

WSSC Water

APPROVED BUDGET

FY 2023

July 1, 2022 - June 30, 2023



FISCAL YEAR 2023 APPROVED BUDGET

Fausto R. Bayonet, Chair
Regina Y. Speed-Bost, Vice Chair
Keith E. Bell, Commissioner
T. Eloise Foster, Commissioner
Howard A. Denis, Commissioner

Carla A. Reid, General Manager/CEO

ATTEST: Julianne Montes De Oca, Corporate Secretary

GOVERNMENT FINANCE OFFICERS ASSOCIATION



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*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Washington Suburban Sanitary Commission
Maryland**

For the Fiscal Year Beginning

July 01, 2021

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, 2021. This is the 27th consecutive year that WSSC Water has received this award.



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SECTION I

**WSSC WATER OVERVIEW, PREFACE AND
BUDGET SUMMARIES**

WSSC WATER OVERVIEW

WSSC Water provides water and sewer services to approximately 1.9 million residents of Maryland's Montgomery and Prince George's Counties, which border Washington, D.C. Established by the Maryland General Assembly in 1918 as a regional (Bi-County) agency under Article 29, it was later re-codified into Division II of the Public Utilities Article of the Annotated Code of Maryland. The agency ranks among the largest water and sewer utilities in the country, encompassing a service area of nearly 1,000 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) 2023 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 2023, it is projected that an average of 197 million gallons of wastewater per day from Montgomery and Prince George's Counties will move to these facilities through 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 FYs 2023 - 2025 Strategic Initiatives

WSSC Water employees work 24/7/365 to fulfill our clean water mission. Throughout FYs 2023 - 2025, we will work with our customers, neighbors, stakeholders and each other to deliver these strategic initiatives:



Enhance Customer Experience

- Continue to exceed U.S. Environmental Protection Agency water quality requirements and implement actions to ensure compliance with future regulations such as the Lead and Copper Rule Revisions, Unregulated Contaminant Monitoring Rule and Per- and Polyfluoroalkyl Substances (PFAS) proposed regulations
- Begin implementation of Advanced Metering Infrastructure (AMI) to provide accurate monthly billing and near real-time water usage data that increases revenues and allows customers to monitor usage and avoid high bills due to leaks
- Enhance and expand WSSC Water's financial assistance programs and educate the public on the value of WSSC Water's services and how to access our programs



Spend Customer Dollars Wisely

- Maintain AAA bond rating through strong financial policies and planning
- Improve contract lifecycle management to ensure deliverables and materials are provided on time, on budget and within scope
- Identify opportunities to reduce costs across WSSC Water



Optimize Infrastructure

- Continually implement the Capital Improvements Program (CIP)
- Continue to invest in innovative technology, processes and ideas
- Prioritize investments to improve the condition of facilities and seek opportunities for public private partnership



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
- Develop and implement the biosolids/water residuals master plan and business plan
- Enhance WSSC Water's comprehensive cybersecurity framework to ensure protection of critical assets
- Ensure resiliency of WSSC Water's water supply and delivery



Transform Employee Engagement

- Develop and implement workforce strategies to plan for current and future workforce needs, including acquiring and developing talent
- Evaluate Human Resource management policies, procedures and practices to retain a high quality and diverse workforce
- Advance achievement of WSSC Water's Strategic Plan by facilitating organizational development activities to enable data and risk informed decisions that optimize business processes

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



Prince George's County Commissioners



Regina Y. Speed-Bost
Vice Chair



Keith E. Bell
Commissioner

Vacant
Commissioner



Montgomery County Commissioners



Fausto R. Bayonet
Chair



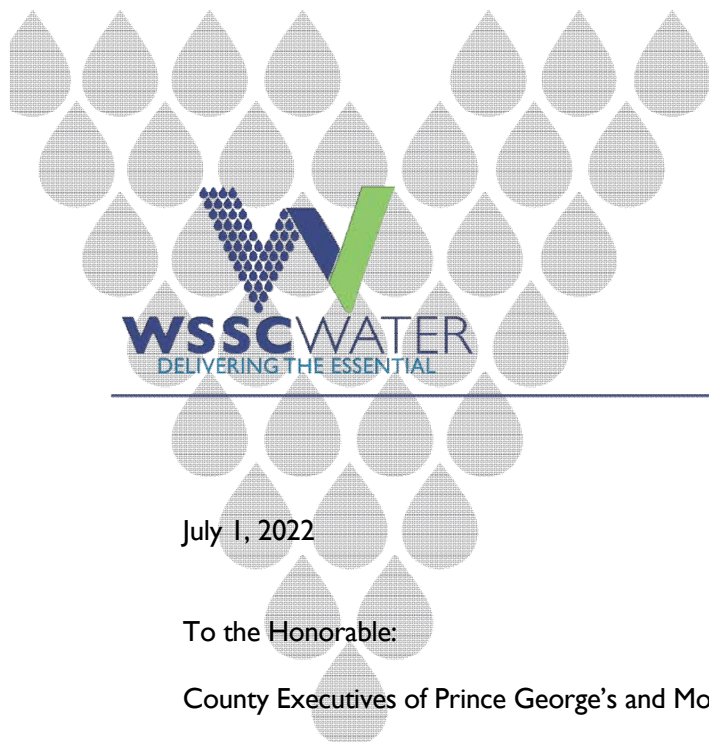
Howard A. Denis
Commissioner



T. Eloise Foster
Commissioner

OUR LEADERSHIP AND ORGANIZATION





COMMISSIONERS

Fausto R. Bayonet, Chair
Regina Y. Speed-Bost, Vice Chair
Keith E. Bell
Howard A. Denis
T. Eloise Foster

GENERAL MANAGER

Carla A. Reid

July 1, 2022

To the Honorable:

County Executives of Prince George's and Montgomery Counties

Chair, President, and Members of the County Councils of
Prince George's and Montgomery Counties

Elected Officials, Valued Customers, and Interested Citizens:

We are pleased to present the WSSC Water's Approved Budget for Fiscal Year (FY) 2023, which begins on July 1, 2022. The budget was adopted by the Commission on June 15, 2022. This document reflects a total budget of \$1.469 billion, including \$864.6 million for operating expenses and \$604.8 million for capital expenses.

As a result of the ongoing COVID-19 pandemic, WSSC Water lost approximately \$150 million in revenue from March of 2020 to March 2022. This loss required budget cuts of roughly \$150 million in FYs 2020 through 2022. Sadly, one in five customers is past due on their bills – equating to over 81,000 delinquent accounts and nearly \$55 million past due. As of June 30, 2022, 1,340 WSSC Water customers across both counties have received a total of \$1.5 million in assistance through the federal Low Income Household Water Assistance Program (LIHWAP). But despite repeated requests for direct assistance to address these delinquencies, we have yet to receive federal, state or county assistance. The ongoing loss of revenue due to the global health and financial crisis has caught the attention of the bond rating agencies. While we maintained our AAA bond rating, one agency changed our outlook from stable to negative. The other rating agencies noted the need to maintain sufficient debt coverage ratios and reserve levels to maintain the rating. The potential loss of our coveted AAA rating would adversely impact debt service, which is our largest expense, and result in millions in additional costs. The Customer Assistance Program, the Water Fund and payment plans are available to help qualified financially struggling customers by providing assistance with water and sewer bills.

The impact of COVID-19 is taking place during a long-term trend of reduced water consumption of nearly 6% over the last 20 years. To keep pace with rising costs and service demands and to help offset revenue loss, we requested a 9% rate increase, which was not supported by the County Councils when setting our Spending Affordability Guidelines. For the past three years, the councils have recommended rate increases that were 2% lower than our request – resulting in continued budget cuts. The impact of the factors outlined above is creating revenue deficits that are growing bigger each year. To curtail the impact of revenue loss due to shift in the actual water and sewer consumption pattern from the highest rate tier to the lowest rate tier, we reduced our revenue projections by \$7 million in FY 2023.

With this as a backdrop, we have built a budget based on a 6.5% average rate increase – requiring over \$138 million in additional cuts to the operating and capital budgets. Our customers will feel the impacts of these cuts. These cuts are not without risks and may increase the likelihood of sanitary sewer overflows (SSOs) and water service outages in many communities throughout both counties, resulting in health hazards and environmental impacts. The cuts will also result in delays to operational and energy efficiency improvements to multiple facilities, which will impact the time it takes for our crews to respond to water/sewer emergencies and increase our vulnerability to events driven by climate change.

See Section I of this document for the entire list of reductions and their associated impacts.

Comparative Expenses by Fund

(\$ in thousands)	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Approved	FY 2023 Approved	FY 2023 Over/(Under) FY 2022	% Change
Operating Funds							
Water Operating	\$ 339,200	\$ 338,471	\$ 335,324	\$ 380,565	\$ 379,808	\$ (757)	(0.2)%
Sewer Operating	419,633	413,421	401,300	461,734	476,137	14,403	3.1 %
General Bond Debt Service	18,847	14,292	12,006	9,794	8,661	(1,133)	(11.6)%
Total Operating	\$ 777,680	\$ 766,184	\$ 748,630	\$ 852,093	\$ 864,606	\$ 12,513	1.5 %
Capital Funds							
Water Supply Bond	\$ 210,783	\$ 162,378	\$ 142,441	\$ 291,667	\$ 239,027	\$ (52,640)	(18.0)%
Sewer Disposal Bond	152,891	211,729	265,865	384,600	343,081	(41,519)	(10.8)%
General Construction	23,121	20,278	18,587	27,478	22,674	(4,804)	(17.5)%
Total Capital	\$ 386,795	\$ 394,385	\$ 426,893	\$ 703,745	\$ 604,782	\$ (98,963)	(14.1)%
Grand Total	\$ 1,164,475	\$ 1,160,569	\$ 1,175,523	\$ 1,555,838	\$ 1,469,388	\$ (86,450)	(5.6)%

The FY 2023 Approved Budget for all operating and capital funds totals \$1.469 billion or \$86.5 million (5.6%) below the Approved FY 2022 Budget. The Approved Operating Budget of \$864.6 million represents an increase of \$12.5 million (1.5%) over the FY 2022 Approved Operating Budget of \$852.1 million. Services and operations will be impacted by the reductions included in this budget. However, the budget does fund some essential improvements including much needed repairs at our facilities, water tank painting to prevent metal corrosion, and continuation of cybersecurity enhancements to protect customer data and Information Technology (IT) system security. Funding is also included for positions and funding for training, initial start-up, and testing of the new Biosolids Management Division; for positions and funding to comply with the new regulatory requirements due to a change to the Lead and Copper Rule; for the Little Seneca Reservoir Forebay sediment removal project (at a reduced level); for compliance with the regulatory requirements for

dam inspection and monitoring; and for the Call Center Optimization Project to enhance customer experience.

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, some new fees and adjustments to current fees have been approved. A listing of all fees and changes are included in Section 2.

WSSC Water is proud to continue its tradition of innovation and excellence in serving the citizens of Prince George's and Montgomery Counties, a tradition that has been a hallmark of the agency for over 104 years.

Comparative Expenses by Major Expense Category

(\$ in thousands)	FY 2021 Actual			FY 2022 Approved			FY 2023 Approved		
	Capital	Operating	Total	Capital	Operating	Total	Capital	Operating	Total
Expense Categories									
Salaries & Wages	\$ 25,911	\$ 131,799	\$ 157,710	\$ 27,449	\$ 133,730	\$ 161,179	\$ 27,547	\$ 134,461	\$ 162,008
Heat, Light & Power	-	18,234	18,234	222	18,501	18,723	230	18,829	19,059
Regional Sewage Disposal	-	58,658	58,658	-	59,160	59,160	-	60,343	60,343
Contract Work	217,590	-	217,590	444,405	21,337	465,742	351,478	-	351,478
Consulting Engineers	42,349	-	42,349	79,614	19,890	99,504	72,122	-	72,122
Debt Service	-	291,980	291,980	-	316,827	316,827	-	328,524	328,524
All Other	141,043	247,959	389,002	152,055	282,648	434,703	153,405	322,449	475,854
Grand Total	\$ 426,893	\$ 748,630	\$ 1,175,523	\$ 703,745	\$ 852,093	\$ 1,555,838	\$ 604,782	\$ 864,606	\$ 1,469,388

