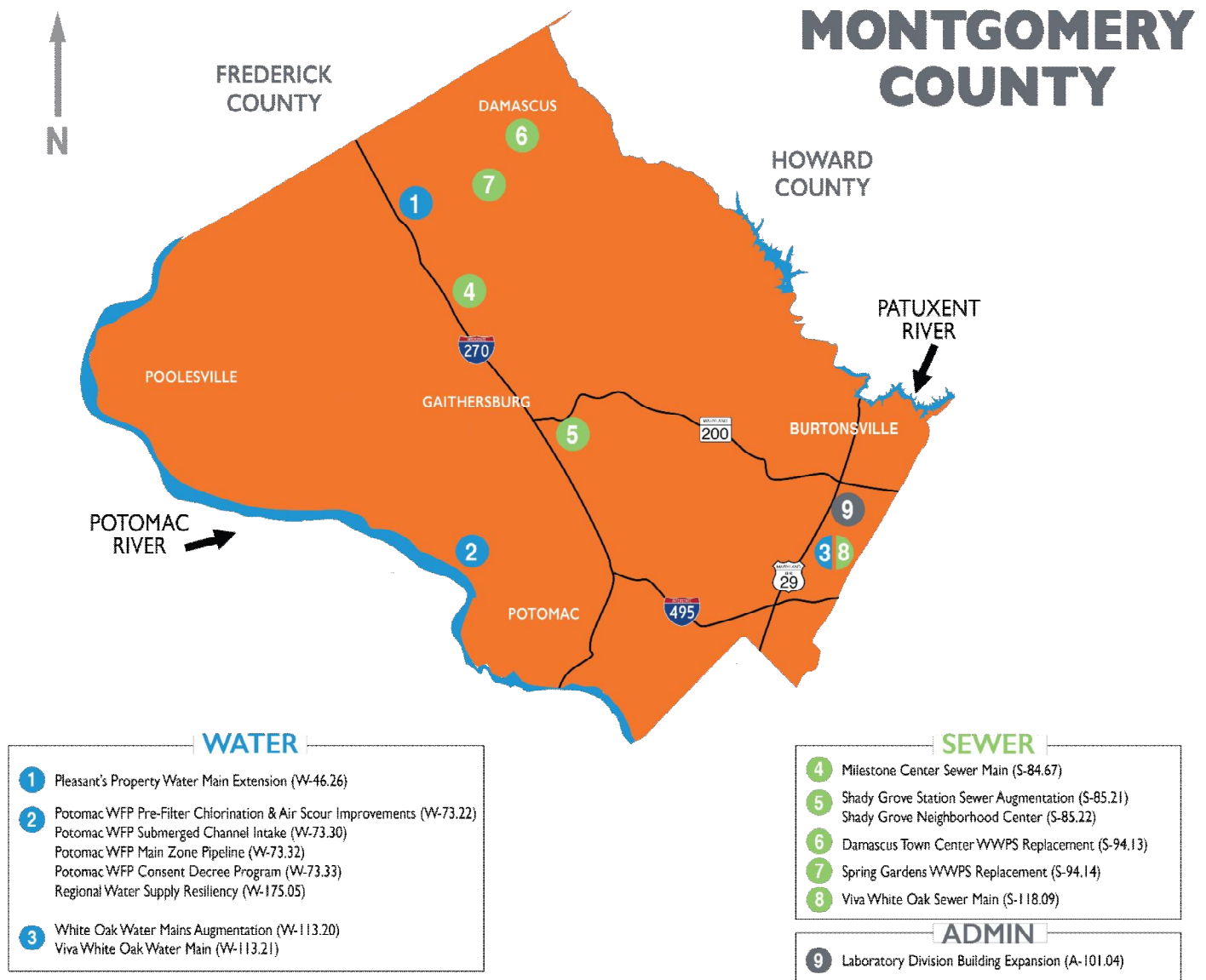
The total Fiscal Year (FY) 2022 Proposed Capital Budget is \$700.9 million. This is comprised of \$466.9 million in CIP projects, \$242.2 million in Information Only projects and an adjustment of \$8.1 million to account for expenditures funded via developer contributions for projects with a signed System Extension Permit (SEP). The FY 2022 Proposed Capital Budget is \$95.5 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
Capital Improvements Program:		
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
Total Capital Improvements Program	\$ 375,073	\$ 466,879
Information Only:		
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	50,906
D'Arcy Park North Relief Sewer	290	290
Total Information Only	\$ 239,932	\$ 242,152
Total Capital Expenses	\$ 615,005	\$ 709,031
Adjustment for Developer Contributions	(9,623)	(8,118)
Total Capital Budget	\$ 605,382	\$ 700,913

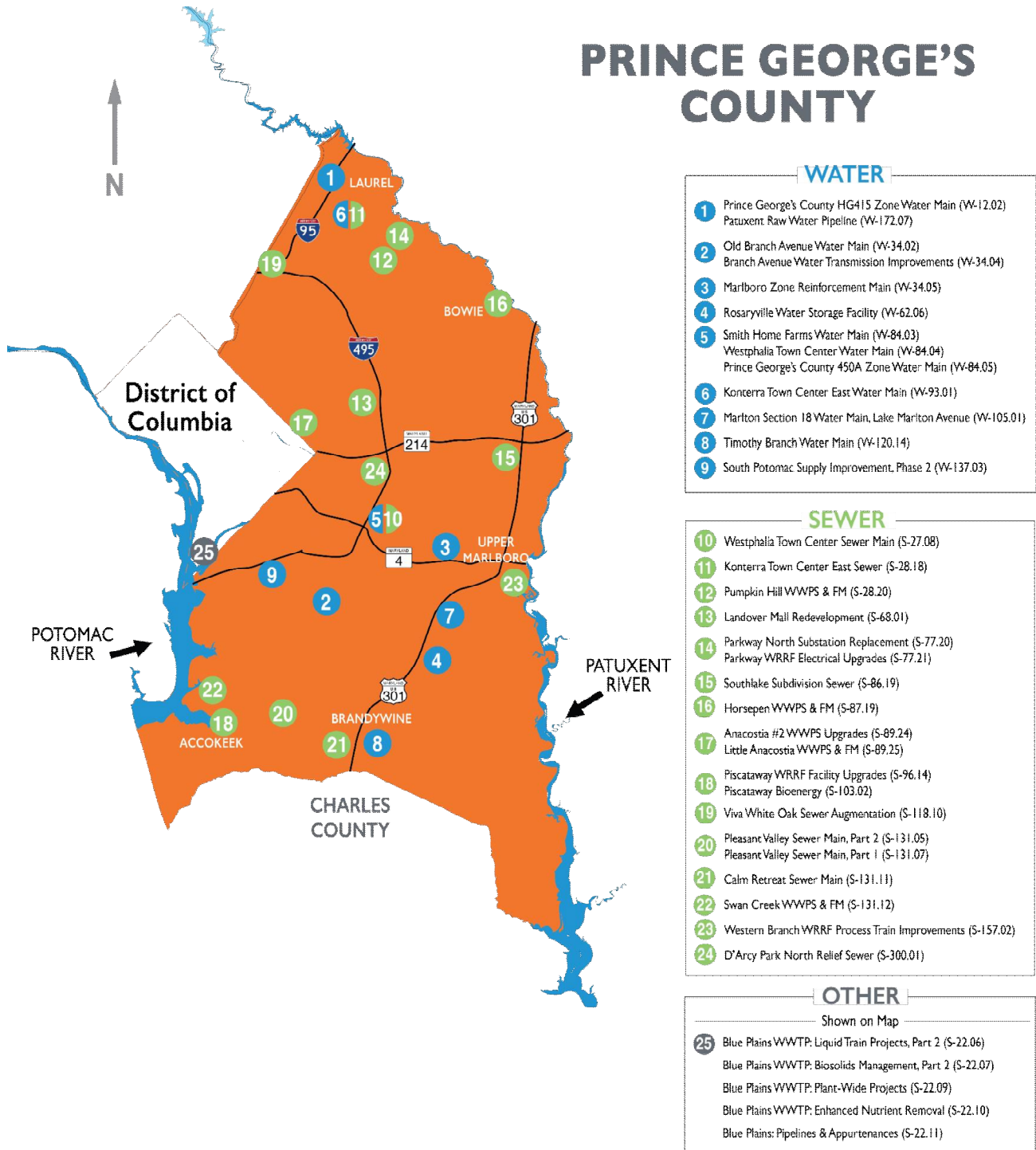
MAP OF PROJECTS IN MONTGOMERY COUNTY

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>.



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.