FY 2023 OPERATING BUDGET REDUCTIONS TOTALING \$27.0 MILLION AND IMPACT STATEMENTS

Utility Services Department

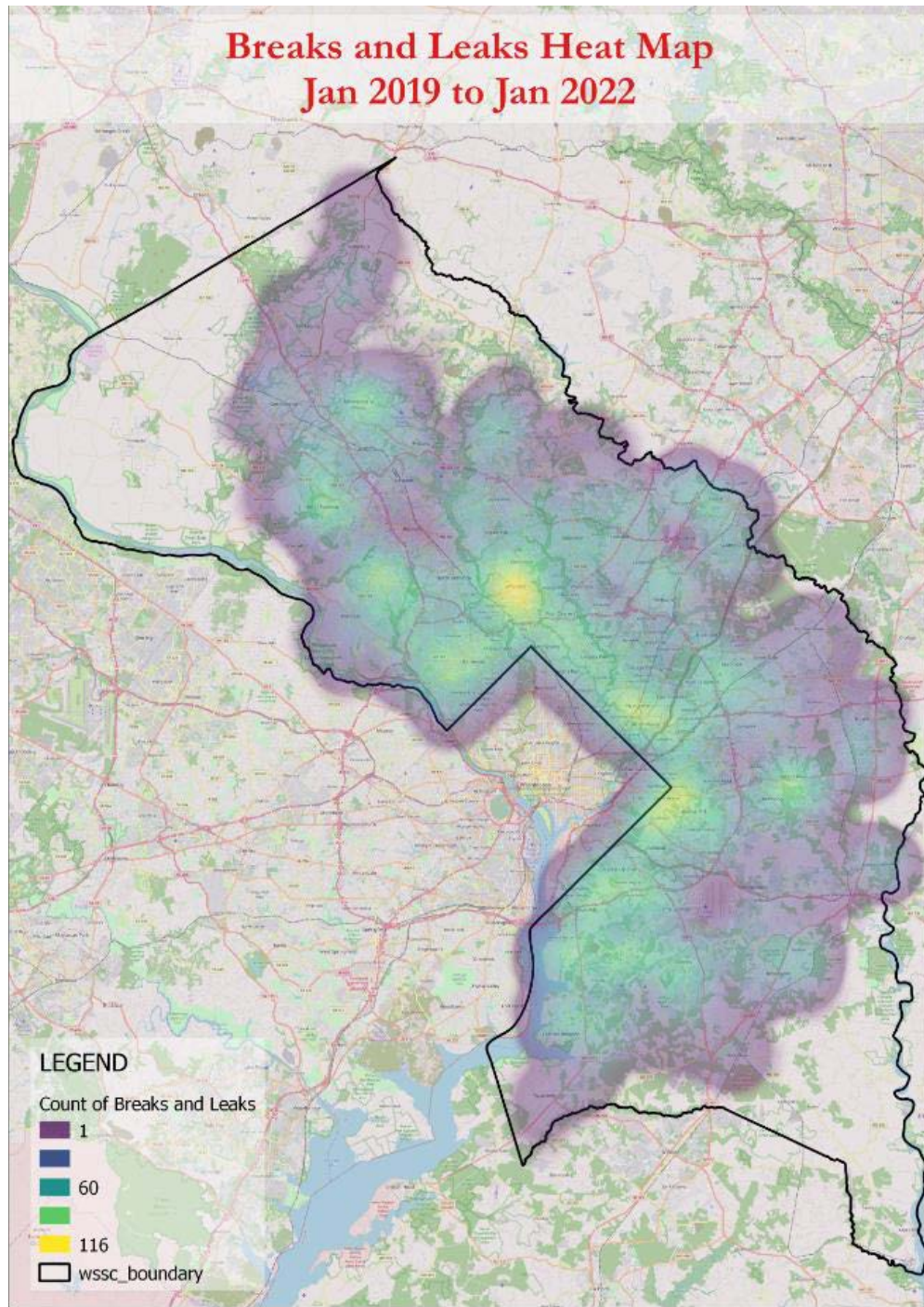
- a. **\$1,865,000 - Emergency Responses** - The depots respond to emergencies in communities, in environmentally sensitive areas, at WSSC Water WFPs, WRRFs, pumping stations and elevated water tanks. Certain responses often require by-pass pumping and repairs for sanitary sewer overflows (SSO) to mitigate untreated wastewater discharges from the sanitary sewer system into the environment. Longer response times may result in increased fines due to the additional flow volume being discharged. Supporting contractors provide specialized equipment necessary to build access roads, pumps large enough to handle our sewer trunk line flow volume and machines large enough to move large pipe through our rights-of-way to make the repairs. The contractors can also address multiple emergencies simultaneously, mitigating the emergencies' impacts. In addition, some planned urgent repairs can include large valve repairs or replacements, pipe repairs and other ancillary tasks. Emergency repair contractors provide support for both buried/linear and vertical assets. This reduction impacts three of the four depots.
- b. **\$600,000 - Work Order Backlog Contract** - The contract supports reducing the backlog of work orders of miscellaneous water and wastewater main repairs. The budget reduction will likely lead to an increased workload with longer repair times for leaks in mains. This directly impacts water loss and gives the appearance of wasting water. Additionally, we would see an increase in breaks, SSOs, longer water outages, longer repair times, higher fines from regulatory agencies and greater environmental impacts to nearby streams.
- c. **\$500,000 - Acoustic Fiber Optic (AFO) Monitoring System** - These data acquisition systems continually monitor the integrity of large pre-stressed concrete cylinder pipe (PCCP) water mains while the pipelines are in service. The systems collect and record PCCP wire breaks and alert WSSC Water when pipes are in danger of failure so immediate action can be taken to avert failures. One less AFO data acquisition monitoring system will be commissioned.
- d. **\$384,600 - "Miss U" Locating Contractor** - The contract provides locating and marking services for WSSC Water's underground water and sewer assets prior to any excavation work (i.e. valves, water and sewer pipelines, etc.). In accordance with Maryland's Annotated Code, Public Utilities Article, Title 12 "Underground Facilities"; Subtitle 1: "Excavation or Demolition Near Underground Facilities" WSSC Water's contractor must respond to all Miss-Utility tickets received from the Miss Utility One-Call Center. Failure of WSSC Water to comply with Maryland's Annotated Code, Public Utilities Article, Title 12 may result in violations and fines from Maryland Underground Facilities Damage Prevention Authority. A reduction in funding can lead to an increased number of contractor damages to our buried assets, can cause customer outages, and in extreme cases may result in injuries and/or property damage. Decreasing funding for locating and marking buried assets will likely increase the time to restore water or sewer service.
- e. **\$300,000 - Pipe Armoring** - This program addresses water and wastewater assets that have become exposed across and along streams, providing construction services for armoring/protecting the exposed assets and restoring portions of the impacted stream to avoid future failures of critical water and sewer assets in environmentally sensitive areas. A 23% program reduction will increase the frequency with which linear assets may become compromised and possibly fail along streams, causing environmental damages as well as disruptions in service. Regulatory agencies may fine WSSC Water due to these exposed assets.
- f. **\$200,000 - W-1.00 Pressure Monitoring** - Transient pressures occur in water mains because of sudden changes in flow due to daily operations and can be very damaging and often result in water main failures. A budget reduction will result in a 48% decrease in the mileage of WSSC Water's transmission system that can be monitored for dangerous transient pressures each year. The resulting impact may be an increase in breaks in large and small diameter water mains.

FY 2023 OPERATING BUDGET REDUCTIONS TOTALING \$27.0 MILLION AND IMPACT STATEMENTS (Continued)

- g. **\$150,000 - W-161.01 Valve Repairs** - The existing valve inspection and exercising program includes provisions for repairing broken or malfunctioning valves. The budget cut will reduce the number of valves that can be addressed from 85 to approximately 65 per year, which limits WSSC Water's ability to make sure all critical valves are in proper working condition during emergencies and/or routine maintenance.
- h. **\$150,000 - W-161.01 Right-of-Way Clearing/Temporary Access Roads** - This program provides services to construct temporary access roads to critical valves for inspection and repair. Repairs on valves located in areas difficult to access may take a longer time. Service disruptions, mitigation efforts and overall impact will worsen if access to these critical assets is impeded.
- i. **\$150,000 - Emergency Response Plan Consultants** - This program is to generate emergency response plans related to critical buried water and wastewater assets with the objective of preventing injuries and fatalities, reducing damage to property, protecting the environment and the community and accelerating the resumption of normal operations. Emergencies related to critical buried water and wastewater assets can take longer to resolve resulting in longer disruptions of service.
- j. **\$125,000 - W-161.01 PCCP Inspection & Condition Assessment** - The current PCCP condition assessment program targets approximately 18 miles of pipe each year and should be expanded to ensure the proper operation and maintenance of these critical assets. The program has been instrumental in avoiding water main failures of large PCCP, such as River Road several years ago and more recently in Capital Heights. A reduction in budget will result in a reduction of the large diameter PCCP mileage assessments performed yearly which may result in an increase of large diameter breaks.
- k. **\$100,000 - Large Diameter Inspection Program** - This program provides engineering consultant resources for the inspection and condition assessment of at least 5 miles of large diameter sewer mains and a minimum of one sewer force main per year. The budget reduction reduces the resources available for the targeted assessment and may result in increased large volume sanitary sewer overflows, resulting in additional mitigation costs and negative environmental impacts.
- l. **\$100,000 - Small Valve Inspection/Exercising** - The small valve inspection and exercising program targets approximately 14,000 valves each year. The budget reduction will reduce the number of valves that can be inspected each year by approximately 1,100 and limits WSSC Water's ability to make sure all critical valves are in proper working condition during emergencies and routine maintenance.
- m. **\$50,000 - Inspection Services** - This program provides contractor resources for responding to sewer emergencies and for performing routine maintenance of sewer mains. A reduction in funding can result in additional odor complaints, SSOs, basement backups, line blockages, additional cleaning costs and an increase in claims associated with damages caused by the sewers.
- n. **\$50,000 - Chemical Root Control** - The chemical root control program is part of WSSC Water's preventive maintenance program for the wastewater collection system and is part of the SSO consent decree. The program targets tree roots that have intruded into the sewer pipes, causing SSOs and basement backups. Each year, selected sewer pipes are treated with an herbicide to kill tree roots and prevent regrowth. The chemical root control program has been a significant contributor to WSSC Water's success in reducing SSOs annually from approximately 225 in 2006 to 98 in 2020. Reducing the program will eventually result in a gradual increase in the number of SSOs and basement backups that occur each year.

FY 2023 OPERATING BUDGET REDUCTIONS TOTALING \$27.0 MILLION AND IMPACT STATEMENTS (Continued)

- o. **\$25,000 - Sewer System Evaluation Survey (SSES) for Flow Reduction** - An SSES is a comprehensive approach to quantifying infiltration and inflow (I&I), locating sources of I&I and making recommendations for the reduction of I&I in selected portions of the collection system. I&I is excess water that flows into the sewer collection system from groundwater and stormwater. I&I can overwhelm WSSC Water's collection system, resulting in SSOs and basement backups. The current budget includes evaluation of approximately 30 miles of sewer pipe per year, which is 10 miles less than the program goal per the SSO Consent Decree. Therefore, any further reduction in the budget will reduce the miles evaluated and continue to limit I&I source detection and reduction efforts in parts of the system such as the Piscataway Broad Creek basins.



FY 2023 OPERATING BUDGET REDUCTIONS TOTALING \$27.0 MILLION AND IMPACT STATEMENTS (Continued)

Production

- a. **\$1,395,000 - Chemicals** - Increased risk that proper/complete treatment of water or wastewater will not be accomplished.
- b. **\$1,200,000 - Materials** - There is an increased risk that critical maintenance and repair work at water or wastewater treatment facilities will not be completed when needed, potentially causing temporary service interruptions. In addition, potential cost increases for supplies due to inflation, supply chain issues, and/or the need for more emergency purchases will impact the available budget.
- c. **\$1,000,000 - Operating Support Program Projects** - There is an increased risk of facility performance problems due to equipment-related issues. The risk of poor or unsafe working conditions in WSSC Water work locations also increases. We also will not be able to complete roof replacement projects. In addition, there will be increased cost for rehabilitation projects as delays result in further deterioration in the condition of the assets.
- d. **\$807,000 - Various Services Including Hauling** - There is an increased risk that funding dedicated to other areas will have to be diverted to pay for these critical services, which cannot be delayed.
- e. **\$797,000 - Maintenance/Repair Services** - There is an increased risk that critical maintenance and repair work at water or wastewater treatment facilities will not be completed when needed, potentially causing temporary service interruptions. Short term risk: Delay in getting repairs to facility equipment and systems such as pumping systems and electrical distribution systems. Long term risk: Delay in rehabilitation work such as the replacement of major heating, ventilation and air conditioning systems.
- f. **\$300,000 - Consultant Support for Renovation Projects** - Renovation projects will be delayed.
- g. **\$300,000 - Tools, Machinery, Lab and Radio Equipment** - Some maintenance, repair, or replacement of equipment will have to be deferred.
- h. **\$270,000 - Project Management for Little Seneca Dredging Project** - There will be a delay in getting this project underway, affecting the quantity and quality of stored water in the Little Seneca Dam. There will be an inability to manage this multi-million dollar project due to lack of staff.
- i. **\$178,000 - Rental** - There is an increased risk that some maintenance, repair, or replacement of equipment will have to be deferred.
- j. **\$56,000 - Laboratory Supplies** - The reduction will impact WSSC Water's customer complaint analysis. Delay in the analysis means a delay responding to customers. Note that some samples have holding time limitations (expiration times), and samples might expire before they are analyzed, resulting in no report to customers. The reduction will impact all WRRF and WFP daily process control samples. In addition, all WRRF and WFP regulatory and compliance analyses will be affected. Risk of U.S. Environmental Protection Agency stabilized sludge analysis and reporting violation. Risk of losing the Maryland state certification for Laboratory Division.

FY 2023 OPERATING BUDGET REDUCTIONS TOTALING \$27.0 MILLION AND IMPACT STATEMENTS (Continued)

- k. **\$40,000 - Consultant Services for New Water Quality Regulations** – This reduction will delay completion of lead service line inventory, which will impact WSSC Water’s ability to identify customer lead service and reduce lead risks from customer taps.
- l. **\$20,000 - Overtime** - There is an increased risk of potential staffing shortages at WRRFs.

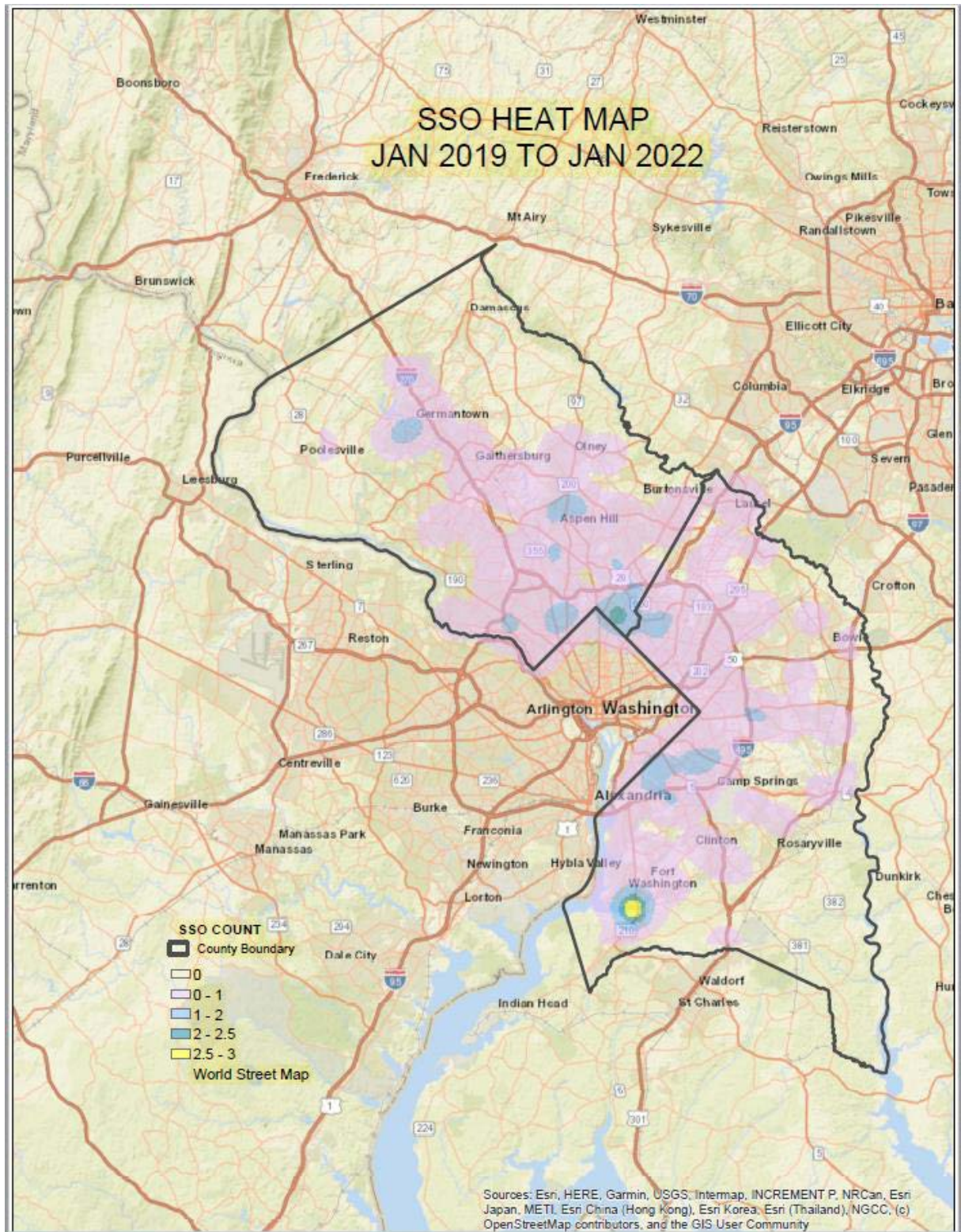
General Services

- a. **\$482,500 - Fleet Machinery & Equipment** - There is an increased risk that the replacement of certain pieces of equipment will be delayed by one year. Delaying replacement will cause more frequent breakdowns and higher maintenance costs.
- b. **\$311,000 - Truck & Automobiles** - There is an increased risk that the replacement of vehicles and trucks will be delayed for one year. Delaying vehicle replacement will cause more frequent breakdowns and higher maintenance costs.

Engineering & Construction

- a. **\$2,617,000 - Piscataway Rehabilitation Program** - The Piscataway Rehabilitation Program is designed to rehabilitate sewer assets in the Piscataway sewer basin that WSSC Water has identified as contributing to I&I issues. Over the last several years, I&I issues in the Piscataway basin have contributed to high sewage flows to the Piscataway WRRF. The Piscataway Rehabilitation Program seeks to address these issues through a multi-pronged approach of capital and operating rehabilitation activities. The operating rehabilitation activities include manhole rehabilitation and an enhanced grouting initiative. By postponing this work on some assets, the I&I issues will persist for a longer period of time, which will result in higher costs at the Piscataway WRRF to treat water that should not be in the sewer pipes.
- b. **\$942,600 - System-wide Manhole Rehabilitation and Grouting Programs** - Like with the Piscataway basin as described above, there are I&I issues throughout WSSC Water’s service area. These issues lead to higher probabilities of paying to treat cleaner water at all our WRRFs (and the Blue Plains Advanced Wastewater Treatment Plant owned and operated by DC Water). I&I also increases the probability of SSOs. Therefore, the negative impacts of these reductions include higher future costs for our ratepayers, the potential for more, and likely worse, SSOs, and a curtailment to WSSC Water’s goal of being a good steward of the environment for current and future generations.
- c. **\$255,000 - Pipeline Design-Build Study** - This reduction will eliminate funding for the Pipeline Design-Build Study. This study would have benchmarked industry best practices for pipe replacement, resulting in potential solutions for streamlining projects and reducing costs. Therefore, the negative impacts of this reduction include higher future costs for our ratepayers, the potential for more service interruptions, and a weakening of WSSC Water’s strategic priorities to optimize our infrastructure and spend customer dollars wisely.

FY 2023 OPERATING BUDGET REDUCTIONS TOTALING \$27.0 MILLION AND IMPACT STATEMENTS (Continued)



FY 2023 OPERATING BUDGET REDUCTIONS TOTALING \$27.0 MILLION AND IMPACT STATEMENTS (Continued)

- d. **\$120,000 – Water & Sewer Planning and Modeling** - WSSC Water utilizes computerized hydraulic models that simulate the flow of water and wastewater throughout the water and sewer systems. The models should be updated on a regular basis to account for newly constructed or abandoned pipes, to account for changes in demographic projections in future growth, and to be re-calibrated to match current I&I. Neither model has been updated for 11 years due to previous budgeting limits and existing resource issues although many utilities update their models approximately every 2 to 5 years.

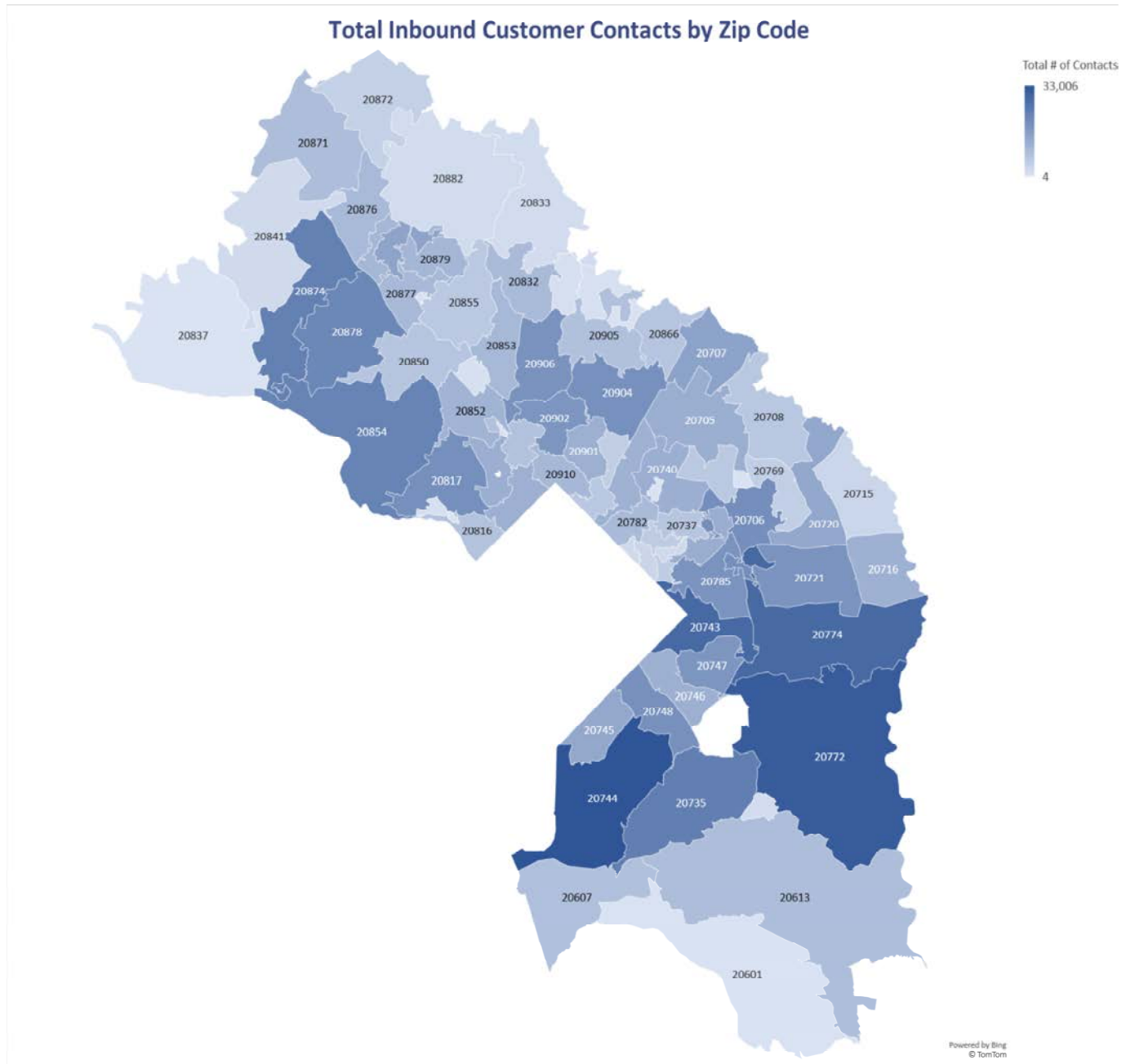
The budget reduction will slow the progress on this work effort and may impact our ability to make accurate and timely decisions with respect to current and long-term capacity needs within our water distribution and wastewater collection, pumping and treatment systems. Utilizing outdated information can lead to under-sizing system expansions, potential SSOs and lower levels of service provided to WSSC Water customers.

- e. **\$100,000 - Staff Augmentation for Plan Review and Permits** - Cycle times may increase for plan review and permit issuance because the Engineering & Construction Department uses these funds for staff augmentation when needed.
- f. **\$80,000 - Consultant for On-site Inspection** - Elimination of a consultant inspector for on-site pipeline construction inspection will reduce the inspection capacity and will take longer to complete inspections on time.
- g. **\$47,200 - Process Control Upgrades to WSSC Water Facilities** - Reductions will impact process control upgrades for WSSC Water facilities including the new Biosolids Management Division.
- h. **\$66,500 - Miscellaneous Other** - Reduced support for e-Builder software upgrades and development. Reduced travel that will reduce the employees' ability to meet continuing education credits as required by certifications, learn new technologies and share WSSC Water's projects with the industry and peers. Additional reductions are for office supplies, furniture and small machinery and equipment.

Customer Service

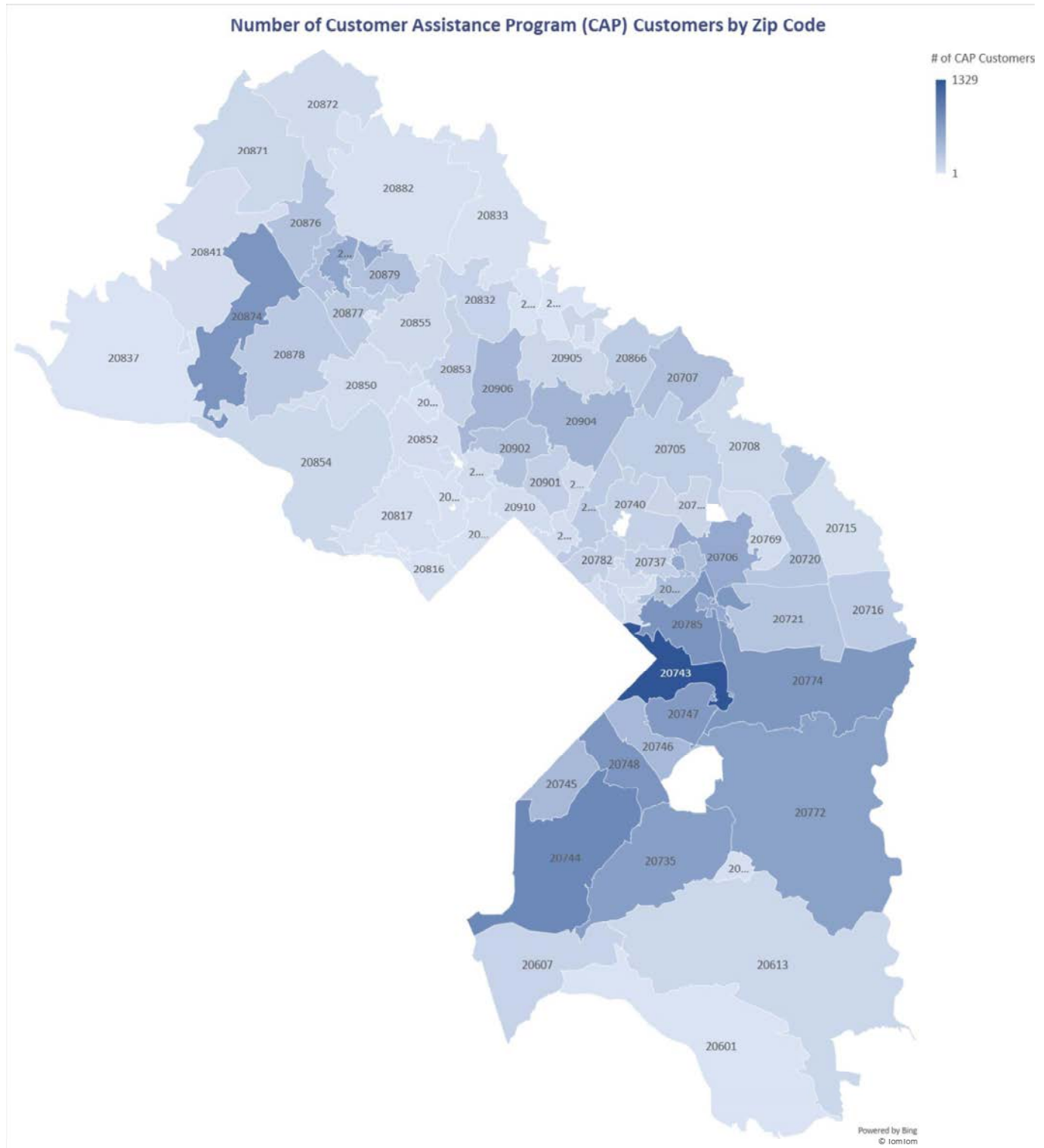
- a. **\$500,000 - Overtime** - Due to the COVID-19 pandemic, WSSC Water has experienced approximately 80,000 past due accounts with a value exceeding \$60 million in lost revenue. This severe delinquency challenge results in a 23% increase in past due accounts and a 125% growth in past due amounts. The magnitude of the challenge has put additional pressure on existing limited customer service resources, resulting in severe backlogs. Overtime is critical for enabling the Customer Service Department to address high volumes, surges in customer requests and work backlogs. The Customer Service Department often works nights and weekends to reduce backlogs and process billing system transactions, including requests for payment plans, start/stop services, resolution for estimated bills, and high bill adjustments. Reduced funding for overtime will result in longer customer phone wait times, more customer call abandonments, delayed deposit refunds and bill adjustments, increased customer complaints, increased non-call work backlogs, and increased staff stress related unscheduled leave.
- b. **\$432,900 - Vendors and Temporary Staff** - Reduced funding for vendors and temporary customer support staff will result in frustrated customers due to WSSC Water's inability to provide customers with timely call-answering, and quick responses to customer requests and bill adjustments. Work backlogs will increase as will customer complaints. Intensified staff stress will also result in increased unscheduled leave.

FY 2023 OPERATING BUDGET REDUCTIONS TOTALING \$27.0 MILLION AND IMPACT STATEMENTS (Continued)



FY 2023 OPERATING BUDGET REDUCTIONS TOTALING \$27.0 MILLION AND IMPACT STATEMENTS (Continued)

- c. **\$75,000 - Professional Services** -This reduction could impact the free plumbing inspection program available to financially challenged customers and would also limit consulting services.



FY 2023 OPERATING BUDGET REDUCTIONS TOTALING \$27.0 MILLION AND IMPACT STATEMENTS (Continued)

Information Technology

- a. **\$2,448,600 - Support C2M and Related Applications** - Potentially longer wait time for solutions to be delivered to the end users and fewer incident resolutions per year. 10% reduction in incident resolution because functional architects' capability will decrease by 40% and there will be 15% fewer fixes resolved each week.

Reduces the capability for training WSSC Water staff which will impact the Customer Service staff's effective use of the new release functions.
- b. **\$2,328,050 – C2M Reductions to IT** - Based on the Commission's approved motion at the March 16, 2022 meeting to eliminate further enhancements to the C2M Billing System, the IT Budget can be reduced by. IT will still retain the capacity to operate and maintain the C2M system and respond to any critical defects that may occur over the next year.
- c. **\$812,800 - Voice and Contact Center Enhancements** - Reduce the number of enhancements done for the Voice and Contact Center. IT will work on implementing additional features in ServiceNow during FY 2022 to address some of the enhancements previously planned for FY 2023.
- d. **\$722,000 - Application Purchases** - Limits the ability to purchase applications to support and enhance business functions.
- e. **\$192,900 - Upgrade Firewall** - Although the budget to upgrade the firewall when the equipment is end of life will be reduced, there will be minimal impact to services. The functionality can be replicated by other tools that WSSC Water already owns.
- f. **\$164,200 - Consultant for Financial Analysis and Contract Administration** - Reduces resources available to support financial analysis and contract administration functions in IT. However, IT is working on reorganizing the team and plans to utilize existing positions to help to meet the workload requirements for the IT Finance & Contract Administration Section.
- g. **\$139,600 - Research and Advisory Services** - Research and advisory services for IT will be discontinued with the existing vendor; IT will pursue more cost-effective subscriptions for research and advisory services.
- h. **\$82,100 - Computer Equipment Purchases** - Reduces the purchases of computer equipment and other related items.

Finance

- a. **\$170,000 - Professional Services** - Professional services provide financial advisory services, risk management evaluations, financial studies, rate and cost-of-service studies, and development of processes and procedures based on evaluations and audits. The reduction will postpone or eliminate planned studies and services.

Strategy & Innovation Office

- a. **\$1,535,540 – Organizational Development Consulting Services** - Based on the Commission's approved motion at the March 16, 2022 meeting to eliminate money spent by the Office of Strategy and Innovation on training and organizational development for Cornerstone Post Production.
- b. **\$300,000 - Organizational Development Consulting Services** - The Organizational Development contract is used to provide operational support to process the start/stop requests. Start/stop requests are initiated when customers start and/or stop water services when moving into a new home or moving out. Reducing the resources

FY 2023 OPERATING BUDGET REDUCTIONS TOTALING \$27.0 MILLION AND IMPACT STATEMENTS (Continued)

will significantly increase the start/stop backlog. This also results in an increased call volume as customers call to check on their requests.