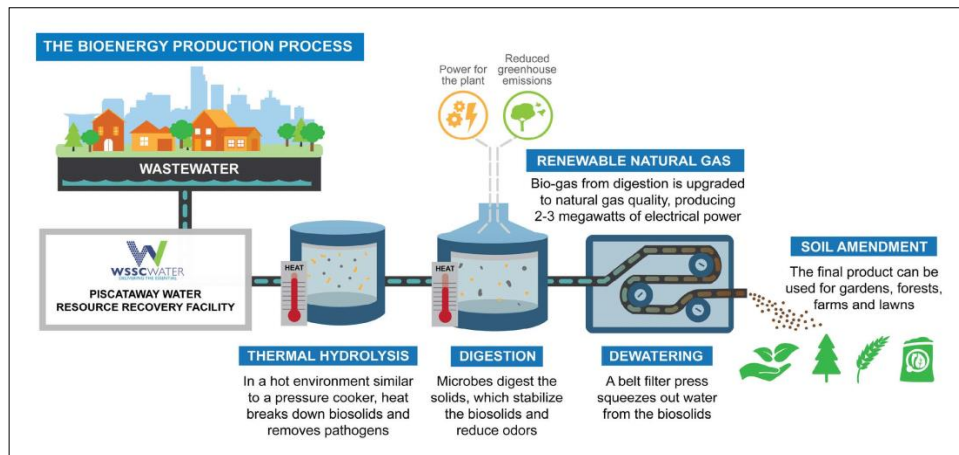
The total estimated cost for the Potomac WFP Consent Decree Program is \$203.0 million, including \$1.0 million for supplemental environmental projects. A portion of this project will be financed by Green bonds. The reduction in solids discharged to the Potomac River addresses the pollution prevention/control 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 5. 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 \$700.9 million. The funding is comprised of \$604.9 million in bonds, \$27.6 million in PAYGO and \$68.4 million in grants, contributions and other funding sources. The \$95.5 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
Capital Improvements Program:		
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
Total Capital Improvements Program	\$ 375,073	\$ 466,879
Information Only:		
Bonds	219,738	221,862
State Grants	20,000	20,000
Contribution/Other	194	290
Total Information Only	\$ 239,932	\$ 242,152
Total Capital Funding	\$ 615,005	\$ 709,031
Adjustment for Developer Contributions	(9,623)	(8,118)
Total Capital Budget Sources	\$ 605,382	\$ 700,913

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
Operating - Water and Sewer Program			
Debt Service Expense	\$ 313,865	\$ 309,045	\$ (4,820)
Major Capital Projects Net Impact	-	196	196
Total	\$ 313,865	\$ 309,241	\$ (4,624)

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 8
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 ¹	\$ 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 ²	240,197,781	7.6%	255,869,091	7.9%
Total Bonds	\$ 3,162,127,781	100.0%	\$ 3,245,344,091	100.0%
Water, Sewer and General Notes	177,800,000		177,800,000	
Total Principal Debt Outstanding	\$ 3,339,927,781		\$ 3,423,144,091	

¹Includes \$53,880,000 in Green Bonds.

²Maryland 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%.

Total Principal Debt Outstanding, June 30, 2020	\$ 3,423,144,091
Less: Estimated Principal Payments	
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)
Total (As of June 30, 2022)	\$ 3,086,121,902
Plus:	
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
Less: Estimated Principal Payments:	
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)
Total Estimated Debt Outstanding (As of June 30, 2022)	\$ 3,886,965,304

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.

Debt Limit per Public Utilities Article:	
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
Total Debt Limit (As of June 30, 2020)	\$ 11,987,471,094
Less: Total Estimated Debt Outstanding (As of June 30, 2022)	\$ (3,886,965,304)
Legal Debt Margin	\$ 8,100,505,790

¹The 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 ^{1,2,3}	Total Debt Limit ¹	Total Debt Outstanding ¹	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%

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

²Sources 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.

³The 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.

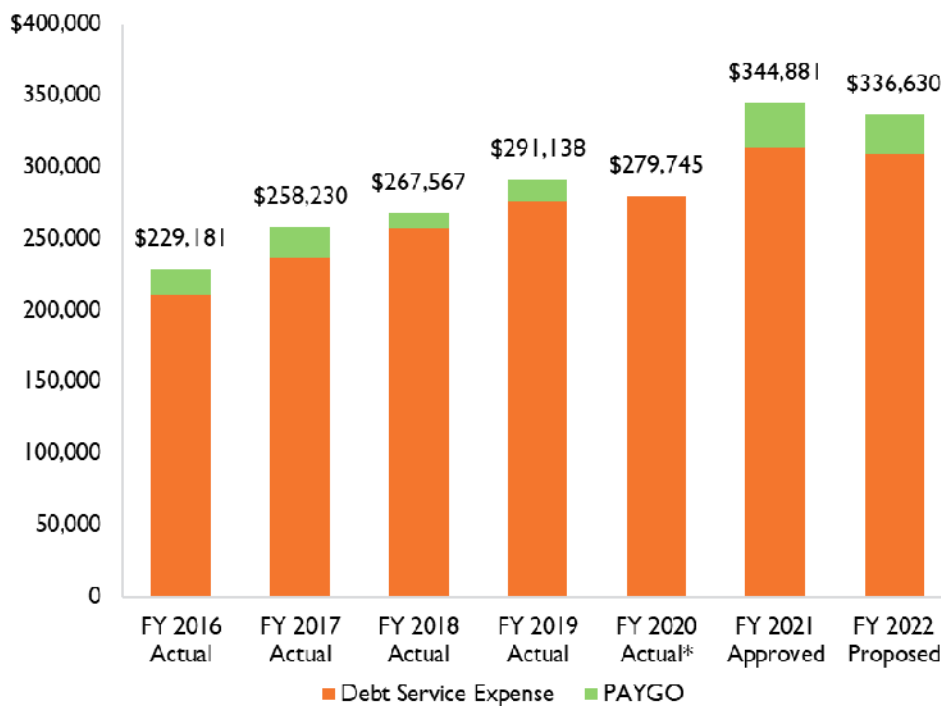
DEBT SERVICE TRENDS

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 5, 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)

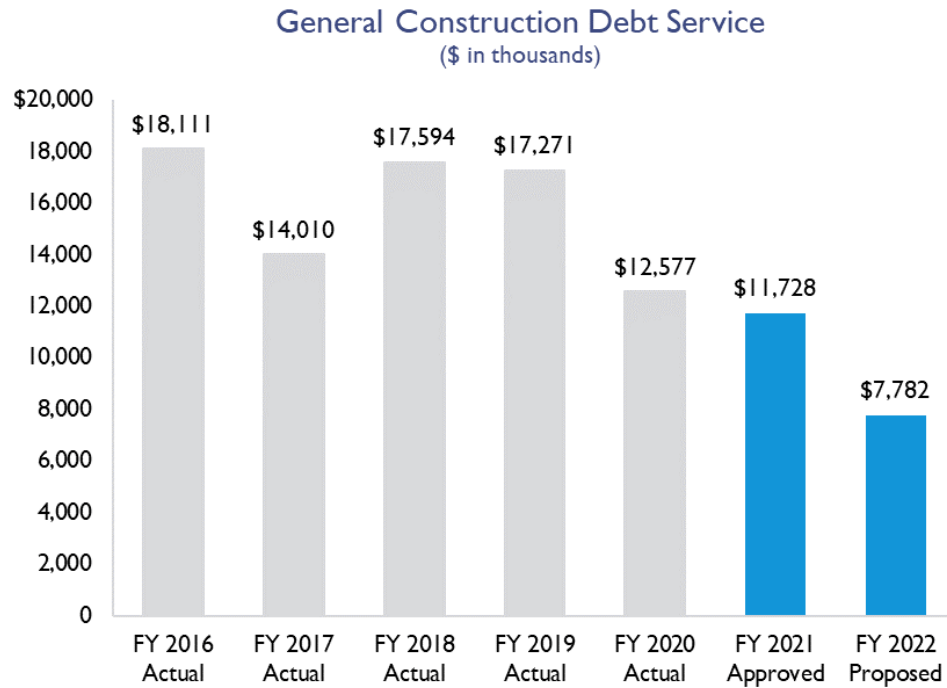


*In FY 2020, PAYGO was reduced to zero as part of the COVID-19 savings plan.

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 9
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
Total Water Quality Projects		\$ 150,724

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:

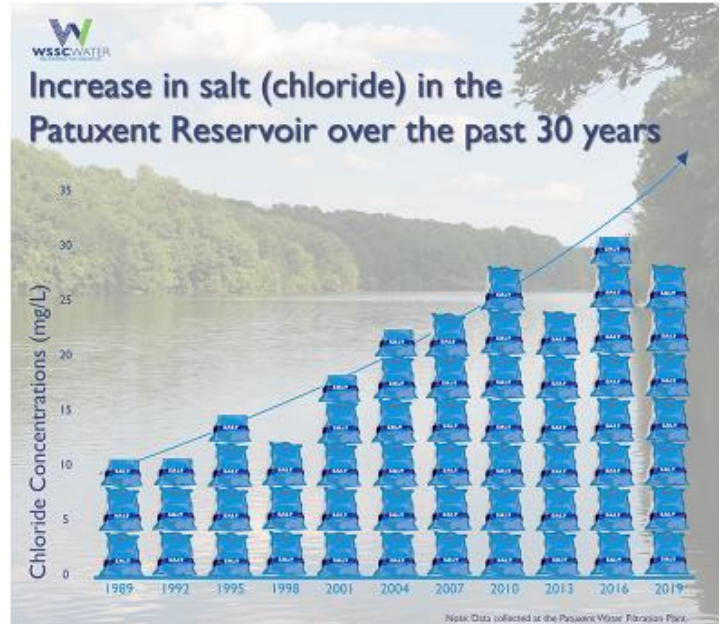
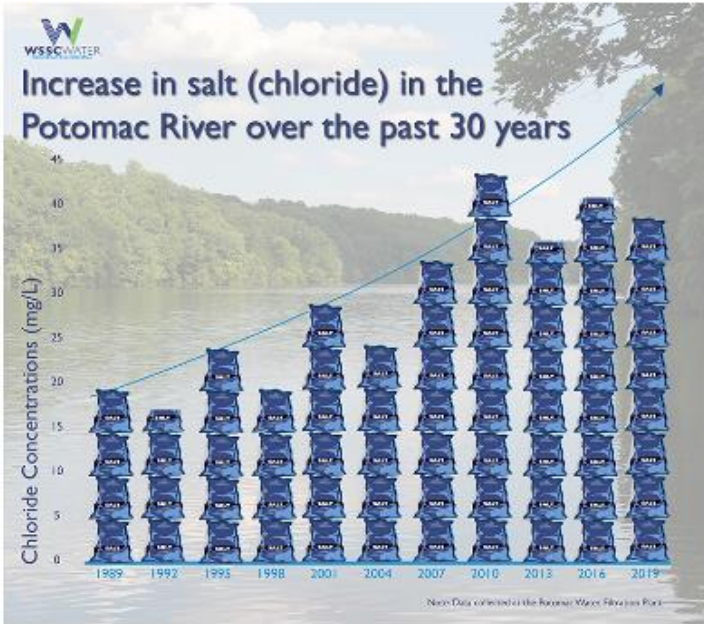
- Run water to flush out any potential lead content: if water has not been used for several hours, run water for 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking
- Use cold water for drinking, cooking and preparing baby formula
- Periodically 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

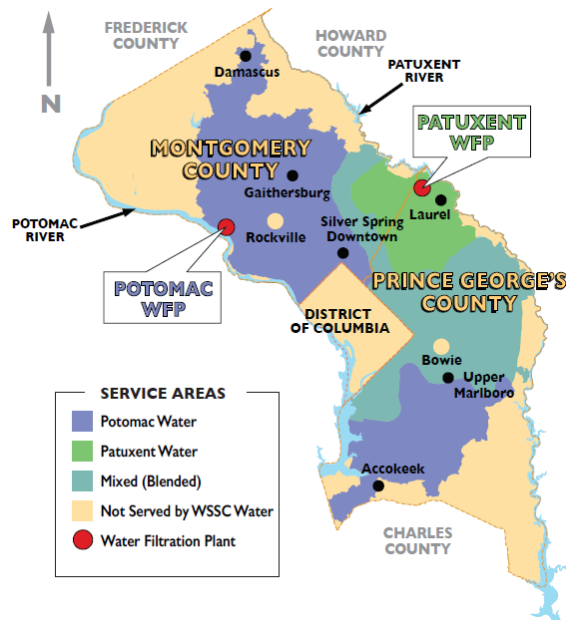
WSSC Water adopted the U.S. Food and Drug Administration recommendations to not dispose of unused or expired pharmaceutical drugs into the sanitary sewer. Any pharmaceutical flushed down the toilet or discharged to the sanitary sewer could potentially make its way into the drinking water source. WRRFs 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”.

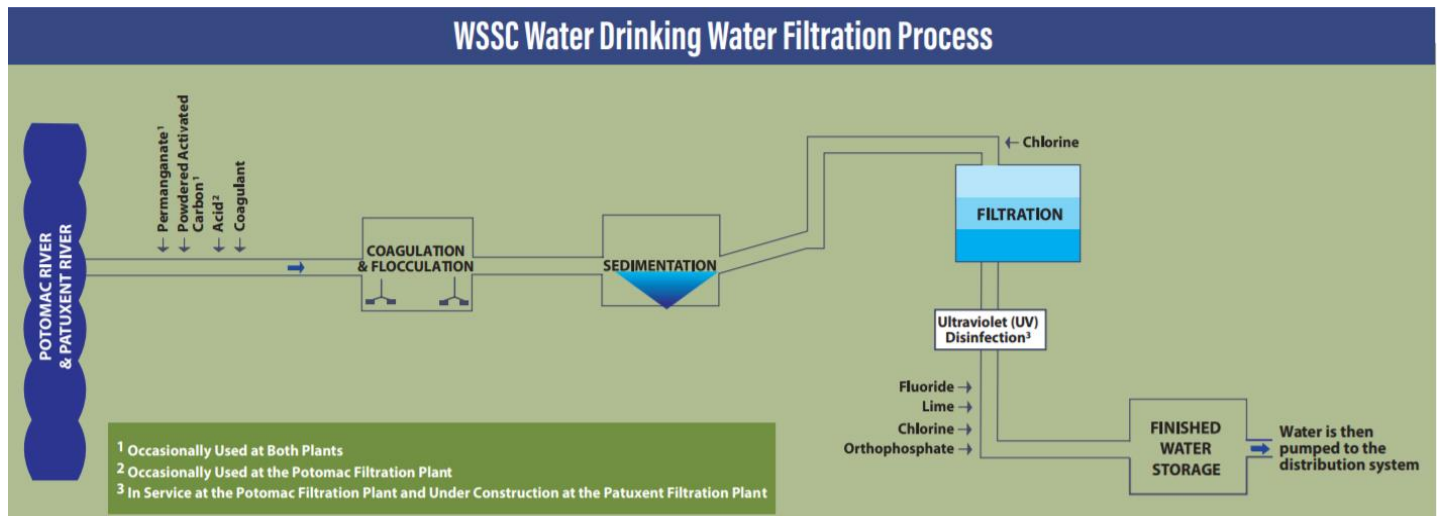
As for other hazardous wastes such as household cleaners, pesticides, paints, motor oil and prescription drugs: never pour them down the drain, in the toilet, on the ground or in storm drains. The best place to take these hazardous substances is to a recycling center. Please contact your County’s solid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

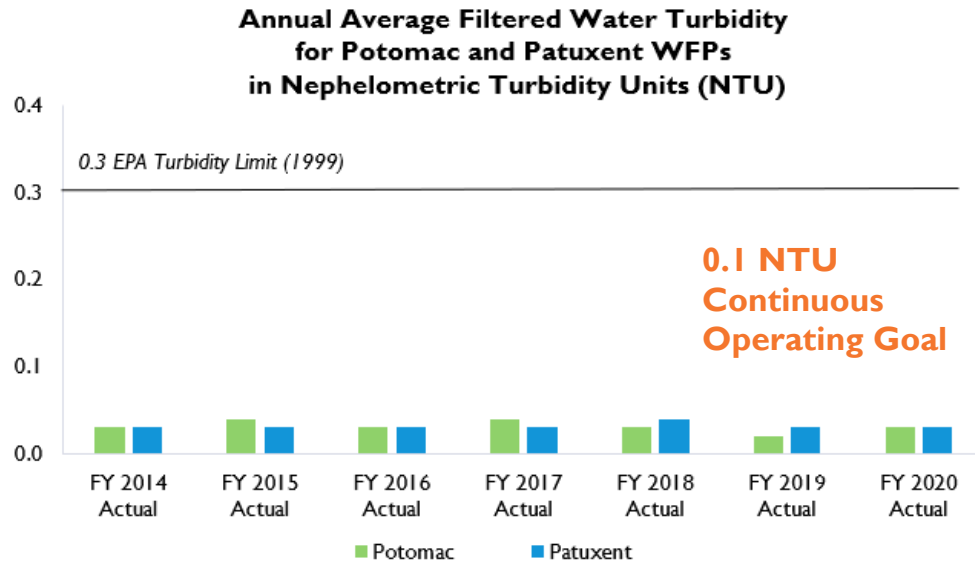
WSSC Water has never exceeded a maximum contaminant level or failed to meet a treatment technique requirement established by the EPA in accordance with the Safe Drinking Water Act.

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.

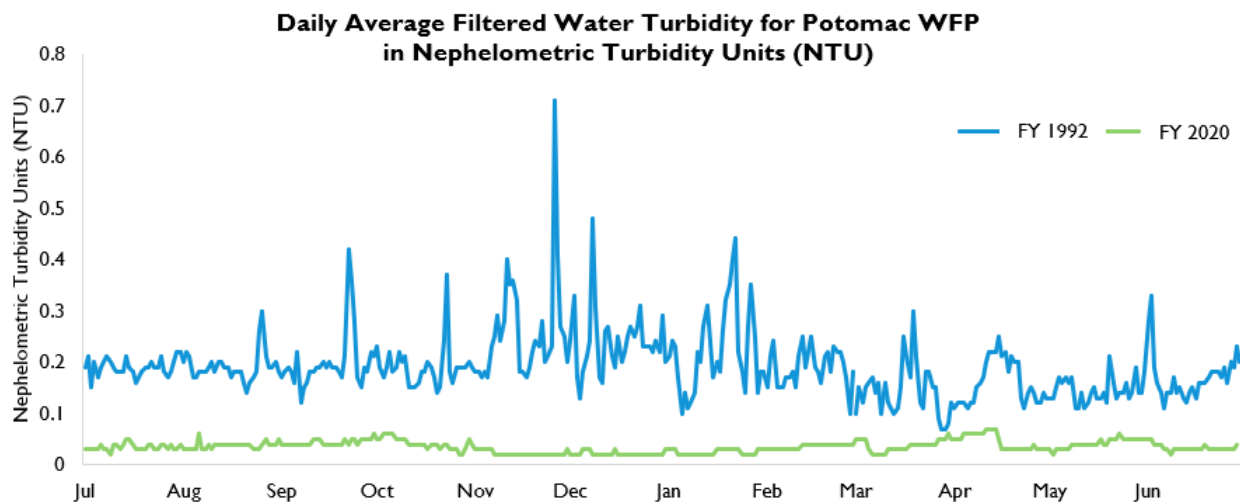
PERFORMANCE OF KEY SERVICES (Continued)

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.