Additional impacts resulting from this reduction are delays in critical work that can affect Customer Service, Finance and Utility Services Departments, significant increases in pending bill volume, decreases in troubleshooting customer account issues, loss of critical expertise, reductions in staff training and documentation, and reductions in consultant hours which may contribute to the loss of consultants on the project.

- c. **\$44,500 - Leaders on the Same Page Conference** - Eliminating budget for Leaders on the Same Page where 200+ directors, division managers, section managers, chiefs and other WSSC Water leaders come together to share industry knowledge. The conference will potentially take place virtually going forward.

Commissioner's Office/Corporate Secretary's Office

- a. **\$16,500 - Miscellaneous Reductions** - Reduces various expenditures such as student scholarships, consultant hours, temporary staff hours, travel, office supplies and subscriptions.

Office of the Inspector General

- a. **\$11,200 - Auditing Services and Mileage** - Reductions to auditing services will limit the office's ability to solicit external specialized professional services for auditing and investigations. Mileage reductions will reduce the area and time traveled for audits and investigations.

General Manager's Office

- a. **\$13,000 - Consulting Services and Travel to Conferences** - Reductions in consulting services may result in limited funds for hiring consultants for special projects. The travel budget reductions will reduce the General Manager and the Deputy General Managers participation in various meetings and conferences.

Asset Management Division

- a. **\$222,300 - Business Cases** - The project planning process is the method through which WSSC Water identifies and validates needs and evaluates solutions to address those needs. It incorporates engineering data, environmental requirements, economic factors, and public interaction to establish a sound basis for making decisions, for efficiently conducting and documenting specific work tasks, and for successfully implementing needed solutions. The project planning process utilizes business case evaluations to determine the most effective solution to a validated need based on lifecycle cost, business risk exposure, and/or level of service. An important goal in the planning process is to produce a result that is acceptable to citizens, elected officials, regulatory agencies, and WSSC Water at a reasonable cost.

The reduction will result in delayed project execution on several infrastructure projects within WSSC Water facilities. This may result in higher risk of failure, including the realized level of service failures for WSSC Water customers. Additionally, the reduction will increase operation risk due to delayed project development and execution. This will result in higher operational costs due to emergency interventions and increase maintenance costs.

Police & Homeland Security

- a. **\$127,200 - Maintenance, Electronic Security and IT Projects** - There will be major impacts to maintenance, improvements, and other necessary work on the electronic security system, especially in light of the impacts of IT projects and cybersecurity. In addition, there will not be funding available for planned cybersecurity assessments of the electronic security system network, no funding for additional emergency management initiatives, including training exercises, planning, and response.

FY 2023 OPERATING BUDGET REDUCTIONS TOTALING \$27.0 MILLION AND IMPACT STATEMENTS (Continued)

- b. **\$44,900 - Overtime** - Limited overtime support for overnight security for water main break crews and other WSSC Water employees operating in potentially dangerous areas.
- c. **\$58,700 - Miscellaneous Reductions** - Includes reduction to the contracted security staff. Reduction to travel will reduce participation in key law enforcement, security, resilience, and emergency management conferences, impacting WSSC Water's ability to remain up to date on all aspects of Police and Homeland Security.

General Counsel's Office

- a. **\$102,200 - Outside Legal Counsel** - Reduction of funding required to pay for outside legal counsel.
- b. **\$14,300 - Recording & Court Fees, Subscriptions, Office Supplies and Travel** - Limit office's resources to hire the required court reporters needed for administrative hearings and depositions. The office is also required to pay for attorney dues, library subscriptions, and legal research. Additional reductions are made to travel for conferences and seminars and reductions to office supplies purchases.
- c. **\$11,100 - Temporary Employees** - Reduction will impact hiring a law clerk and temporary employees, or additional services needed for litigation defense.

Communications & Community Relations Office

- a. **\$51,700 - WSSC Water Annual Report** - Reduction will result in the annual report being performed by in-house staff versus an outside vendor.
- b. **\$30,100 - Promotional Items, Rental Services, Photography, Subscriptions, Laboratory Supplies** - WSSC Water will distribute fewer promotional opportunities during various events and drives, eliminate a stand-by photographer to cover multiple events, and additional reductions will be made to subscriptions and laboratory supplies.

Human Resources Office

- a. **\$74,000 - Training and Development** - Reduce training and development of WSSC Water employees.
- b. **\$31,000 - Consulting Services** - Limit professional and temporary support when there is a need for support from staffing agencies during busy seasons.
- c. **\$15,900 - Consulting Services** - Reduce consulting services for the Human Resources Office initiatives and activities. Funding reduction impacts requirements for support to benefits, health and welfare activities and Request-for-Proposal for employee benefits.
- d. **\$15,900 - Recruiting Expenses** - Impact to funding for pre-employment services and activities for new employees who are promoted.
- e. **\$11,100 - Educational Assistance** - Reduce funding for the educational assistance for employees seeking advanced degrees.
- f. **\$10,100 - Advertising** - Reduce advertising job postings for open positions throughout WSSC Water. Reduction to the number of professional subscriptions.

FY 2023 OPERATING BUDGET REDUCTIONS TOTALING \$27.0 MILLION AND IMPACT STATEMENTS (Continued)

- g. **\$5,500 - Administration Staff** – Reduce Equity, Engagement and Inclusion administrative staff assistance within the office.
- h. **\$4,400 - Office Supplies and Travel** - Reduce Occupational Safety and Health Division office supplies and travel for courses, classes and conferences.

Office of Supplier Diversity & Inclusion

- a. **\$22,600 - Business Conference** - Scale back business conference for vendor community including potential limitations to size and scope of the event.

Intergovernmental Relations Office

- a. **\$29,900 - Professional Services** - Reduce WSSC Water's efforts to develop a federal legislation strategy and its advancement before the U.S. Congress, the Executive Branch, and federal agencies.

OPERATING BUDGET REDUCTIONS GEOGRAPHICAL IMPACT				
County/District/Project	Area Impacted	Communities Impacted	Reference to the Operating Budget Impact Statements	
Montgomery County				
At-Large				
Acoustic Fiber Optic (AFO) Monitoring System	System-wide impact		Utility Services	c
“Miss U” Locating Contractor	System-wide impact		Utility Services	d
Pipe Armoring	System-wide impact		Utility Services	e
Inspection Services	System-wide impact		Utility Services	m
Emergency Response Plan Consultants	System-wide impact		Utility Services	i
Chemical Root Control	System-wide impact		Utility Services	n
Chemicals	System-wide impact		Production	a
Materials	System-wide impact		Production	b
Various Services Including Hauling	System-wide impact		Production	d
Maintenance/Repair Services	System-wide impact		Production	e
Tools, Machinery, Lab and Radio Equipment	System-wide impact		Production	g
Project Management for Little Seneca Dredging Project	System-wide impact		Production	h
Rental	System-wide impact		Production	i
Laboratory Supplies	System-wide impact		Production	j
Consultant Services for New Water Quality Regulations	System-wide impact		Production	k
Overtime	System-wide impact		Production	l
Fleet Machinery & Equipment	System-wide impact		General Services	a
Truck & Automobiles	System-wide impact		General Services	b
Pipeline Design-Build Study	System-wide impact		Engineering & Construction	c
Water & Sewer Planning and Modeling	System-wide impact		Engineering & Construction	d
Staff Augmentation for Plan Review and Permits	System-wide impact		Engineering & Construction	e
Consultant for On-site Inspection	System-wide impact		Engineering & Construction	f
Process Control Upgrades to WSSC Water Facilities	System-wide impact		Engineering & Construction	g
Miscellaneous Other	System-wide impact		Engineering & Construction	h
Business Cases	System-wide impact ⁶		Asset Management Division	a
District I				
Work Order Backlog Contract	System-wide impact ¹	Bethesda Chevy Chase Potomac	Utility Services	b
W-1.00 Pressure Monitoring	System-wide impact ¹	North Potomac Bethesda Chevy Chase Potomac	Utility Services	f
W-161.01 Valve Repairs	System-wide impact ¹	North Potomac Bethesda Chevy Chase Potomac	Utility Services	g
W-161.01 Right-of-Way Clearing/Temporary Access Roads	System-wide impact ⁵	North Bethesda Travilah	Utility Services	h
W-161.01 PCCP Inspection & Condition Assessment	System-wide impact ⁵	North Bethesda Travilah	Utility Services	j
Large Diameter Inspection Program	System-wide impact ²	Bethesda	Utility Services	k
Small Valve Inspection/Exercising	System-wide impact ¹	Bethesda Chevy Chase Potomac North Potomac	Utility Services	l
Customer Service Overtime	System-wide impact ³	Bethesda Potomac	Customer Service	a
Customer Service Vendors and Temporary Staff	System-wide impact ³	Bethesda Potomac	Customer Service	b
Support C2M and Related Applications	System-wide impact ³	Bethesda Potomac	Information Technology	a
Voice and Contact Center Enhancements	System-wide impact ³	Bethesda Potomac	Information Technology	b
Organizational Development Consulting Services	System-wide impact ³	Bethesda Potomac	Strategy & Innovation Office	a

OPERATING BUDGET REDUCTIONS GEOGRAPHICAL IMPACT (Continued)					
County/District/Project		Area Impacted	Communities Impacted	Reference to the Operating Budget Impact Statements	
District 2					
Work Order Backlog Contract		System-wide impact ¹	Montgomery Village	Utility Services	b
W-1.00 Pressure Monitoring		System-wide impact ¹	Montgomery Village	Utility Services	f
W-161.01 Valve Repairs		System-wide impact ¹	Montgomery Village	Utility Services	g
W-161.01 Right-of-Way Clearing/Temporary Access Roads		System-wide impact ⁵	Montgomery Village	Utility Services	h
W-161.01 PCCP Inspection & Condition Assessment		System-wide impact ⁵	Montgomery Village	Utility Services	j
Large Diameter Inspection Program		System-wide impact ²	Germantown	Utility Services	k
Small Valve Inspection/Exercising		System-wide impact ¹	Montgomery Village	Utility Services	l
Customer Service Overtime		System-wide impact ³	Germantown	Customer Service	a
Customer Service Vendors and Temporary Staff		System-wide impact ³	Germantown	Customer Service	b
Support C2M and Related Applications		System-wide impact ³	Germantown	Information Technology	a
Voice and Contact Center Enhancements		System-wide impact ³	Germantown	Information Technology	b
Organizational Development Consulting Services		System-wide impact ³	Germantown	Strategy & Innovation Office	a
Professional Services		System-wide impact ⁴	Germantown Montgomery Village	Customer Service	c
Business Cases		System-wide impact ⁶	Germantown	Asset Management Division	a
District 3					
Emergency Responses		Emergency responses handled by Utility Services North depot	Gaithersburg	Utility Services	a
W-161.01 Right-of-Way Clearing/Temporary Access Roads		System-wide impact ⁵	Aspen Hill Leisure World Gaithersburg	Utility Services	h
W-161.01 PCCP Inspection & Condition Assessment		System-wide impact ⁵	Aspen Hill Leisure World Gaithersburg	Utility Services	j
Operating Support Program Projects		System-wide impact	Gaithersburg	Production	c
Customer Service Overtime		System-wide impact ³	Gaithersburg	Customer Service	a
Customer Service Vendors and Temporary Staff		System-wide impact ³	Gaithersburg	Customer Service	b
Support C2M and Related Applications		System-wide impact ³	Gaithersburg	Information Technology	a
Voice and Contact Center Enhancements		System-wide impact ³	Gaithersburg	Information Technology	b
Organizational Development Consulting Services		System-wide impact ³	Gaithersburg	Strategy & Innovation Office	a
District 4					
Work Order Backlog Contract		System-wide impact ¹	Wheaton	Utility Services	b
W-1.00 Pressure Monitoring		System-wide impact ¹	Wheaton	Utility Services	f
W-161.01 Valve Repairs		System-wide impact ¹	Wheaton	Utility Services	g
W-161.01 Right-of-Way Clearing/Temporary Access Roads		System-wide impact ⁵	Wheaton Kensington	Utility Services	h
W-161.01 PCCP Inspection & Condition Assessment		System-wide impact ⁵	Wheaton Kensington	Utility Services	j
Large Diameter Inspection Program		System-wide impact ²	Olney	Utility Services	k
Small Valve Inspection/Exercising		System-wide impact ¹	Wheaton	Utility Services	l
District 5					
Emergency Responses		Emergency responses handled by Utility Services West depot	Silver Spring	Utility Services	a
Work Order Backlog Contract		System-wide impact ¹	Silver Spring	Utility Services	b
W-1.00 Pressure Monitoring		System-wide impact ¹	Silver Spring	Utility Services	f
W-161.01 Valve Repairs		System-wide impact ¹	Silver Spring	Utility Services	g
W-161.01 Right-of-Way Clearing/Temporary Access Roads		System-wide impact ⁵	Silver Spring White Oak	Utility Services	h
W-161.01 PCCP Inspection & Condition Assessment		System-wide impact ⁵	White Oak	Utility Services	j
Small Valve Inspection/Exercising		System-wide impact ¹	Silver Spring	Utility Services	l
Operating Support Program Projects		System-wide impact	Silver Spring	Production	c
Professional Services		System-wide impact ⁴	Silver Spring	Customer Service	c

OPERATING BUDGET REDUCTIONS GEOGRAPHICAL IMPACT (Continued)				
County/District/Project	Area Impacted	Communities Impacted	Reference to the Operating Budget Impact Statements	
Prince George's County				
At-Large				
Acoustic Fiber Optic (AFO) Monitoring System	System-wide impact		Utility Services	c
"Miss U" Locating Contractor	System-wide impact		Utility Services	d
Emergency Response Plan Consultants	System-wide impact		Utility Services	i
Pipe Armoring	System-wide impact		Utility Services	e
Inspection Services	System-wide impact		Utility Services	m
Chemical Root Control	System-wide impact		Utility Services	n
Chemicals	System-wide impact		Production	a
Materials	System-wide impact		Production	b
Various Services Including Hauling	System-wide impact		Production	d
Maintenance/Repair Services	System-wide impact		Production	e
Tools, Machinery, Lab and Radio Equipment	System-wide impact		Production	g
Rental	System-wide impact		Production	i
Laboratory Supplies	System-wide impact		Production	j
Consultant Services for New Water Quality Regulations	System-wide impact		Production	k
Overtime	System-wide impact		Production	l
Fleet Machinery & Equipment	System-wide impact		General Services	a
Truck & Automobiles	System-wide impact		General Services	b
Pipeline Design-Build Study	System-wide impact		Engineering & Construction	c
Water & Sewer Planning and Modeling	System-wide impact		Engineering & Construction	d
Staff Augmentation for Plan Review and Permits	System-wide impact		Engineering & Construction	e
Consultant for On-site Inspection	System-wide impact		Engineering & Construction	f
Process Control Upgrades to WSSC Water Facilities	System-wide impact		Engineering & Construction	g
Miscellaneous Other	System-wide impact		Engineering & Construction	h
District 1				
W-161.01 Right-of-Way Clearing/Temporary Access Roads	System-wide impact ⁵	Adelphi	Utility Services	h
W-161.01 PCCP Inspection & Condition Assessment	System-wide impact ⁵	Adelphi	Utility Services	j
Business Cases	System-wide impact ⁶	Laurel	Asset Management Division	a
District 2				
Emergency Responses	Emergency responses handled by Utility Services Central depot	Hyattsville	Utility Services	a
Work Order Backlog Contract	System-wide impact ¹	Hyattsville	Utility Services	b
W-1.00 Pressure Monitoring	System-wide impact ¹	Hyattsville	Utility Services	f
W-161.01 Valve Repairs	System-wide impact ¹	Hyattsville	Utility Services	g
W-161.01 Right-of-Way Clearing/Temporary Access Roads	System-wide impact ⁵	Adelphi	Utility Services	h
W-161.01 PCCP Inspection & Condition Assessment	System-wide impact ⁵	Adelphi	Utility Services	j
Small Valve Inspection/Exercising	System-wide impact ¹	Hyattsville	Utility Services	l
Operating Support Program Projects	System-wide impact	Adelphi	Production	c
Consultant Support for Renovation Projects	Renovation projects in Utility Services Central depot	Hyattsville	Production	f
Professional Services	System-wide impact ⁴	Hyattsville	Customer Service	c
District 3				
Customer Service Overtime	System-wide impact ³	Lanham	Customer Service	a
Customer Service Vendors and Temporary Staff	System-wide impact ³	Lanham	Customer Service	b
Professional Services	System-wide impact ⁴	Lanham	Customer Service	c
Support C2M and Related Applications	System-wide impact ³	Lanham	Information Technology	a
Voice and Contact Center Enhancements	System-wide impact ³	Lanham	Information Technology	b
Organizational Development Consulting Services	System-wide impact ³	Lanham	Strategy & Innovation Office	a
District 4				
Customer Service Overtime	System-wide impact ³	Lanham Upper Marlboro	Customer Service	a
Customer Service Vendors and Temporary Staff	System-wide impact ³	Lanham Upper Marlboro	Customer Service	b
Professional Services	System-wide impact ⁴	Lanham	Customer Service	c
Support C2M and Related Applications	System-wide impact ³	Lanham Upper Marlboro	Information Technology	a
Voice and Contact Center Enhancements	System-wide impact ³	Lanham Upper Marlboro	Information Technology	b
Organizational Development Consulting Services	System-wide impact ³	Lanham Upper Marlboro	Strategy & Innovation Office	a