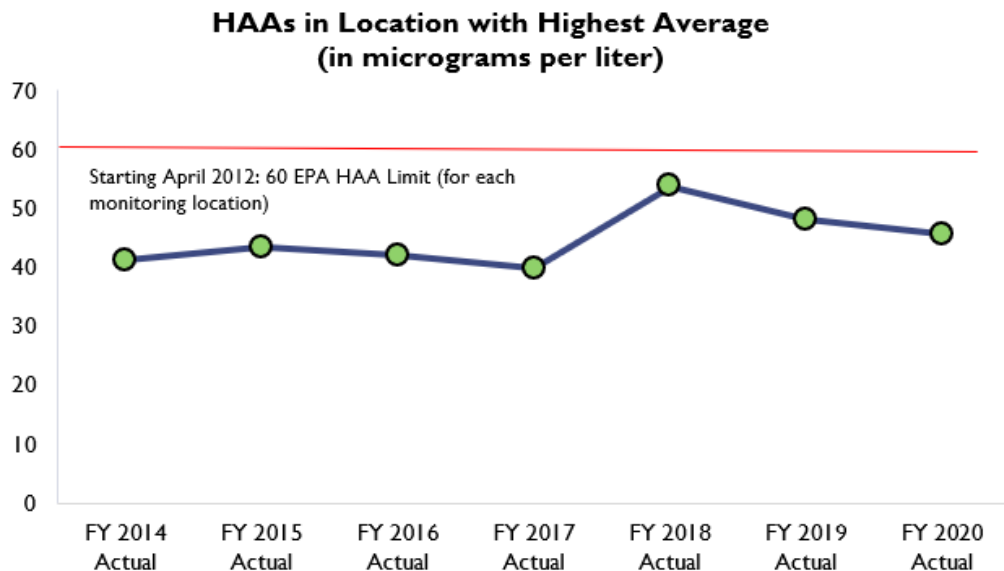
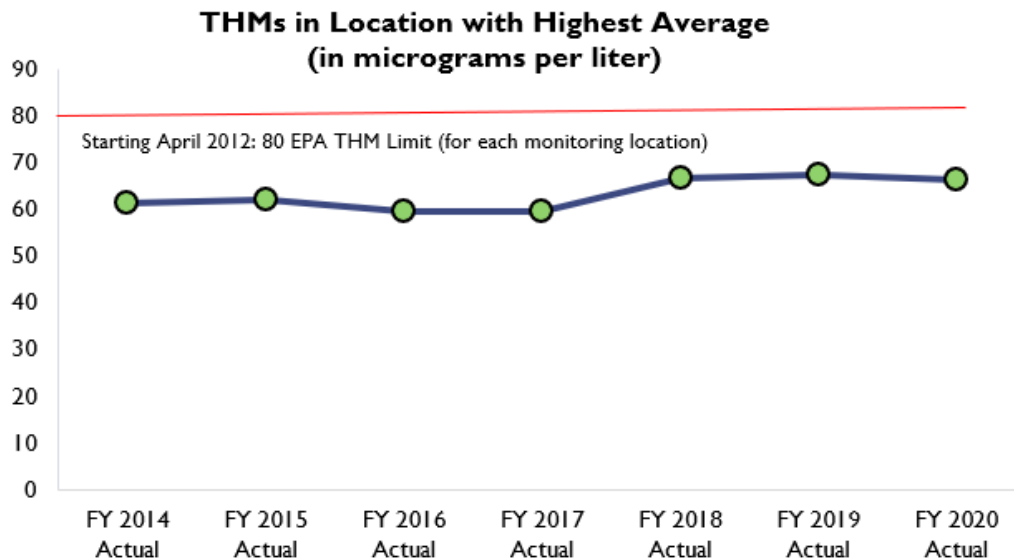
Not only has average turbidity been reduced, but also, as shown in the graph below for the Potomac WFP, the magnitudes of the daily peaks associated with variable raw water quality have been substantially reduced from FY 1992 peak levels. This latter measure is of particular importance in ensuring the 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

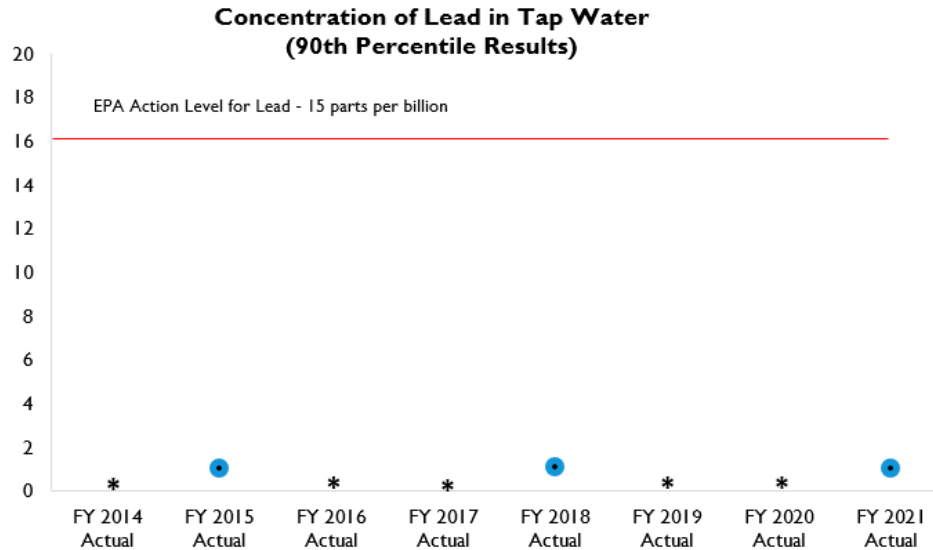
WSSC Water has also been aggressively pursuing enhanced coagulation (optimization of coagulant doses and pH levels to improve total organic carbon removal) to enhance disinfection by-product precursor removal, thereby lessening the formation of potential carcinogens in the finished water. Effective January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



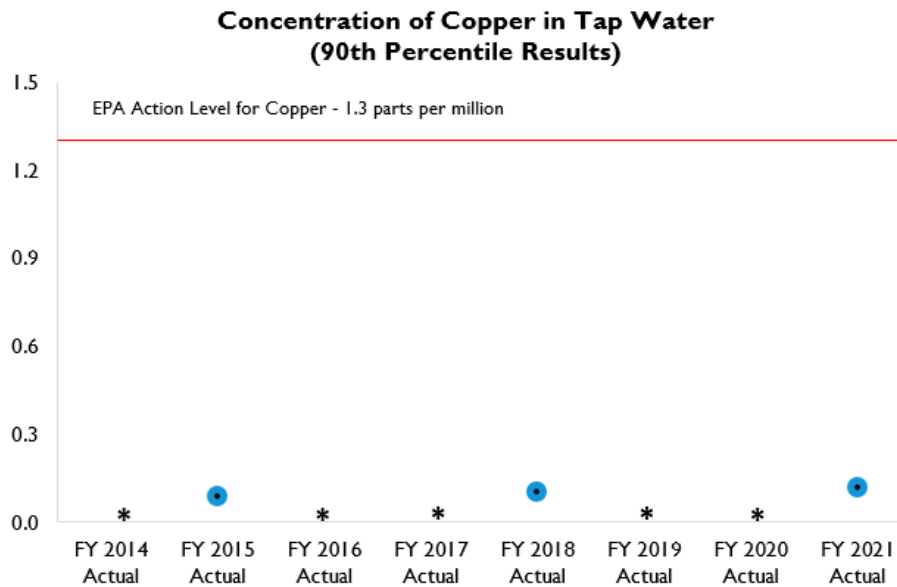
PERFORMANCE OF KEY SERVICES (Continued)

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 90th 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 90th 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.

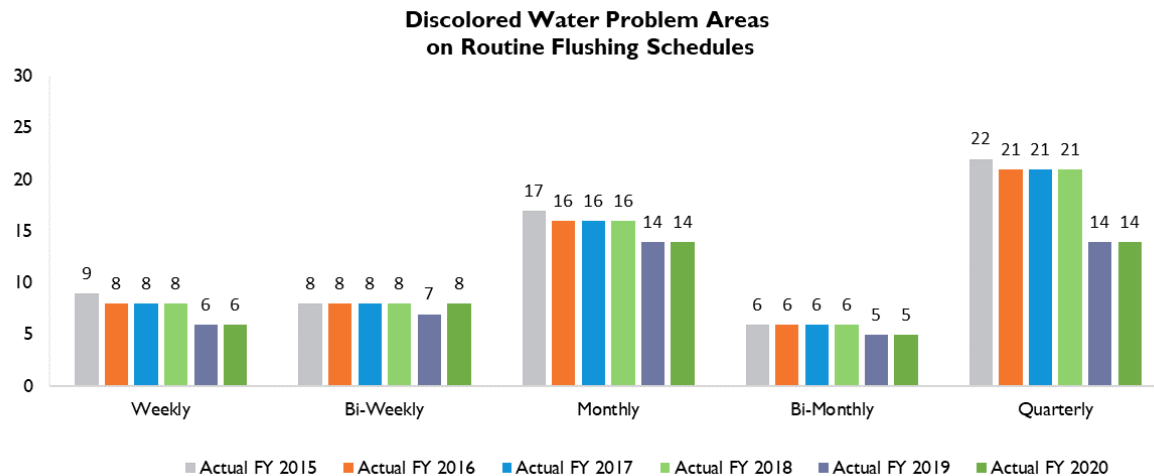
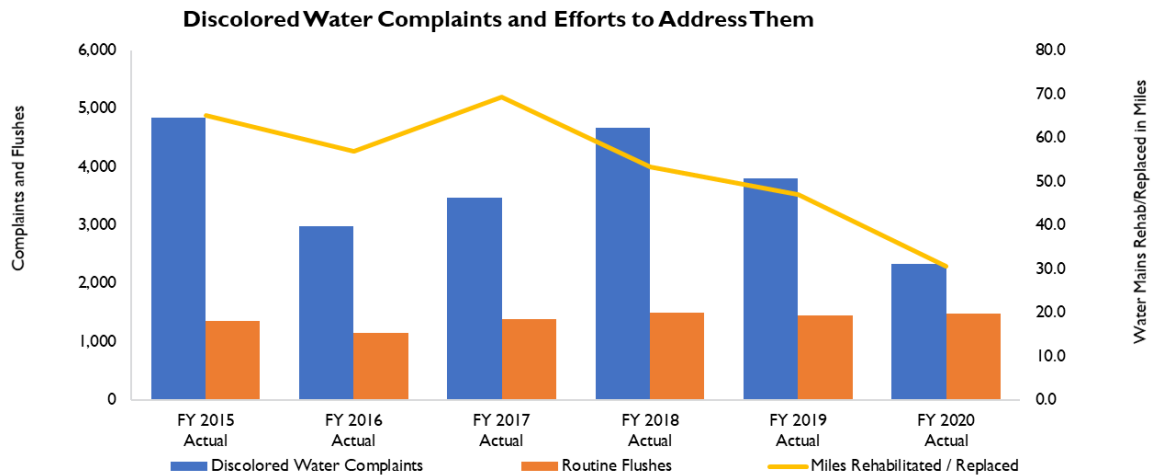


*No sampling required in these years.

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.

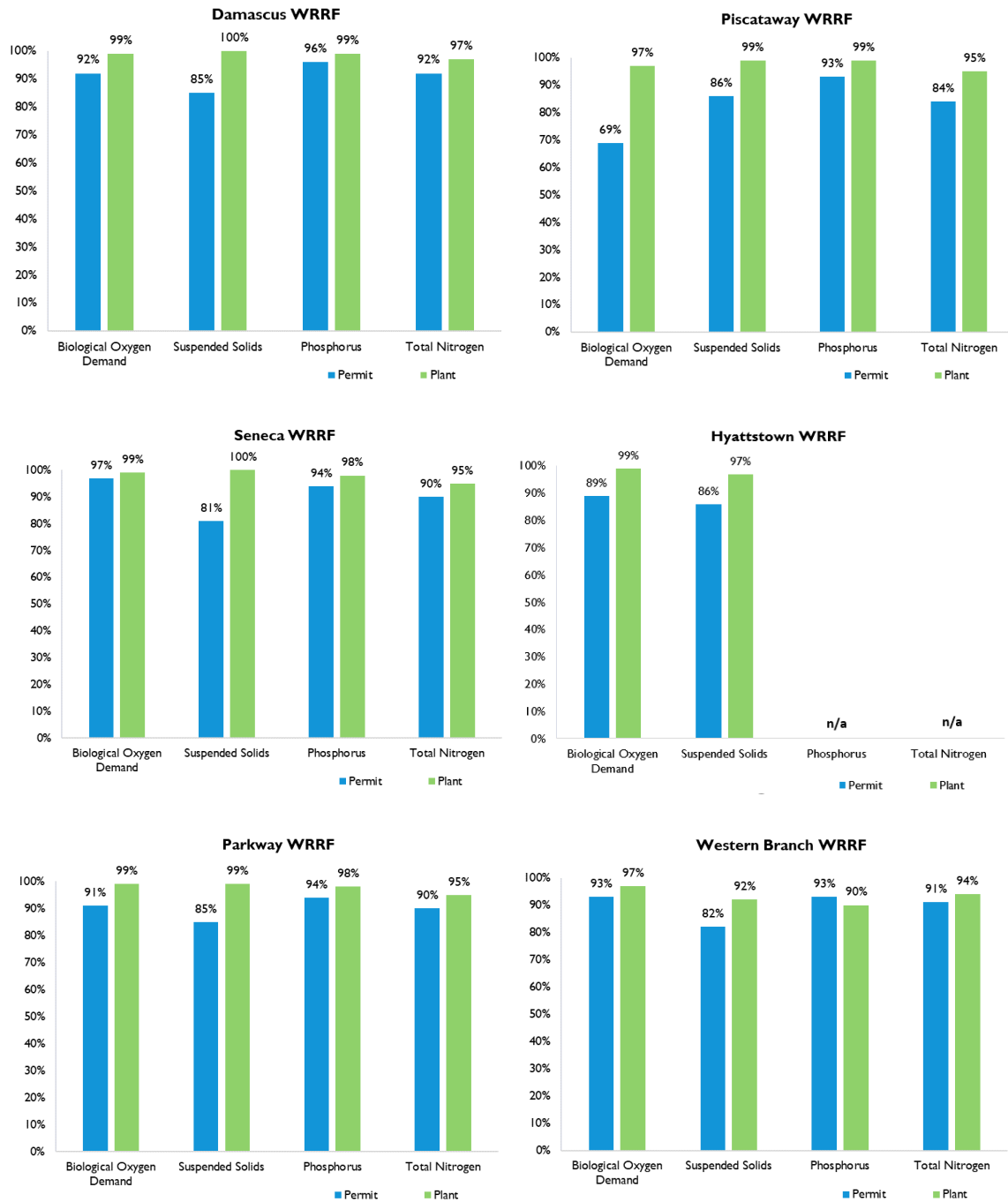


The graph above shows the number of chronic problem areas requiring regular flushing on a weekly, bi-weekly, monthly, bi-monthly or quarterly basis since FY 2015. The number of areas with chronic discolored water problems has remained relatively constant over the years. Apart from the bi-weekly procedures, 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.

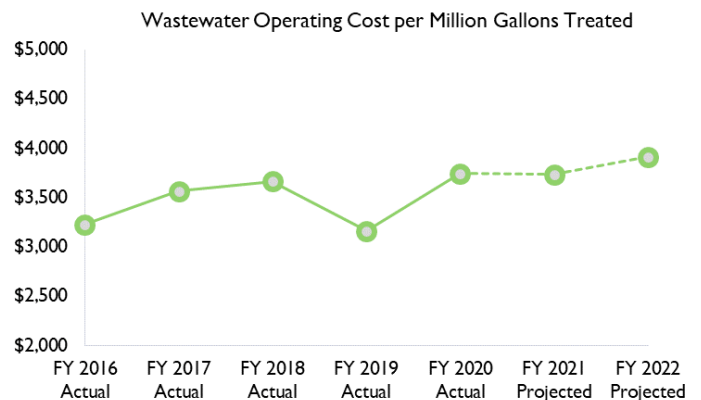
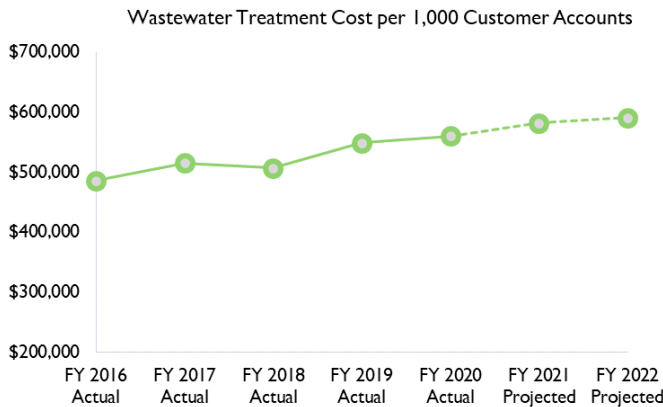
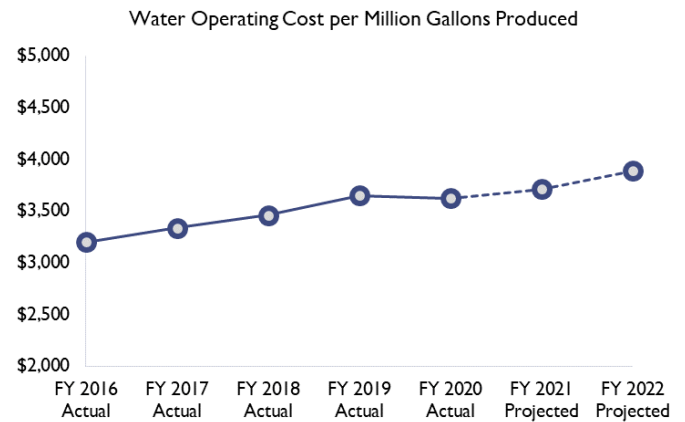
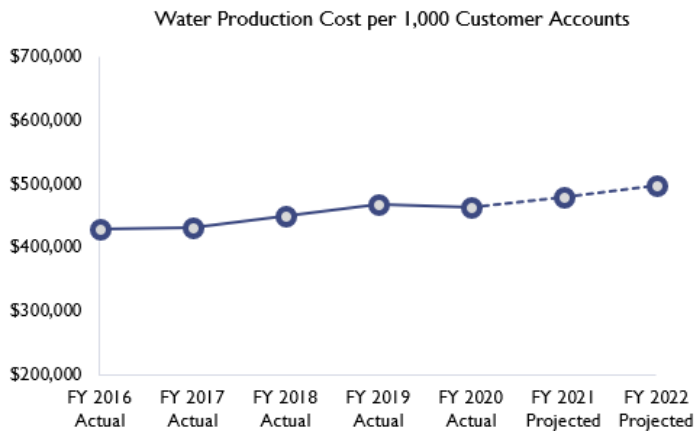