OPERATING BUDGET REDUCTIONS GEOGRAPHICAL IMPACT (Continued)				
County/District/Project	Area Impacted	Communities Impacted	Reference to the Operating Budget Impact Statements	
District 5				
Emergency Responses	Emergency responses handled by Utility Services Central depot	Hyattsville	Utility Services	a
Work Order Backlog Contract	System-wide impact ¹	Hyattsville Bladensburg	Utility Services	b
W-1.00 Pressure Monitoring	System-wide impact ¹	Hyattsville Bladensburg	Utility Services	f
W-161.01 Valve Repairs	System-wide impact ¹	Hyattsville Bladensburg	Utility Services	g
Small Valve Inspection/Exercising	System-wide impact ¹	Hyattsville Bladensburg	Utility Services	l
Customer Service Overtime	System-wide impact ³	Lanham	Customer Service	a
Customer Service Vendors and Temporary Staff	System-wide impact ³	Lanham	Customer Service	b
Professional Services	System-wide impact ⁴	Lanham	Customer Service	c
Support C2M and Related Applications	System-wide impact ³	Lanham	Information Technology	a
Voice and Contact Center Enhancements	System-wide impact ³	Lanham	Information Technology	b
Organizational Development Consulting Services	System-wide impact ³	Lanham	Strategy & Innovation Office	a
District 6				
Work Order Backlog Contract	System-wide impact ¹	Capitol Heights Mitchellville	Utility Services	b
W-1.00 Pressure Monitoring	System-wide impact ¹	Capitol Heights Mitchellville	Utility Services	f
W-161.01 Valve Repairs	System-wide impact ¹	Capitol Heights Mitchellville	Utility Services	g
Large Diameter Inspection Program	System-wide impact ²	Bowie Rosaryville	Utility Services	k
Small Valve Inspection/Exercising	System-wide impact ¹	Capitol Heights Mitchellville	Utility Services	l
Sewer System Evaluation Survey (SSES) for Flow	System-wide impact	Western Branch Basin	Utility Services	o
System-wide Manhole Rehabilitation and Grouting	System-wide impact	Western Branch Basin	Engineering & Construction	b
Customer Service Overtime	System-wide impact ³	Capitol Heights	Customer Service	a
Customer Service Vendors and Temporary Staff	System-wide impact ³	Capitol Heights	Customer Service	b
Support C2M and Related Applications	System-wide impact ³	Capitol Heights	Information Technology	a
Voice and Contact Center Enhancements	System-wide impact ³	Capitol Heights	Information Technology	b
Organizational Development Consulting Services	System-wide impact ³	Capitol Heights	Strategy & Innovation Office	a
District 7				
W-161.01 Right-of-Way Clearing/Temporary Access Roads	System-wide impact ⁵	Suitland Capitol Heights	Utility Services	h
W-161.01 PCCP Inspection & Condition Assessment	System-wide impact ⁵	Suitland Capitol Heights	Utility Services	j
Professional Services	System-wide impact ⁴	Capitol Heights District Heights	Customer Service	c
District 8				
Work Order Backlog Contract	System-wide impact ¹	Oxon Hill	Utility Services	b
W-1.00 Pressure Monitoring	System-wide impact ¹	Oxon Hill	Utility Services	f
W-161.01 Valve Repairs	System-wide impact ¹	Oxon Hill	Utility Services	g
W-161.01 Right-of-Way Clearing/Temporary Access Roads	System-wide impact ⁵	Temple Hills	Utility Services	h
W-161.01 PCCP Inspection & Condition Assessment	System-wide impact ⁵	Temple Hills	Utility Services	j
Small Valve Inspection/Exercising	System-wide impact ¹	Oxon Hill	Utility Services	l
Operating Support Program Projects	System-wide impact	Temple Hills	Production	c
Consultant Support for Renovation Projects	Renovation projects in Utility Services South depot	Temple Hills	Production	f

OPERATING BUDGET REDUCTIONS GEOGRAPHICAL IMPACT (Continued)				
County/District/Project	Area Impacted	Communities Impacted	Reference to the Operating Budget Impact Statements	
District 9				
Large Diameter Inspection Program	System-wide impact ²	Fort Washington	Utility Services	k
Sewer System Evaluation Survey (SSES) for Flow Reduction	System-wide impact	Piscataway Basin Broad Creek Basin	Utility Services	o
Piscataway Rehabilitation Program	Piscataway Basin	Piscataway Basin	Engineering & Construction	a
System-wide Manhole Rehabilitation and Grouting Programs	System-wide impact	Piscataway Basin Broad Creek Basin	Engineering & Construction	b
Customer Service Overtime	System-wide impact ³	Clinton Fort Washington	Customer Service	a
Customer Service Vendors and Temporary Staff	System-wide impact ³	Clinton Fort Washington	Customer Service	b
Professional Services	System-wide impact ⁴	Fort Washigton Upper Marlboro Clinton	Customer Service	c
Support C2M and Related Applications	System-wide impact ³	Clinton Fort Washington	Information Technology	a
Voice and Contact Center Enhancements	System-wide impact ³	Clinton Fort Washington	Information Technology	b
Organizational Development Consulting Services	System-wide impact ³	Clinton Fort Washington	Strategy & Innovation Office	a
Business Cases	System-wide impact ⁶	Upper Marlboro	Asset Management Division	a

Footnotes:

¹ This reduction has a system-wide impact but based on recent historical data, the communities listed have generally more breaks and leaks incidents due water pipe density and pipe age

² Refer to the CIP budget reductions for the projects that will be impacted

³ Six of the top 10 zip codes that contacted Customer Services in the FY 2021 are in Prince George's County and the other four are in Montgomery County. Based on the FY 2021 data, calls received in a descending order were from Lanham, Clinton, Capitol Heights, Fort Washington, Upper Marlboro, Bethesda, Potomac, Germantown and Gaithersburg. Unfortunately, many of these "top" zip codes are also heavily impacted by past dues

⁴ WSSC Water has 16,000 total CAP customers as of December 2021. Free inspections are offered to CAP customers to help detect leaks/potential leaks to avoid large water bills. Any CAP customer can receive one free property inspection on an annual basis. In FY 2021, no property inspections were provided due to COVID-19. In FY 2020, there were more than 100 property inspections provided to CAP customers

⁵ Communities with PCCP replacement and rehabilitations work from FYs 2020-2022

⁶ The following business cases are on hold due to the budget reductions:

- a. RGH Building and Façade Rehabilitation, City of Laurel
- b. Little Seneca WWPS Upgrades, City of Germantown
- c. Parkway WRRF Clarifiers Upgrades, City of Laurel
- d. Western Branch WRRF I/I High Flow Mitigation, Upper Marlboro

FY 2023 CAPITAL IMPROVEMENTS PROGRAM REDUCTIONS TOTALING \$110.5 MILLION AND IMPACT STATEMENTS

Montgomery County Projects

- a. **\$690,000 - Arcola WWPS & FM** - This project provides for the planning, design and construction of the modifications to the Arcola Wastewater Pumping Station (WWPS) and replacement of the Arcola Force Main (FM). The rehabilitation will replace both pumps, maintaining the 0.17 million gallons per day (MGD) capacity of the WWPS. The existing 1,300 linear feet of 4" FM will be replaced. In addition, replacement of all electrical and mechanical components, piping assets and the heating, ventilation and air conditioning (HVAC) system are included.

The existing WWPS and FM serve approximately 130 households in the Arcola area, just west of the Wheaton Regional Park in Montgomery County. They were constructed in 1961 and have reached the end of their useful lives. Replacement of the existing FM is in accordance with an initiative to prioritize replacing FMs that have reached their anticipated life expectancy. This upgrade work was recommended as part of WSSC Water's Asset Management Program.

Due to budgetary constraints, this project will be deferred for one year. The delay could lead to failure of the WWPS or FM before the work is completed. Failure of the WWPS will cause a release of raw sewage into the park. Failure of the FM will cause a release of raw sewage onto the travelled roadways along its alignment and repairs will cause construction nuisances to the travelling public.

- b. **\$275,000 - Reddy Branch WWPS & FM** - This project provides for the planning, design and construction of the modifications to the Reddy Branch WWPS and replacement of the Reddy Branch FM. The work will maintain the 3.04 MGD capacity of the WWPS. The existing 12,774 linear feet of 16" FM will be replaced.

The existing WWPS and pre-stressed concrete cylinder pipe (PCCP) FM serve approximately 5,650 households in the Brookeville and Olney areas within Montgomery County. They were built in 1971 and have reached the end of their useful lives. Additionally, the existing site is immediately adjacent to Reddy Branch, which is experiencing streambank erosion that could soon encroach upon the facility. The WWPS is subject to flooding and there are safety concerns with equipment operation. Replacement of the existing FM is in accordance with an initiative to prioritize replacing FMs that have reached their anticipated life expectancy. This upgrade work was recommended as part of WSSC Water's Asset Management Program.

Due to budgetary constraints, this project will be deferred for one year. The delay could lead to failure of the WWPS or FM before the work is completed. Failure of the WWPS will cause a release of raw sewage into Reddy Branch. Much of the existing FM, which is prone to failure, is located within parkland and environmentally sensitive areas that would be impacted by the release of raw sewage in the event of failure of the FM.

- c. **\$173,000 - Sam Rice Manor WWPS & FM** - This project provides for the planning, design and construction of the relocated Sam Rice Manor WWPS and replacement of the Sam Rice Manor FM. The capacity of the relocated WWPS will be 0.12 MGD. A new 3,521 linear foot FM will be constructed.

The relocated WWPS and FM will serve approximately 135 households in the Sam Rice Manor community near Ashton in Montgomery County. The existing WWPS and FM were originally installed in 1977 and have reached the end of their useful lives. The WWPS does not meet current standards and is in jeopardy from encroaching streambank erosion. Replacement of the existing FM is in accordance with an initiative to prioritize replacing FMs that have reached their expected life expectancy. This upgrade work was recommended as part of WSSC Water's Asset Management Program.

Due to budgetary constraints, this project will be deferred for one year. The delay could lead to failure of the WWPS or FM before the work is completed. Failure of the WWPS will cause a release of raw sewage into some tributaries to the Patuxent River. The existing FM, which is prone to failure, is within the backyards of numerous residences that would be impacted by the release of raw sewage in the event of failure of the FM, causing health hazards and nuisances to the property owners.

FY 2023 CAPITAL IMPROVEMENTS PROGRAM REDUCTIONS TOTALING \$110.5 MILLION AND IMPACT STATEMENTS (Continued)

- d. **\$132,000 - Spring Gardens WWPS Replacement** - This project provides for the planning, design and construction of a new Spring Gardens WWPS and replacement of the Spring Gardens FM. The capacity of the new WWPS will be 1.30 MGD in order to accommodate build-out of the service area. A new 7,500 linear foot FM will be constructed. Additionally, 900 linear feet of gravity sewer will also be built.

The existing WWPS and FM serve approximately 620 households in the King Valley, King Valley Manor, and Kingstead Knoll communities near Damascus in Montgomery County. They were constructed in 1977 and have reached the end of their useful lives. Replacement of the existing FM is in accordance with an initiative to prioritize replacing FMs that have reached their anticipated life expectancy. This upgrade work was recommended as part of WSSC Water's Asset Management Program.

Due to budgetary constraints, this project will be deferred for one year. The delay could lead to failure of the WWPS or FM before the work is completed. Failure of the WWPS will cause a release of raw sewage into Little Bennett Creek and environmentally sensitive areas. The existing FM, which is prone to failure, follows the Little Bennett Creek streambed. Failure of the FM will cause a release of raw sewage into the creek.

Prince George's County Projects

- a. **\$345,000 - Carsondale WWPS & FM** - This project provides for the planning, design and construction of the modifications to the Carsondale WWPS and replacement of the Carsondale FM. The rehabilitation will replace both pumps, maintaining the 0.60 MGD capacity of the WWPS. The existing 3,000 linear feet of 8" FM will be replaced. In addition, replacement of all electrical components, including the generator, replacement of the HVAC system, general upgrade to the WWPS building and grounds as needed and the addition of a restroom are included.

The existing WWPS and FM serve the Carsondale community southeast of the I-95 and Route 50 interchange near Lanham in Prince George's County. The WWPS is located adjacent to the local community park. The WWPS and FM were constructed in 1960 and have reached the end of their useful lives. Replacement of the existing FM is in accordance with an initiative to prioritize replacing FMs that have reached their anticipated life expectancy. This upgrade work was recommended as part of WSSC Water's Asset Management Program.

Due to budgetary constraints, this project will be deferred for one year. The delay could lead to failure of the WWPS or FM before the work is completed. Failure of the WWPS will cause a release of raw sewage into the local community park. Failure of the FM will cause a release of raw sewage onto the travelled roadways along its alignment and repairs will cause construction nuisances to the travelling public.

- b. **\$173,000 - Colmar Manor WWPS & FM** - This project provides for the planning, design and construction of the relocated Colmar Manor WWPS and replacement of the Colmar Manor FM. The capacity of the relocated WWPS will be 0.80 MGD. A new 726 linear foot FM will be constructed.

The relocated WWPS and FM will serve approximately 240 households in the Colmar Manor community in Prince George's County. The existing WWPS and FM were originally installed in 1956 and have reached the end of their useful lives. The WWPS is outdated and could be considered "piece-meal" due to a number of in-house modifications through the decades. Replacement of the existing FM is in accordance with an initiative to prioritize replacing FMs that have reached their expected life expectancy. This upgrade work was recommended as part of WSSC Water's Asset Management Program.