Note: ■ Permit should be less than ■ Plant

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 10
ORGANIZATIONAL BUDGETS AND MEASURES

ORGANIZATIONAL BUDGETS AND MEASURES

This section discusses 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 measured by the agency.

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	1,780	\$ 160,479,560
Overtime		8,088,000
Subtotal		168,567,560
Lapse on Base Positions*		(8,819,228)
Subtotal		159,748,332
Salary Enhancements		823,000
Salary - 6 Commissioners		78,500
Total	1,780	\$ 160,649,832

*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 and are not expected to change.

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

Group Insurance – The contributions for health insurance are actuarially determined, and the contribution for life insurance is based on fixed rates per coverage amounts based on an employee's salary. Contribution rates 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.

WORKFORCE AND COMPENSATION (Continued)

Employee Benefits (Continued)

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

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



COMPARATIVE 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	
Governance & General Manager's Office							
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)
Strategy & Partnerships							
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	88.0	14,197,482	859,272
Operations							
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	684,643,479	113,151,972
Production Department	311.1	141,838,990	330.0	143,843,456	332.0	152,791,872	8,948,416
Utility Services Department	477.7	94,476,940	512.0	137,722,473	512.0	119,523,706	(18,198,767)
Administration							
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
Other							
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	-	52,118,731	(1,019,673)
Retirement Trust Chargeback	-	(756,355)	-	(750,042)	-	(769,300)	(19,258)
Total	1,683.9	\$ 1,160,569,433	1,776.0	\$ 1,455,038,111	1,780.0	\$ 1,553,005,756	\$ 97,967,645

(*) 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:	<u>Operating</u>			<u>Capital</u>		
	Water Operating	Sewer Operating	General Bond Debt Service	Water Supply	Sewage Disposal	General Construction
Governance & General Manager's Office						
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
Strategy & Partnerships						
Intergovernmental Relations Office	X	X	X	X	X	X
Strategy & Innovation Office	X	X	X	X	X	X
Communications & Community Relations O	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				
Operations						
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
Administration						
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
Other						
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 Charge Back	X	X				

APPENDICES

CUSTOMER CHARACTERISTICS

Top 20 Customers - Water and Sewer Usage Charges

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

*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%

By Type of Customer*

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%

By Type of Property*

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

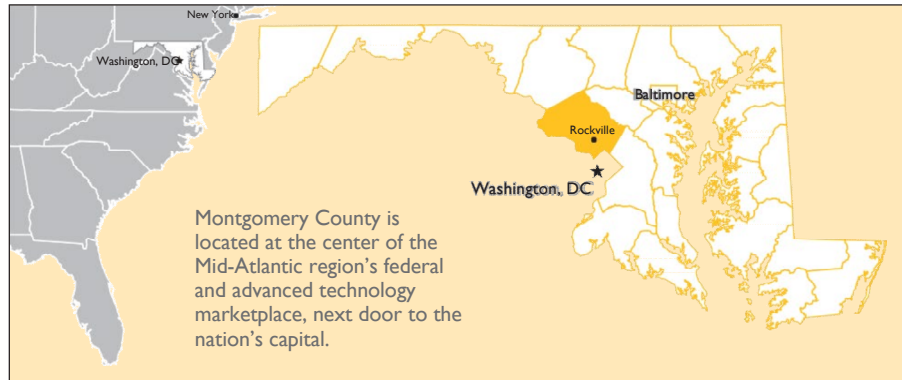
The following pages include economic facts for Montgomery County and Prince George's County, published by the Maryland Department of Commerce.

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 GEOGRAPHY¹

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^{2,3}

	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^{2,3} (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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2019.2

Brief Economic Facts MONTGOMERY COUNTY, MARYLAND

LABOR AVAILABILITY^{3,4,5} (BY PLACE OF RESIDENCE)

Civilian Labor Force (2018 avg.)	County	Labor Mkt. Area*
Total civilian labor force	554,989	1,594,853
Employment	537,429	1,529,652
Unemployment	17,560	65,201
Unemployment rate	3.2%	4.1%
Residents commuting outside the county to work (2013-2017)	Number	Percent
	213,809	39.2%

Employment in selected occupations (2013-2017)

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^{6,7} (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

EMPLOYMENT⁴ (2018, BY PLACE OF WORK)

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

Includes civilian employment only

HOURLY WAGE RATES⁴ (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^{3,8}

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

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

Public Schools

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

Nonpublic Schools Number: 311 (Sept. 2018)

Higher Education (2018)	Enrollment	Degrees
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2-year institution

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

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

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

TAX RATES⁹

	Montgomery Co.	Maryland
Corporate Income Tax (2019)	none	8.25%
Base – federal taxable income		
Personal Income Tax (2019)	3.20%	2.0%-5.75%*
Base – federal adjusted gross income		
*Graduated rate peaking at 5.75% on taxable income over \$300,000		
Sales & Use Tax (2019)	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		
Real Property Tax (FY 20)	\$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		
Business Personal Prop. Tax (FY 20)	\$1.7915	none
Rate per \$100 of depreciated value		
Exempt – manufacturing and R&D machinery, equipment, materials and supplies; manufacturing, R&D and warehousing inventory		
In an incorporated area, a municipal rate may also apply; municipal exemptions may be available		
Major Tax Credits Available		
Enterprise Zone, Job Creation, More Jobs for Marylanders, R&D, New Jobs, Biotechnology and Cybersecurity Investment, A&E District		

INCOME³ (2013-2017)

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

HOUSING^{3,10}

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 PROPERTY⁶

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
Land – cost per acre			
Industrial	\$146,200	\$2,500,000	\$972,430
Office	\$350,000	\$7,323,262	\$2,494,334
Rental Rates – per square foot			
Warehouse / Industrial	\$9.75	\$18.60	\$12.72
Flex / R&D / Technology	\$8.00	\$34.50	\$17.41
Class A Office	\$19.81	\$55.00	\$31.25

Brief Economic Facts MONTGOMERY COUNTY, MARYLAND

TRANSPORTATION

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

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

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

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

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

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

RECREATION AND CULTURE

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

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

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

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

Arts & Entertainment Districts: Bethesda, Silver Spring, Wheaton

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

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

UTILITIES

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

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

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

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

GOVERNMENT¹¹

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

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

Montgomery County Economic Development Corporation

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Sources:

1 National Oceanic and Atmospheric Administration (1981-2010 normals); Maryland Geological Survey

2 Maryland Department of Planning

3 U.S. Bureau of the Census

4 Maryland Department of Labor, Office of Workforce Information and Performance

5 U.S. Bureau of Labor Statistics

6 Montgomery County Economic Development Corporation

7 Maryland Department of Commerce

8 Maryland State Department of Education; Maryland Higher Education Commission

9 Maryland State Department of Assessments and Taxation; Comptroller of the Treasury

10 Maryland Association of Realtors

11 Maryland State Archives; Maryland Association of Counties



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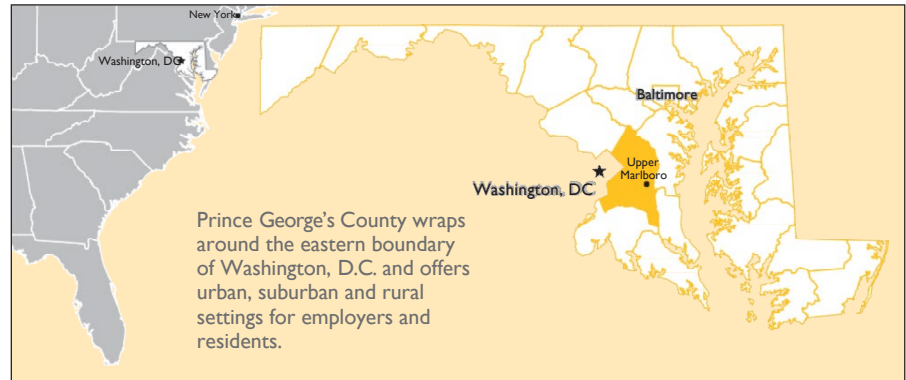
Brief Economic Facts

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 GEOGRAPHY¹

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^{2,3}

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

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

**Projections

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

POPULATION DISTRIBUTION^{2,3} (2018)

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

Brief Economic Facts PRINCE GEORGE'S COUNTY, MARYLAND

LABOR AVAILABILITY^{3,4,5} (BY PLACE OF RESIDENCE)

Civilian Labor Force (2018 avg.)	County	Labor Mkt. 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^{6,7} (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

EMPLOYMENT⁴ (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
Total	16,187	321,065	100.0	1,118

Includes civilian employment only

HOURLY WAGE RATES⁴ (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^{3,8}

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

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

Public Schools

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

Nonpublic Schools Number: 135 (Sept. 2018)

Higher Education (2018)	Enrollment	Degrees
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2-year institution

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

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

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

TAX RATES⁹

	Prince George's Co. Maryland	
Corporate Income Tax (2019)	none	8.25%
Base – federal taxable income		
Personal Income Tax (2019)	3.20%	2.0%-5.75%*
Base – federal adjusted gross income		
*Graduated rate peaking at 5.75% on taxable income over \$300,000		
Sales & Use Tax (2019)	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		
Real Property Tax (FY 20)	\$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		
Business Personal Property Tax (FY 20)	\$2.50	none
Rate per \$100 of depreciated value		
Exempt – manufacturing and R&D machinery, equipment, materials and supplies; manufacturing, R&D and warehousing inventory		
In an incorporated area, the county rate will vary and a municipal rate may apply; municipal exemptions may be available		
Major Tax Credits Available		
Enterprise Zone (incl. Focus Area), Job Creation, More Jobs for Marylanders (Tier I), R&D, Biotechnology and Cybersecurity Investment, Revitalization, Arts & Entertainment Dist.		

INCOME³ (2013-2017)

Distribution	Percent Households		U.S.
	Pr. George's Co.	Maryland	
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^{3,10}

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 PROPERTY⁶

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
Land – cost per acre			
Industrial	\$40,000	\$800,000	\$250,000
Office	\$125,000	\$2,000,000	\$300,000
Rental Rates – per square foot			
Warehouse / Industrial	\$3.75	\$14.48	\$7.31
Flex / R&D / Technology	\$6.00	\$19.00	\$11.14
Class A Office	\$16.00	\$36.00	\$21.14

Brief Economic Facts PRINCE GEORGE'S COUNTY, MARYLAND

TRANSPORTATION

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

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

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

Truck: All major motor freight common carriers serve the county

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

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

RECREATION AND CULTURE

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

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

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

Arts & Entertainment District: Gateway Arts District

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

UTILITIES

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

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

Water and Sewer: Washington Suburban Sanitary Commission

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

GOVERNMENT¹¹

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

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

Prince George's County Economic Development Corporation

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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
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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 Work Years	Employee work years that are funded in the adopted budget and may be filled during the budget year.
Balanced Budget	A financial plan showing estimated or planned revenues equaling expenses.
Biosolids	Solids produced as a byproduct of treating sewage to produce clean water; also referred to as sludge.

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.
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.

APPENDIX B - GLOSSARY

Cryptosporidium	A microbial contaminant of raw water that can potentially cause chronic or fatal intestinal disorders. In 1993, cryptosporidium was identified as the primary source of an outbreak of water-borne disease in Milwaukee that caused more than 400,000 illnesses and over 100 deaths.
Customer Assistance Program	(Also referred to as CAP) WSSC Water program providing financial assistance to approved residential customers.
Debt Service	The annual payment of principal and interest on bonded indebtedness.
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.
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.

APPENDIX B - GLOSSARY

Environmental Protection Agency	(Also referred to as EPA) U.S. Federal agency charged with overseeing waterways and water sources, decreasing water pollution and protecting drinking water from known and emerging contaminants that endanger public health.
Expenditure/Expense	Payment for an asset obtained or goods and services received.
Fats, Oils, and Grease Program	(Also referred to as FOG) A federally mandated program that advises customers on how to properly manage fats, oils, and grease (FOG); monitors and controls the discharge of FOG from commercial food service establishments; investigates sanitary sewer blockages and overflows caused by FOG discharges; and initiates enforcement action to ensure appropriate corrective measures are taken.
Federal Open Market Committee	(Also referred to as FOMC) A Federal Reserve Board committee that sets monetary policy, including the interest rates that are charged to banks.
Fee	A charge for service to the user or beneficiary of the service. According to State law, charges must be related to the cost of providing the service.
Fiscal Policy	WSSC Water's policies with respect to revenues, spending, and debt management as the policies relate to WSSC Water services, programs, and capital investments. Fiscal policy provides a set of principles for the planning and programming of budgets, uses of revenues, and financial management.
Fiscal Year	(Also referred to as FY) The 12-month period to which the annual operating and capital budgets and their expenditure authorizations apply. WSSC Water's fiscal year starts on July 1 and ends on June 30.
Fixture Unit	(Drainage fixture unit or water supply fixture unit) A measurement of the probable discharge into the drainage system (sewer) or the probable hydraulic demand on the water supply (water) by various types of plumbing fixtures (bathtubs, lavatories, water closets, drinking fountains, etc.). For example, a drinking fountain corresponds to 0.5 drainage fixture units, while a conventional bathtub corresponds to 2.0 drainage fixture units.
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.

APPENDIX B - GLOSSARY

Fringe Benefits	Contributions made by WSSC Water to help underwrite the agency's share of the costs for Social Security and various pension, health, and life insurance plans provided to employees. Fringe benefits are centrally budgeted in non-departmental accounts.
Front Foot Benefit	(Also referred to as FFB or FFBC) A charge assessed owners of property abutting WSSC Water's water mains and/or sewers who derive a benefit from the construction of these water mains and sewers. Revenue from front foot benefit charges is used to pay debt service on General Construction Bonds.
Fund	A set of interrelated accounts to record revenues and expenditures associated with implementing specific activities or achieving certain objectives in accordance with special regulations, restrictions, or limitations, and constituting an independent fiscal and accounting entity.
Fund Balance	The amount by which resources exceed the obligations of the fund. The beginning fund balance represents the residual funds brought forward from the previous fiscal year (ending fund balance). Fund balance is also referred to as Accumulated Net Revenue in this document.
General Bond Debt Service Fund	(Also referred to as GBDS) An independent fiscal and accounting entity with a self-balancing set of accounts for recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities associated with paying the debt service on bonds issued to finance WSSC Water's general construction and administrative and support facility construction program; and for administering the agency's front foot benefit assessment activities.
General Construction Bond Fund	An independent fiscal and accounting entity with a self-balancing set of accounts for recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities associated with carrying out the activities of designing and constructing WSSC Water's minor water supply and wastewater collection and disposal systems (water mains less than 16 inches in diameter and sewer mains less than 15 inches in diameter), and all administrative and support facilities. Water meters are also purchased from this fund.
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.

APPENDIX B - GLOSSARY

Green Bond	Bond instrument whose proceeds are exclusively applied to projects such as green buildings, pollution prevention and control, renewable energy, water quality, and climate change adaptation.
Haloacetic Acids	(Also referred to as HAAs) A group of chemicals that are formed when chlorine or other disinfectants used to control contaminants in drinking water react with naturally occurring organic and inorganic matter in the water. Five haloacetic acids (referred to as HAA5) that are regulated by the EPA: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.
House Connection Charge	(Also referred to as H/C) A fee set annually by WSSC Water to cover the cost of the installation of small diameter pipe between water and sewer mains and the owner's property line. House connections feed water to a dwelling, place of business, or other structure and convey domestic sewage into the main line sewer for transportation to a wastewater treatment facility.
Infiltration	Groundwater that flows into sewer lines due to defective pipes or manholes.
Inflow	Surface stormwater from rainfall that flows into sewer lines due to defective pipes or manholes.
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.
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.

APPENDIX B - GLOSSARY

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 Cryptosporidium and other chlorine-resistant pathogens.

Non-Departmental

Expenditure items essential to the operation of WSSC Water which either do not fall within the functional assignment of any office or which provide for expenditures related to more than one office. Examples include fringe benefits and insurance.

Objective

A specific measurable and observable result of an organization's activity which advances the organization toward its goal.

APPENDIX B - GLOSSARY

Operating Budget	A comprehensive financial plan by which WSSC Water's operating programs are funded for a single fiscal year.
Other Post-Employment Benefits	(Also referred to as OPEB) Employees in the public sector may be compensated in a variety of forms in exchange for their services. In addition to salary, employees may earn benefits over their years of service that will not be received until their service has been severed due to retirement or other reasons. The most common type of post-employment benefit is a pension. Other post-employment benefits generally take the form of health insurance, dental, prescription drug, or other health care benefits. It may also include life insurance, legal services, or other benefits.
Outcome Measure	A measure of the degree to which an objective has been achieved. For WSSC Water, this usually corresponds to the impact of a service on an organization's key responsibilities, especially the effect on citizens, customers, or other users of the service.
Pay-As-You-GO Financing	(Also referred to as PAYGO) The funding of capital expenditures with operating funds instead of debt.
Plumbing and Inspection Fees	A fee for WSSC Water's inspection of all plumbing and gas fixtures installed in residential and commercial structures to ensure that such installations are in compliance with WSSC Water's Plumbing and Gas-fitting Code.
Potomac WFP Consent Decree	A court-enforced legal document that was negotiated between WSSC Water, the Maryland Department of the Environment, the United States Environmental Protection Agency, the United States Department of Justice, and a number of Citizen Groups that requires WSSC Water to take certain actions in order to reduce the amount of solids discharged back into the Potomac River.
Project Cornerstone	Technologies to modernize and streamline business processes and implement new operational technologies.
Public Hearing	An opportunity for customers and the citizenry in general to voice opinions and concerns to appointed or elected officials. Section 17-202 of the Public Utilities Article of the Annotated Code of Maryland, requires that WSSC Water publish a budget before January 15, make it available to the public upon request, and hold a public hearing on the budget not less than 21 days after the budget is released for comment, but before February 15. Notice of WSSC Water's public hearings is sent to all customers. In addition, public hearing specifics (date, time, location, contact information, and procedures for testifying) are advertised in local and regional newspapers.