Due to budgetary constraints, this project will be deferred for one year. The delay could lead to failure of the WWPS or FM before the work is completed. The WWPS is located adjacent to the Anacostia River tributary and greenway. Failure of the WWPS or FM will cause a release of raw sewage into the tributary and greenway.

FY 2023 CAPITAL IMPROVEMENTS PROGRAM REDUCTIONS TOTALING \$110.5 MILLION AND IMPACT STATEMENTS (Continued)

- c. **\$173,000 - Forest Heights WWPS & FM** - This project provides for the planning, design and construction of the modifications to the Forest Heights WWPS and replacement of the Forest Heights FM. The work will maintain the 2.28 MGD capacity of the WWPS. The existing 1,940 linear feet of 14" FM will be replaced.

The existing WWPS and FM serve approximately 1,200 households in the Forest Heights community in Prince George's County. They were built in 1946 and have reached the end of their useful lives. Additionally, replacement parts are unavailable since the equipment is obsolete. The WWPS is located adjacent to the Forest Heights Elementary School ballfields and Oxon Run stream. Replacement of the existing FM is in accordance with an initiative to prioritize replacing FMs that have reached their expected life expectancy. This upgrade work was recommended as part of WSSC Water's Asset Management Program.

Due to budgetary constraints, this project will be deferred for one year. The delay could lead to failure of the WWPS or FM before the work is completed. Failure of the WWPS will cause a release of raw sewage onto the elementary school ballfields, into Oxon Run stream, and into other environmentally sensitive areas. The existing FM, which is prone to failure, is within the backyards of numerous residences that would be impacted by the release of raw sewage in the event of failure of the FM, causing health hazards and nuisances to the property owners.

- d. **\$14,410,000 - Prince George's County 450A Zone Water Main** - This project provides for a capacity and alignment study, design and construction of approximately 3.8 miles of new 48" diameter redundant transmission main for Prince George's high pressure zone HG450A. Portions of the transmission main that currently serve the HG450A and HG290B pressure zones will be out of service almost every year to meet the goals of the PCCP inspection program. When portions of the existing main are out of service, the remaining mains lack sufficient capacity and pumping against these restrictions can cause high pressure that may result in pipe failure. A redundant transmission main is required to continue to provide service to our customers while the existing transmission main is planned to be out of service and to provide service in case the existing main fails.

The new transmission main may parallel or replace existing mains as determined by modeling. The new main should be a minimum of 30" diameter, will start where the existing 54" diameter main inside the Beltway connects to an existing 30" diameter main just north of Pennsylvania Avenue and tie in to the new 30" diameter main to be constructed under the Old Branch Avenue Water Main project. This project benefits a large water pressure zone that includes the areas of Hillcrest Heights, Suitland, Forestville, District Heights, Andrews Air Force Base and Camp Springs.

Due to budgetary constraints, this project will be deferred for one year. This delay will continue concerns with lack of redundancy within this area of the water system. Failure of the existing main will create water outages for 90,000 customers. The delay will also impact the ability to adequately inspect the PCCP transmission mains in the water system, which are critical pipes that transmit high quantities of water and are prone to failure without adequate inspections that identify and remedy defects in a timely manner.

FY 2023 CAPITAL IMPROVEMENTS PROGRAM REDUCTIONS TOTALING \$110.5 MILLION AND IMPACT STATEMENTS (Continued)

- e. **\$22,552,000 - South Potomac Supply Improvement, Phase 2** - This project provides for the design and construction of 4.4 miles of 42" diameter ductile iron transmission main, 6.0 miles of distribution mains (diameters ranging from 10" to 16") and a new flow control valve and vault. The project will replace 3.5 miles of existing 42" diameter PCCP transmission main located within the Henson Creek corridor and will replace parallel aged distribution infrastructure located along the project limits.

During design of the 42" PCCP transmission main replacement under the South Potomac Supply Improvement, Phase 1 project, WSSC Water and the Maryland Department of the Environment discussed extensive requirements for stream restoration of Henson Creek. At that time, WSSC Water staff identified up to 3.5 miles of pipe south of the project area that is exposed along eroding stretches of Henson Creek. An alignment study began under this project to evaluate possible relocation of the existing 42" PCCP main between Rosecroft Drive and Indian Head Highway. The 3.5 miles of PCCP main will be relocated out of Henson Creek and into a roadway alignment between Temple Hills Road and Indian Head Highway, for a total of 4.4 miles of new 42" ductile iron pipe. The transmission main will be relocated out of the 290B pressure zone and into the 450A pressure zone. Phase 2 includes the installation of a flow control valve between pressure zones 450A and 290B. This project primarily benefits the National Harbor area in Prince George's County.

Due to budgetary constraints, this project will be deferred for one year. This delay will continue concerns of a transmission main failure. Failure of the existing main would impact 13,500 customers in the National Harbor area.

Bi-County/Information Only Projects

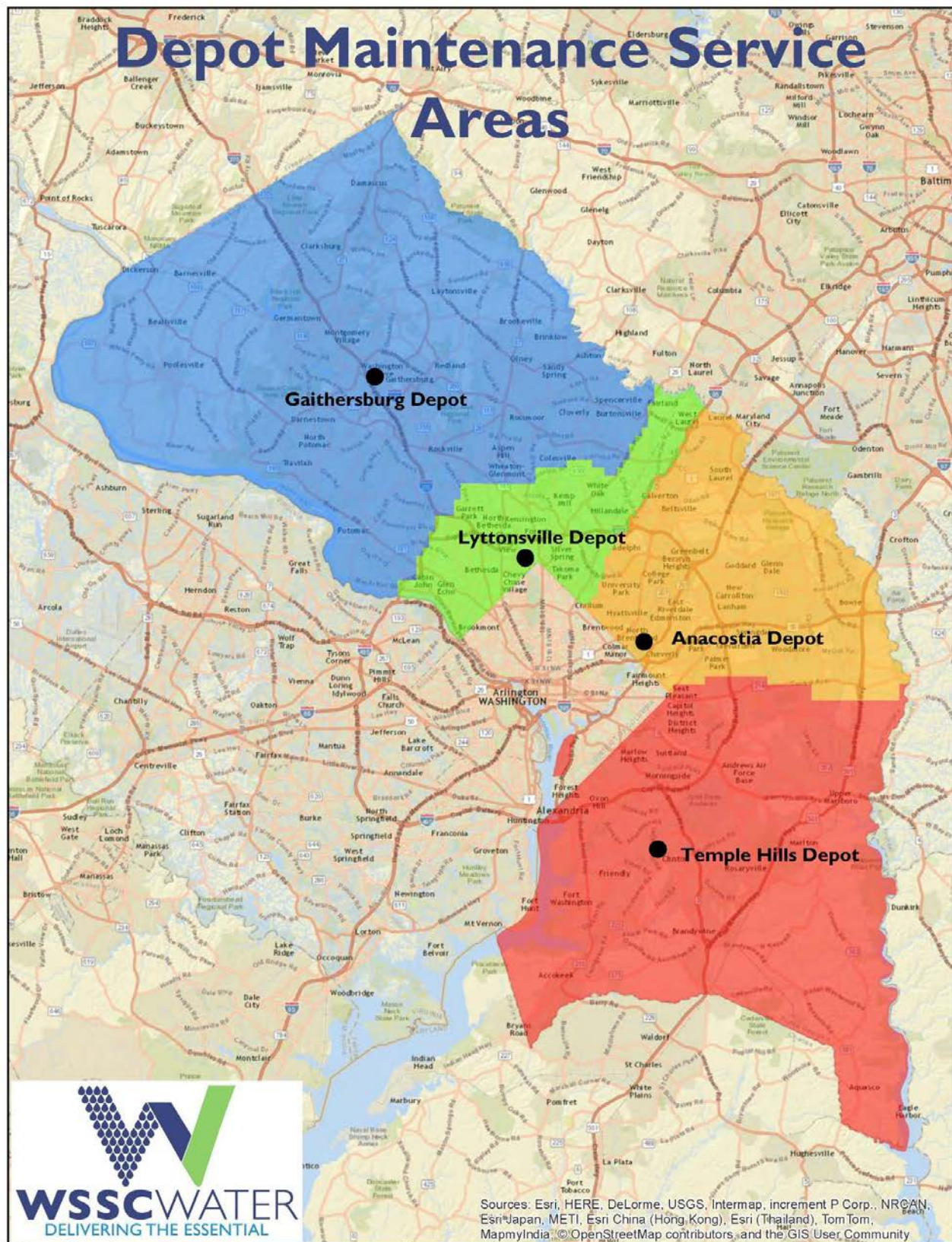
- a. **\$1,314,000 - Anacostia Depot Reconfiguration** - This project provides for the planning, design and construction of a reconfiguration of the Anacostia Depot to improve the efficiency of operations; to update to current building codes, regulations and Americans with Disabilities Act (ADA) requirements; to improve the energy efficiency of the facilities; to address floodplain vulnerabilities due to climate change; and to replace assets that are at or beyond their useful lives.

The Anacostia Depot is the largest of WSSC Water's four depots that support water and sewer field operations. The existing buildings were generally constructed in the 1970s. The depot houses several critical functions for WSSC Water, including the workshop and administrative space for the Facility Maintenance Division, the water meter testing and hydrant shop, the heavy equipment shop, the Fleet Services Division building and one of the fleet garages and the main warehouse. The depot is constrained by CSX railroad tracks that traverse the site, leading to operational inefficiencies when vehicles and staff must wait for trains to pass. The site also has floodplain vulnerabilities due to the effects of climate change.

A facility-wide condition assessment was undertaken in June 2019 to identify deficiencies in the existing facilities and provide a recommended course of action to remedy the issues. The study identified a significant number of deficiencies, including electrical, mechanical, accessibility and safety deficiencies. The study examined potential remedies, including renovation and new build scenarios. A facility master plan was subsequently commissioned to provide a more detailed analysis of the potential renovation and new build alternatives, which was finalized in June 2021.

Due to budgetary constraints, this project will be deferred for one year. This delay will impact addressing the electrical, mechanical, accessibility, safety and floodplain deficiencies of the facility. Many of the critical functions housed at the Anacostia Depot support system-wide operations. The beneficiaries of this project are all of WSSC Water's 1.9 million customers. Any disruptions to the Anacostia Depot due to flooding would be felt across the entire service area. The impacts would likely be most acutely felt in the areas serviced primarily by the Anacostia Depot. While the service areas differ depending on the function, the map on the next page shows the maintenance boundaries for the Anacostia Depot. As shown on the map, the Anacostia Depot maintenance service area encompasses the Beltsville, Bowie, College Park, Glenarden, Greenbelt, Hyattsville and Laurel communities in Prince George's County, among others.

FY 2023 CAPITAL IMPROVEMENTS PROGRAM REDUCTIONS TOTALING \$110.5 MILLION AND
IMPACT STATEMENTS (Continued)



FY 2023 CAPITAL IMPROVEMENTS PROGRAM REDUCTIONS TOTALING \$110.5 MILLION AND IMPACT STATEMENTS (Continued)

- b. **\$12,959,000 - Septage Discharge Facility Planning & Implementation** - This project provides for the planning, design and construction of a new septage and fats, oils and grease (FOG) discharge facility at the abandoned Rock Creek Water Resource Recovery Facility (WRRF) and new septage discharge facilities at the Anacostia #2 WWPS and Piscataway WRRF. Currently, septage waste is collected at three locations: the Muddy Branch Road disposal site in Montgomery County and the Ritchie Road and Bladensburg disposal sites in Prince George's County. A fourth site on Temple Hills Road in Prince George's County was closed down on July 1, 2015. The types of waste collected are as follows: septic tank pump-out (sludge), waste holding tank discharge (gray water), grease trap pump-out (FOG), bus holding tank discharge (sewage and chemicals) and small food service providers (low volume FOG waste). FOG wastes should not be discharged to WSSC Water's sewerage system without treatment.

The design of the Rock Creek, Anacostia and Piscataway sites are complete. The construction of these facilities is currently on hold while a plan is developed to address final dispatch of FOG wastes. The Piscataway site will be coordinated with the construction schedule of other Piscataway facility projects.

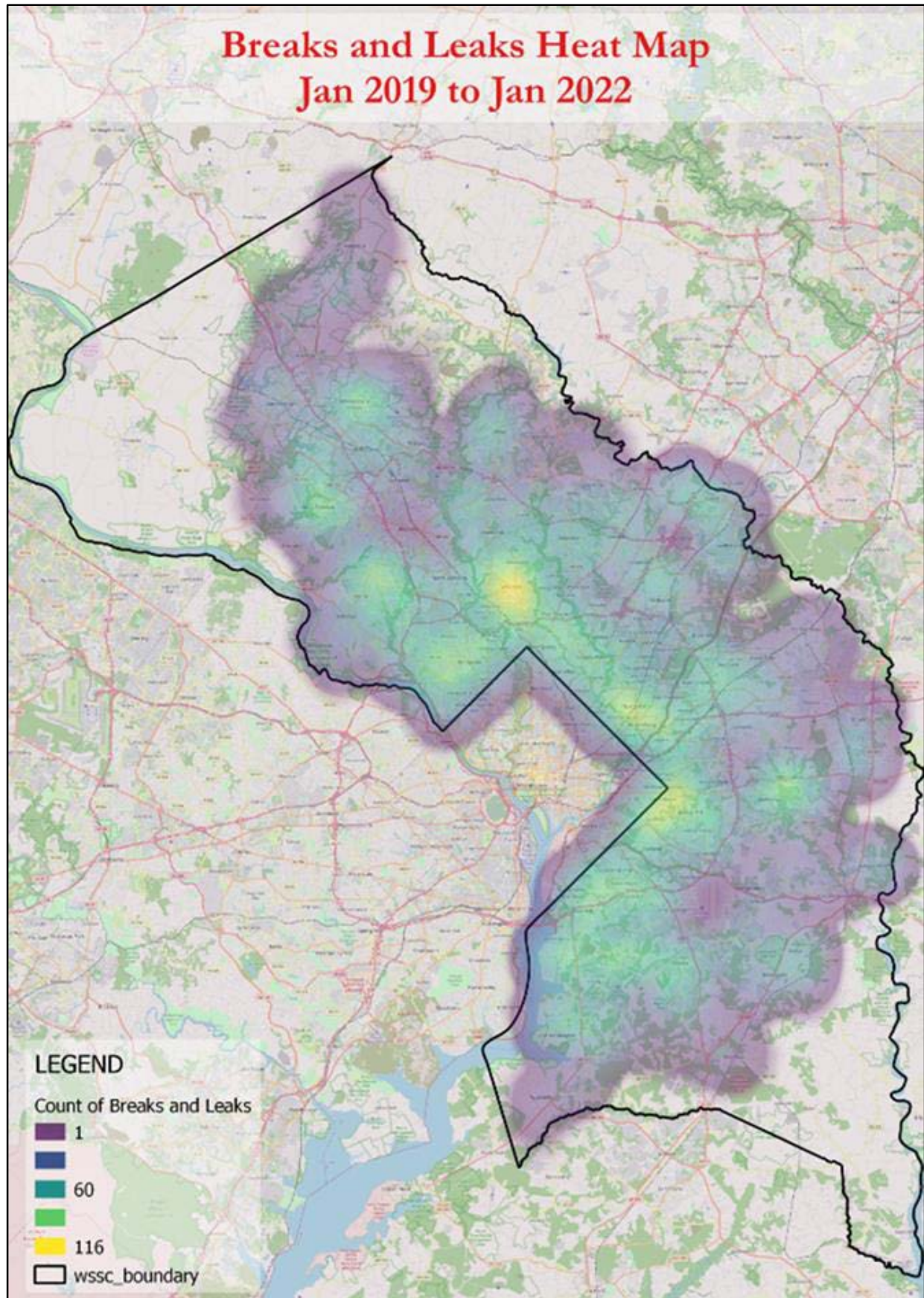
Due to budgetary constraints, this project will be deferred for one year. While the construction of these facilities was already on hold, WSSC Water has been working with Montgomery County to address concerns with the traffic disruptions impacting the public at the existing Muddy Branch Road disposal site. The reductions will delay WSSC Water's ability to address these concerns.

- c. **\$27,725,000 - Water Reconstruction Program** - This program, which has been ongoing since 1979, renews and extends the useful life of water mains, house connections and large water services. Portions of the water system are more than 80 years old. Bare cast iron mains, installed generally before 1965, permit the build-up of tuberculation which can reduce flow and cause discoloration at the customer's tap. Selected replacement is necessary to supply water in sufficient quantity, quality and pressure for domestic use and firefighting. As the system ages, water main breaks are increasing. Selected mains are chronically breaking and other mains are undersized for the current flow standards. Replacement, rehabilitation via structural lining and the addition of cathodic protection to these mains provides added value to the customer. Galvanized, copper and cast iron water mains, as well as all other water main appurtenances including meter and pressure reducing valve vaults are replaced on an as needed basis when they have exceeded their useful life.

Due to budgetary constraints, the budget for this project in FY 2023 has been reduced by \$27.7 million. This reduction will lower the targeted design mileage from 30 miles down to 10 miles and lower the targeted construction mileage from 37 miles down to 25 miles. However, the mileage impacts will be much larger than the stipulated figures. This is an ongoing program and the commencement of new work is a continual process throughout the year. Additionally, the replacement projects typically span multiple fiscal years. Consequently, the projects currently under construction or out to bid already constitute the full allotment of 25 miles for construction in FY 2023. The program will therefore be required to stop issuing tasks for new work, which will slow the work of the program and lead to impacts that exceed the stipulated 12 mile reduction to the construction target and extend into future fiscal years.

Customers across WSSC Water's service area will be impacted by these reductions. The pipes replaced under this program are typically prone to failure. Failure of these pipes will cause temporary loss of water service to residences and businesses and repairs will cause construction nuisances to the travelling public. The heat map on the next page shows the historic location of water main breaks and leaks throughout the WSSC Water service area between January 2019 and January 2022. Generally speaking, the frequency of breaks and leaks has historically been highest in the communities closest to Washington D.C. The pipes in these areas are generally the oldest in the system and there is a higher concentration of pipes in these regions. The historic location of breaks and leaks is not necessarily a predictor of the location of future breaks and leaks, as water mains are replaced each year and other factors like soil conditions, transient pressures, and the temperature of the water in the pipes also impact the frequency and location of breaks and leaks.

FY 2023 CAPITAL IMPROVEMENTS PROGRAM REDUCTIONS TOTALING \$110.5 MILLION AND
IMPACT STATEMENTS (Continued)



FY 2023 CAPITAL IMPROVEMENTS PROGRAM REDUCTIONS TOTALING \$110.5 MILLION AND IMPACT STATEMENTS (Continued)

- d. **\$18,641,000 - Large Diameter Water Pipe & Large Valve Rehabilitation Program** - This program plans, inspects, designs, and rehabilitates or replaces large diameter water transmission mains and large system valves that have reached the end of their useful lives. Condition assessment and/or corrosion monitoring is performed on metallic pipelines, including ductile iron, cast iron and steel, to identify lengths of pipe requiring replacement or rehabilitation and cathodic protection. The PCCP Inspection and Condition Assessment and Monitoring Program identifies individual pipe segments that require repair or replacement to assure the continued safe and reliable operation of the pipeline. The program also identifies extended lengths of pipe that require the replacement or rehabilitation of long segments of the pipeline or the entire pipeline. Rehabilitation or replacement of these mains provides value to the customer by minimizing the risk of failure and ensuring a safe and reliable water supply. The program includes installation of Acoustic Fiber Optic monitoring equipment in order to accomplish these goals in PCCP mains.

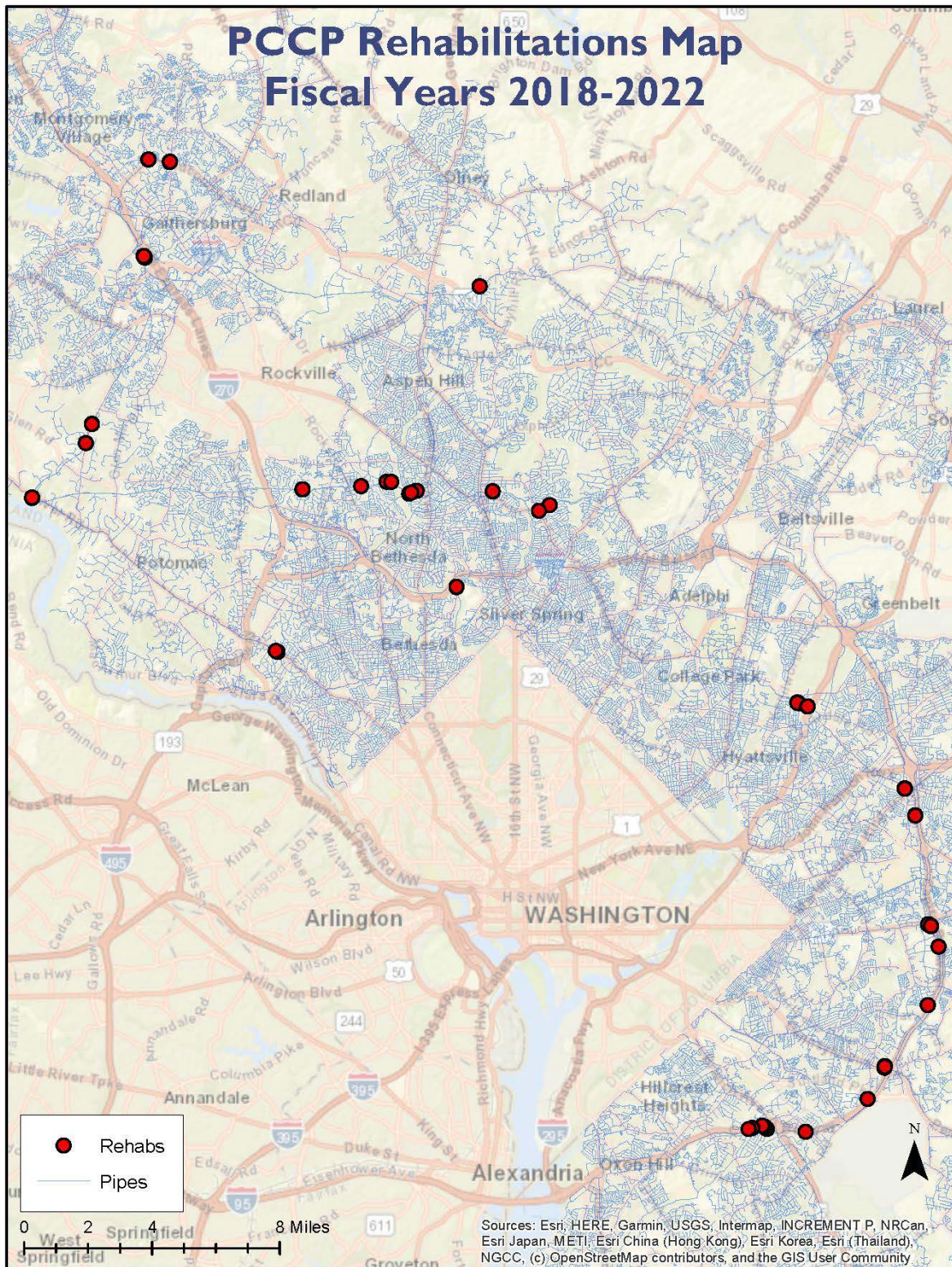
WSSC Water has approximately 1,031 miles of large diameter water main ranging from 16" to 96" in diameter. This includes 335 miles of cast iron, 326 miles of ductile iron, 35 miles of steel and 335 miles of PCCP. Internal inspection and condition assessment are performed on PCCP pipelines 36" and larger in diameter. Of the 335 miles of PCCP, 140 miles are 36" diameter and larger. The inspection program includes internal visual and sounding, sonic/ultrasonic testing and electromagnetic testing to establish the condition of each pipe section and determine if maintenance repairs, rehabilitation or replacement are needed.

In July 2013, WSSC Water's Acoustic Fiber Optic monitoring system identified breaking wires in a 54" diameter PCCP water transmission main in the Forestville area of Prince George's County. Upon attempting to close nearby valves to isolate the failing pipe for repair, WSSC Water crews encountered an inoperable valve with a broken gear, requiring the crew to drop back to the next available valve. This dropping back to another valve would block one of the major water mains serving Prince George's County, significantly enlarging the shutdown area and reducing our capacity to supply water to over 100,000 residents. In order to minimize the risk associated with inoperable large valves and possible water outages, the large valve inspection and repair program was initiated to systematically inspect, exercise, repair or replace any of the nearly 1,500 large diameter valves and vaults located throughout the system.

Due to budgetary constraints, the budget for this project in FY 2023 has been reduced by \$18.6 million. This reduction will lower the targeted construction mileage from 6 miles to 5 miles, reduce the funding available for PCCP carbon fiber and planned and emergency replacement work by \$10.7 million and eliminate funding for the water redundancy program in FY 2023. The PCCP funding is used for planned and emergency interventions on PCCP transmission mains throughout the system that are identified as requiring repair or replacement through the Acoustic Fiber Optic monitoring program. The map on the next page shows the historic location of PCCP rehabilitation throughout the WSSC Water service area in FYs 2018 through 2022. The historic location of interventions is not necessarily a predictor of the location of needs. The water redundancy program provides for planning, design and construction of projects that improve the redundancy of the water system in order to improve service to customers when critical pipe segments are out of service. Projects are identified using a criticality analysis of WSSC Water's hydraulic model for the water system.

Customers across WSSC Water's service area will be impacted by these reductions. Transmission mains are the backbone of the water system, providing water service to large areas. The pipes replaced under this program are typically prone to failure or have been identified as at-risk of failure in the near future through the inspection, condition assessment and monitoring program. Failure of these pipes will cause temporary loss of water service to residences and businesses across a large area and repairs will cause construction nuisances to the travelling public.

FY 2023 CAPITAL IMPROVEMENTS PROGRAM REDUCTIONS TOTALING \$110.5 MILLION AND
IMPACT STATEMENTS (Continued)



FY 2023 CAPITAL IMPROVEMENTS PROGRAM REDUCTIONS TOTALING \$110.5 MILLION AND IMPACT STATEMENTS (Continued)

- e. **\$5,699,000 - Engineering Support Program** - This program represents a 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. Engineering Support Program projects are identified primarily through WSSC Water's Asset Management Program. Engineering services are provided for planning, design and construction to meet a wide range of needs. As such, Engineering Support Program projects are diverse in scope and typically include work needed to upgrade operating efficiency, modify existing processes, satisfy regulatory requirements, improve safety and security or rehabilitate aging facilities. The program does not include proposed "major projects" which, by law, must be programmed in WSSC Water's Capital Improvements Program or projects to serve new development.

Due to budgetary constraints, the budget for this project in FY 2023 has been reduced by \$5.7 million. This reduction will impact the ability to execute projects through the program. Due to the diverse scope of projects implemented under this program, the impacts of the reduction will be felt by all of WSSC Water's 1.9 million customers. The following are some projects planned for execution under the Engineering Support Program that will be delayed due the budget reductions.

Northwest Branch Aerial Sewers Rehabilitation/Replacement Phase 2 - This project provides for the planning, design and construction to mitigate exposure to 5 aerial sewer pipelines and their supporting structures. Aerial sewers are elevated sewer pipelines supported by piers or pedestals that pass over geographical features such as streams and low-lying areas due to the inability or impracticability of burying the pipelines in that location. A condition assessment of the 5 aerial sewers identified existing or imminent risks posed by the site conditions, deterioration of the pipes and/or deterioration of the structural support systems. Failure of these pipes will cause a release of raw sewage into environmentally sensitive areas.

Village in the Woods Service Reliability Water Main Supply - During three planned shutdowns of the 42" PCCP transmission main along Brightseat Road in 2014, the Village in the Woods apartment complex was put out of water service for an extended period of time. Hydraulic analysis and a business case were performed to develop a long-term solution to this issue. The scope of work includes upsizing existing mains in the area, installing new mains and removing a dead-end by connecting it to another existing main. Delays to this work will extend the period of time that residents and businesses in the area are at risk of inadequate fire flow or loss of service in the event of a disruption to the 42" PCCP main.

Temple Hills Depot Renovation - A high portion of the assets at the Temple Hills Depot are in poor condition and there are safety concerns with the current condition of the facility. A renovation of the facility will: improve the efficiency of operations; address safety concerns; update the facility to current building codes, regulations and ADA requirements; and improve the energy efficiency of the facility. Delays to this work will extend of period of time that safety issues persist and lengthen the duration that the condition of the facility impairs efficient operations.

- f. **\$5,229,000 - Other Capital Programs** - This program includes miscellaneous capital projects, programs and expenditures for common, non-CIP, enterprise-wide activities such as relocations, new water and sewer house connections, purchases of water meters, paving and general construction of local lines. The program summarizes capital expenditures and allocated costs that are not already included in the CIP or in other Information Only projects.

Due to budgetary constraints, the budget for this project in FY 2023 has been reduced by \$5.2 million. This is comprised of a reduction of \$10.0 million to paving, a reduction of \$3.8 million to purchases of water meters, and a net increase of \$8.6 million in allocated costs due to the reductions to other capital projects and programs and changes to the operating budget. Customers across WSSC Water's service area will be impacted by these reductions.