APPENDIX B - GLOSSARY

Ready-to-Serve Charge	Comprised of the Account Maintenance Fees (AMF) 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 United States Environmental Protection Agency, the United States Department of Justice, and a number of Citizen Groups that requires WSSC Water to take certain actions in order to improve the performance of the wastewater collection system and reduce the number of sanitary sewer overflows.
SDC Debt Service Offset	The use of a portion of System Development Charge (SDC) revenue to pay the debt service on bonds issued after FY'93 to pay for growth-related CIP projects. (FY'94 was the first year that the SDC was in effect.)
Sewage Disposal Bond Fund	An independent fiscal and accounting entity with a self-balancing set of accounts for recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities associated with carrying out the activities of designing and constructing/reconstructing WSSC Water's major wastewater collection, storage, and disposal facilities, including all sewer mains 15-inches in diameter and larger, wastewater treatment plants, force mains, and wastewater pumping stations. The fund also covers the reconstruction of all sized sewer lines and lateral lines.

APPENDIX B - GLOSSARY

Sewer Operating Fund	An independent fiscal and accounting entity with a self-balancing set of accounts for recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities associated with carrying out the activities of operating and maintaining WSSC Water's wastewater collection and disposal system.
Sewer System Evaluation Survey	(Also referred to as SSES) The Sewer System Evaluation Survey is an analytical evaluation of a sanitary sewer system to detect sewer pipe defects, blockages, and capacity problems through the use of techniques such as manhole inspections, trunk sewer inspections, smoke tests, dye tests, closed circuit television (CCTV), flow monitoring, rain monitoring, building service connection location/ inspection, and night flow isolations. The SSES is performed to determine the specific location of problems, estimate dry and wet weather flow rates, possible methods of rehabilitation, and the cost of rehabilitation/replacement.
Sewer Use Charges	Revenue derived from applying an increasing rate schedule per 1,000 gallons of water sold. The rate charged for each account is based upon the average daily water consumption by customer unit during each billing period.
Significant Industrial User	(Also referred to as SIU) Defined by the Environmental Protection Agency as: (1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N; (2) Any other industrial user that: discharges an average 25,000 gallons per day or more of process wastewater; contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or (3) is designated as a SIU by WSSC Water on the basis that the industrial user has a reasonable potential for adversely affecting the operation of WSSC Water's wastewater treatment plants.
Spending Affordability	(Also referred to as SAG) An approach to budgeting that assigns expenditure ceilings for the forthcoming year prior to the development of detailed budget estimates. Limits on new water and sewer debt, total water and sewer debt service, total water and sewer operating expenses, and the amount of the water and sewer bill increase are established each year by the Montgomery and Prince George's County Councils prior to WSSC Water's budget preparation. This process started with the FY'96 budget.
Strategic Sourcing	Strategic planning and priority alignment to foster informed decision making using fact-based, data-driven processes.
Supervisory Control and Data Acquisition System	(Also referred to as SCADA) The technological system enabling WSSC Water to use automation to collect data from one or more (remote) facilities and send limited control instructions to those facilities.

APPENDIX B - GLOSSARY

Supply Chain Management	The identification, acquisition, access, positioning and management of resources an organization needs or potentially needs in the attainment of its strategic objectives.
System Development Charge	(Also referred to as SDC) A charge levied on new development to pay for the construction of major water and sewerage facilities needed to accommodate growth.
System Extension Permit	(Also referred to as SEP) A WSSC Water-issued permit for extensions to WSSC Water's system. This permit is required for the Applicant to build water and sewer systems that WSSC Water will, upon satisfactory completion, take over for maintenance and operations.
Trihalomethanes	A group of potentially cancer-causing substances that can be present as low-level contaminants in finished water. Trihalomethanes can be produced as disinfection byproducts when the chlorine used to treat the raw water reacts with certain normally occurring organic contaminants present in the raw water.
Trunk Sewer	As defined in the Sanitary Sewer Overflow Consent Decree, "Trunk Sewer" refers to any sewer lines in WSSC Water's Collection System that are 15 inches or greater in diameter, including components thereto, and stream-crossings.
Turbidity	Turbidity is the cloudy appearance of water caused by the presence of suspended matter. A turbidity measurement is used to indicate the clarity of water.
Turbidity Units	Turbidity units are a measure of the cloudiness of water. If measured by a Nephelometric (deflected light) instrumental procedure, turbidity units are expressed in Nephelometric turbidity units, or NTU.
Washington Suburban Sanitary Commission	(Also referred to as WSSC Water or agency) 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.

APPENDIX B - GLOSSARY

Wastewater	Water that originates from a combination of domestic, industrial, commercial or agricultural activities and, due to sewer inflow or infiltration, may also include surface runoff or stormwater.
Water Consumption Charge	Revenue derived from the sale of water by applying an increasing rate schedule per 1,000 gallons of use. The rate charged for each account is based upon the average daily consumption during each billing period.
Water Fund	Funded by customers, community members and WSSC Water employees to assist approved residential customers experiencing financial hardships paying water/sewer bills.
Water Operating Fund	An independent fiscal and accounting entity with a self-balancing set of accounts for recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities associated with carrying out the activities of operating and maintaining WSSC Water's water supply and distribution system.
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	FY	Fiscal Year
ADR	Alternative Dispute Resolution	GAAP	Generally Accepted Accounting Principles
AFO	Acoustic Fiber Optic	GBDS	General Bond Debt Service
AMF	Account Maintenance Fee	GFOA	Government Finance Officers Association
AMI	Advanced Metering Infrastructure	GIS	Geographic Information System
AWWA	American Water Works Association	GPD	Gallons per Day
C2M	Customer-to-Meter	GPS	Global Positioning System
CAP	Customer Assistance Program	HAA	Haloacetic Acid
CCTV	Closed Circuit Television	H/C	House Connection
CEO	Chief Executive Officer	ICPRB	Interstate Commission on the Potomac River Basin
CIO	Chief Information Officer	IIF	Infrastructure Investment Fee
CIP	Capital Improvements Program	IT	Information Technology
CIU	Categorical Industrial User	ITSC	IT Solution Center
COOP	Continuity of Operations Plans	MBE	Minority Business Enterprise
CPI-W	Consumer Price Index for Urban Wage Earners & Clerical Workers	MDE	Maryland Department of the Environment
CSC	Customer Service Center	MGD	Million Gallons per Day
CSIS	Customer Service Information System	MHI	Median Household Income
DBA	Database Administration	MOU	Memorandum of Understanding
DC Water	District of Columbia Water and Sewer Authority	MVR	Meter, Vertical Turbine
DSCR	Debt Service Coverage Ratio	MWCOG	Metropolitan Washington Council of Governments
E&C	Engineering & Construction Department	MWQ	Maryland Water Quality
EBS	E-Business Suite	NTU	Nephelometric Turbidity Units
EEO	Equal Employment Opportunity	OCIO	Office of the Chief Information Officer
EGIS	Enterprise Geographic Information System	OIG	Office of the Inspector General
ENR	Enhanced Nutrient Removal	OPEB	Other Post-Employment Benefits
EPA	Environmental Protection Agency	OSDI	Office of Supplier Diversity & Inclusion
ERP	Enterprise Resource Planning	PAYGO	"Pay-As-You-GO" Financing
FFBC	Front Foot Benefit Charge	PCCP	Pre-stressed Concrete Cylinder Pipe
FICA	Social Security & Medicare	PMO	Project Management Office
FOG	Fats, Oils, and Grease	PMP	Proactive Maintenance Program
FOMC	Federal Open Market Committee		
FSE	Food Service Establishment		

APPENDIX C - ACRONYMS

REDO	Reconstruction Debt Service Offset
SAG	Spending Affordability Guidelines
SCADA	Supervisory Control and Data Acquisition
SDC	System Development Charge
SDWA	Safe Drinking Water Act
SEP	System Extension Permit
SIU	Significant Industrial User
SLBE	Small, Local Business Enterprise
SSES	Sewer System Evaluation Survey
SSO	Sanitary Sewer Overflow
THM	Trihalomethanes
UT	Ultrasonic
WFP	Water Filtration Plant
WRRF	Water Resource Recovery Facilities
WSSC	Washington Suburban Sanitary Commission
WSSD	Washington Suburban Sanitary District
WWPS	Wastewater Pumping Station
WWTP	Wastewater Treatment Plant



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