CIP REDUCTIONS GEOGRAPHICAL IMPACT (Continued)				
County/District/Project	Impact Statement	Communities Impacted	Department(s)	Detailed Impact Statement
Montgomery County				
At-Large				
Anacostia Depot Reconfiguration	This project will be deferred one year. The existing buildings were generally built in the 1970s. The depot houses several critical functions for WSSC Water that support system-wide operations. Any disruptions to the Anacostia Depot due to flooding would be felt across the entire service area.	County-wide	Engineering & Construction General Services Production Utility Services	Bi-County/ Information Only Item A
Septage Discharge Facility Planning & Implementation	This project will be deferred one year. WSSC Water has been working with Montgomery County to address concerns with the traffic disruptions impacting the public at the Muddy Branch Road disposal site. The deferral will delay WSSC Water's ability to address these concerns.	County-wide Gaithersburg	Engineering & Construction Production Utility Services	Bi-County/ Information Only Item B
Water Reconstruction Program	The reductions to this program eliminate funding for 20 miles of design projects and 12 miles of construction projects. These projects replace existing water mains that have reached the end of their useful life and which are prone to failure. Failure of these pipes will cause temporary loss of water service to residents and businesses and community impacts due to emergency repairs. Due to the ongoing nature of this program, these reductions impact planned work in FYs 2022, 2023, 2024 and beyond.	Impacts throughout the County as detailed below by district	Engineering & Construction Utility Services	Bi-County/ Information Only Item C
Large Diameter Water Pipe & Large Valve Rehabilitation Program	The reductions to this program eliminate funding for 1 mile of large transmission water main construction, PCCP carbon fiber and planned and emergency replacement work, and the water redundancy program. Transmission mains are the backbone of the water system and failure of these mains will cause temporary loss of water service to residences and businesses across a large area.	Impacts throughout the County as detailed below by district	Engineering & Construction Production Utility Services	Bi-County/ Information Only Item D
Engineering Support Program	The reductions to this program eliminate funding for a diverse group of projects that support operations system-wide. The reductions will increase the likelihood of SSOs, increase the likelihood of water service outages, and delay response times to emergencies.	County-wide Silver Spring	Engineering & Construction General Services Production Utility Services	Bi-County/ Information Only Item E
Other Capital Programs	The reductions to this program reduce the funding available for paving activities and purchases of water meters. The paving reduction is related to the reduction in water main replacement. WSSC Water's water meter population is aging and is in need of replacement. Older meters are less likely to be accurate and delays to replacing the meters could result in more estimated bills and higher call volumes from customers.	County-wide	Engineering & Construction Utility Services	Bi-County/ Information Only Item F
District I				
Water Reconstruction Program	Chevy Chase Village South Alt (Construction; 0.13 miles) Cheltenham WMR (Construction; 0.63 miles) Red Coat Lane WMR (Construction; 2.75 miles)	Chevy Chase Bethesda Potomac	Engineering & Construction Utility Services	Bi-County/ Information Only Item C
Large Diameter Water Pipe & Large Valve Rehabilitation Program	Burdette Road 20" WMR (Construction; 0.90 miles) West Cedar Lane WMR (Construction; 1.12 miles)	Bethesda Bethesda	Engineering & Construction Production Utility Services	Bi-County/ Information Only Item D

CIP REDUCTIONS GEOGRAPHICAL IMPACT (Continued)				
County/District/Project	Impact Statement	Communities Impacted	Department(s)	Detailed Impact Statement
District 2				
Spring Gardens WWPS Replacement	This project will be deferred one year. The existing WWPS and FM were built in 1977 and serve approximately 620 households in the King Valley, King Valley Manor and Kingstead Knoll communities near Damascus. Failure of the WWPS or FM would result in an SSO.	Damascus	Engineering & Construction Production Utility Services	Montgomery County Item D
Water Reconstruction Program	Middleboro Drive WMR (Design; 2.16 miles)	Damascus	Engineering & Construction Utility Services	Bi-County/ Information Only Item C
District 3				
Water Reconstruction Program	Mill Creek Drive WMR (Design; 3.08 miles) Olde Mill Run WMR (Design; 1.44 miles) Trailway Drive WMR (Construction; 1.95 miles) Waterway Drive WMR (Construction; 2.10 miles) Haverford Drive WMR (Construction; 1.71 miles) Rock Creek Valley WMR (Construction; 1.63 miles)	Derwood Derwood Rockville Rockville Aspen Hill Rockville	Engineering & Construction Utility Services	Bi-County/ Information Only Item C
Large Diameter Water Pipe & Large Valve Rehabilitation Program	Redundancy Project - 560B Zone Pressure Reducing Valve	Germantown	Engineering & Construction Production Utility Services	Bi-County/ Information Only Item D
District 4				
Arcola WWPS & FM	This project will be deferred one year. The existing WWPS and FM were built in 1961 and serve approximately 130 households in the Arcola area, just west of the Wheaton Regional Park. Failure of the WWPS or FM would result in an SSO.	Silver Spring	Engineering & Construction Production Utility Services	Montgomery County Item A
Reddy Branch WWPS & FM	This project will be deferred one year. The existing WWPS and FM were built in 1971 and serve approximately 5,650 households in the Brookeville and Olney areas. Failure of the WWPS or FM would result in an SSO.	Brookeville Olney	Engineering & Construction Production Utility Services	Montgomery County Item B
Sam Rice Manor WWPS & FM	This project will be deferred one year. The existing WWPS and FM were built in 1977 and serve approximately 135 households in the Sam Rice Manor community near Ashton. Failure of the WWPS or FM would result in an SSO.	Ashton	Engineering & Construction Production Utility Services	Montgomery County Item C
Large Diameter Water Pipe & Large Valve Rehabilitation Program	Queen Elizabeth Drive 16" WMR (Construction; 1.18 miles)	Olney	Engineering & Construction Production Utility Services	Bi-County/ Information Only Item D
District 5				
Water Reconstruction Program	Meadowood WMR (Design; 1.02 miles) Beaufort Place 20" WMR (Design; 1.90 miles) Lemontree Lane WMR (Construction; 2.34 miles) Cantrell Road WMR (Construction; 1.80 miles) Montgomery Knolls WMR (Construction; 2.68 miles)	Silver Spring Silver Spring Silver Spring Silver Spring Silver Spring	Engineering & Construction Utility Services	Bi-County/ Information Only Item C

CIP REDUCTIONS GEOGRAPHICAL IMPACT (Continued)				
County/District/Project	Impact Statement	Communities Impacted	Department(s)	Detailed Impact Statement
Prince George's County				
At-Large				
Anacostia Depot Reconfiguration	This project will be deferred one year. The existing buildings were generally built in the 1970s. The depot houses several critical functions for WSSC Water that support system-wide operations. Any disruptions to the Anacostia Depot due to flooding would be felt across the entire service area. The impacts would likely be most acutely felt by the areas in Prince George's County that are primarily served by the Anacostia Depot.	County-wide Beltsville Bowie College Park Glenarden Greenbelt Hyattsville Laurel	Engineering & Construction General Services Production Utility Services	Bi-County/ Information Only Item A
Septage Discharge Facility Planning & Implementation	This project will be deferred one year. The construction of these facilities is currently on hold while a plan is developed to address final dispatch of fats, oils and grease (FOG) waste.	County-wide	Engineering & Construction Production Utility Services	Bi-County/ Information Only Item B
Water Reconstruction Program	The reductions to this program eliminate funding for 20 miles of design projects and 12 miles of construction projects. These projects replace existing water mains that have reached the end of their useful life and which are prone to failure. Failure of these pipes will cause temporary loss of water service to residents and businesses and community impacts due to emergency repairs. Due to the ongoing nature of this program, these reductions impact planned work in FYs 2022, 2023, 2024 and beyond.	Impacts throughout the County as detailed below by district	Engineering & Construction Utility Services	Bi-County/ Information Only Item C
Large Diameter Water Pipe & Large Valve Rehabilitation Program	The reductions to this program eliminate funding for 1 mile of large transmission water main construction, PCCP carbon fiber and planned and emergency replacement work, and the water redundancy program. Transmission mains are the backbone of the water system and failure of these mains will cause temporary loss of water service to residences and businesses across a large area.	Impacts throughout the County as detailed below by district	Engineering & Construction Production Utility Services	Bi-County/ Information Only Item D
Engineering Support Program	The reductions to this program eliminate funding for a diverse group of projects that support operations system-wide. The reductions will increase the likelihood of SSOs, increase the likelihood of water service outages, and delay response times to emergencies.	County-wide District Heights Fort Washington Landover Oxon Hill Upper Marlboro	Engineering & Construction General Services Production Utility Services	Bi-County/ Information Only Item E
Other Capital Programs	The reductions to this program reduce the funding available for paving activities and purchases of water meters. The paving reduction is related to the reduction in water main replacement. WSSC Water's water meter population is aging and is in need of replacement. Older meters are less likely to be accurate and delays to replacing the meters could result in more estimated bills and higher call volumes from customers.	County-wide	Engineering & Construction Utility Services	Bi-County/ Information Only Item F
District 1				
Water Reconstruction Program	Shadetree Lane WMR (Construction; 2.11 miles)	Laurel	Engineering & Construction Utility Services	Bi-County/ Information Only Item C
District 2				
Water Reconstruction Program	Powhatan Street WMR (Construction; 1.73 miles)	Hyattsville	Engineering & Construction Utility Services	Bi-County/ Information Only Item C

CIP REDUCTIONS GEOGRAPHICAL IMPACT (Continued)				
County/District/Project	Impact Statement	Communities Impacted	Department(s)	Detailed Impact Statement
District 3				
Water Reconstruction Program	Goucher Drive WMR (Construction; 2.25 miles)	College Park	Engineering & Construction Utility Services	Bi-County/ Information Only Item C
District 4				
Water Reconstruction Program	Locris Drive WMR (Construction; 3.10 miles) Newburg Drive (Construction; 1.56 miles)	Upper Marlboro Greenbelt	Engineering & Construction Utility Services	Bi-County/ Information Only Item C
Large Diameter Water Pipe & Large Valve Rehabilitation Program	Redundancy Project - Race Track Road	Bowie	Engineering & Construction Production Utility Services	Bi-County/ Information Only Item D
District 5				
Carsondale WWPS & FM	This project will be deferred one year. The existing WWPS and FM were built in 1960 and serve the Carsondale community southeast of the I-95 and Route 50 interchange near Lanham. Failure of the WWPS or FM would result in an SSO.	Lanham	Engineering & Construction Production Utility Services	Prince George's County Item A
Colmar Manor WWPS & FM	This project will be deferred one year. The existing WWPS and FM were built in 1956 and serve approximately 240 households in the Colmar Manor community. Failure of the WWPS or FM would result in an SSO.	Colmar Manor	Engineering & Construction Production Utility Services	Prince George's County Item B
Water Reconstruction Program	Cheverly WMR Phase I (Design; 1.61 miles) Cheverly WMR Phase 2 (Design; 2.31 miles)	Cheverly Cheverly	Engineering & Construction Utility Services	Bi-County/ Information Only Item C
District 6				
Water Reconstruction Program	Village in the Woods (Construction; 1.59 miles) Thurston WMR (Construction; 1.69 miles)	Landover Kettering	Engineering & Construction Utility Services	Bi-County/ Information Only Item C
District 7				
Water Reconstruction Program	Horizon Way WMR (Construction; 2.17 miles) Hillside/Cloviss Avenue WMR (Construction; 0.93 miles) Woodlark Park I WMR (Construction; 1.12 miles) Woodlark Park II WMR (Construction; 1.27 miles)	District Heights Capitol Heights District Heights District Heights	Engineering & Construction Utility Services	Bi-County/ Information Only Item C
District 8				
Forest Heights WWPS & FM	This project will be deferred one year. The existing WWPS and FM were built in 1946 and serve approximately 1,200 households in the Forest Heights community. Failure of the WWPS or FM would result in an SSO.	Forest Heights	Engineering & Construction Production Utility Services	Prince George's County Item C
Prince George's County 450A Zone Water Main	This project will be deferred one year. This delay will continue concerns of a transmission main failure that would create water service outages for 90,000 customers due to a lack of redundancy within this area of the water system.	Andrews Air Force Base Camp Springs District Heights Forestville Hillcrest Heights Suitland	Engineering & Construction Production Utility Services	Prince George's County Item D
South Potomac Supply Improvement, Phase 2	This project will be deferred one year. This delay will continue concerns of a transmission main failure that would create water service outages for 13,500 customers due to a lack of redundancy within this area of the water system.	National Harbor	Engineering & Construction Production Utility Services	Prince George's County Item E

CIP REDUCTIONS GEOGRAPHICAL IMPACT (Continued)				
County/District/Project	Impact Statement	Communities Impacted	Department(s)	Detailed Impact Statement
District 8 (Continued)				
Water Reconstruction Program	Larkwood WMR (Design; 2.35 miles)	Fort Washington		
	Fort Washington WMR (Design; 2.15 miles)	Fort Washington		
	Simmons Lane WMR (Construction; 1.49 miles)	Temple Hills	Engineering & Construction	Bi-County/ Information Only
	Leisure Drive (Construction; 2.74 miles)	Temple Hills	Utility Services	Item C
	Vistula Drive WMR (Construction; 1.14 miles)	Fort Washington		
	Karla Road WMR (Construction; 1.45 miles)	Fort Washington		
	Alexandria Drive WMR (Construction; 1.65 miles)	Oxon Hill		
Large Diameter Water Pipe & Large Valve Rehabilitation Program	Allentown Road 16" WMR and Flow Control Valve (Construction; 1.09 miles)	Fort Washington	Engineering & Construction Production Utility Services	Bi-County/ Information Only Item D
District 9				
Water Reconstruction Program	Buckler Road WMR (Design; 2.20 miles)	Clinton	Engineering & Construction	Bi-County/ Information Only
	Edwards Drive WMR (Construction; 1.52 miles)	Clinton	Utility Services	Item C
	Darlene Drive WMR (Construction; 1.63 miles)	Clinton		
Large Diameter Water Pipe & Large Valve Rehabilitation Program	Rosaryville 20" WMR (Construction; 0.61 miles)	Rosaryville	Engineering & Construction Production Utility Services	Bi-County/ Information Only Item D

BUDGET SUMMARIES

COMPARATIVE EXPENSES

Comparative Expenses by Fund

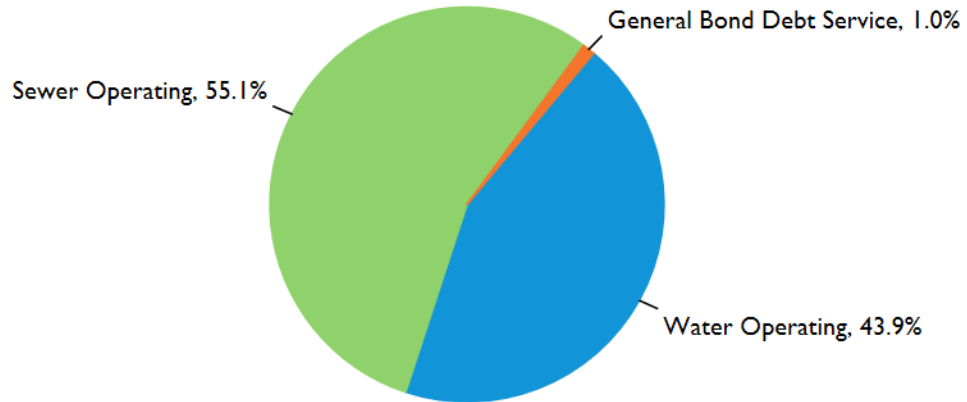
(\$ in thousands)	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Approved	FY 2023 Approved	FY 2023 Over/(Under) FY 2022	% Change
Operating Funds							
Water Operating	\$ 339,200	\$ 338,471	\$ 335,324	\$ 380,565	\$ 379,808	\$ (757)	(0.2)%
Sewer Operating	419,633	413,421	401,300	461,734	476,137	14,403	3.1 %
General Bond Debt Service	18,847	14,292	12,006	9,794	8,661	(1,133)	(11.6)%
Total Operating	\$ 777,680	\$ 766,184	\$ 748,630	\$ 852,093	\$ 864,606	\$ 12,513	1.5 %
Capital Funds							
Water Supply Bond	\$ 210,783	\$ 162,378	\$ 142,441	\$ 291,667	\$ 239,027	\$ (52,640)	(18.0)%
Sewer Disposal Bond	152,891	211,729	265,865	384,600	343,081	(41,519)	(10.8)%
General Construction	23,121	20,278	18,587	27,478	22,674	(4,804)	(17.5)%
Total Capital	\$ 386,795	\$ 394,385	\$ 426,893	\$ 703,745	\$ 604,782	\$ (98,963)	(14.1)%
Grand Total	\$ 1,164,475	\$ 1,160,569	\$ 1,175,523	\$ 1,555,838	\$ 1,469,388	\$ (86,450)	(5.6)%

Comparative Expenses by Major Expense Category

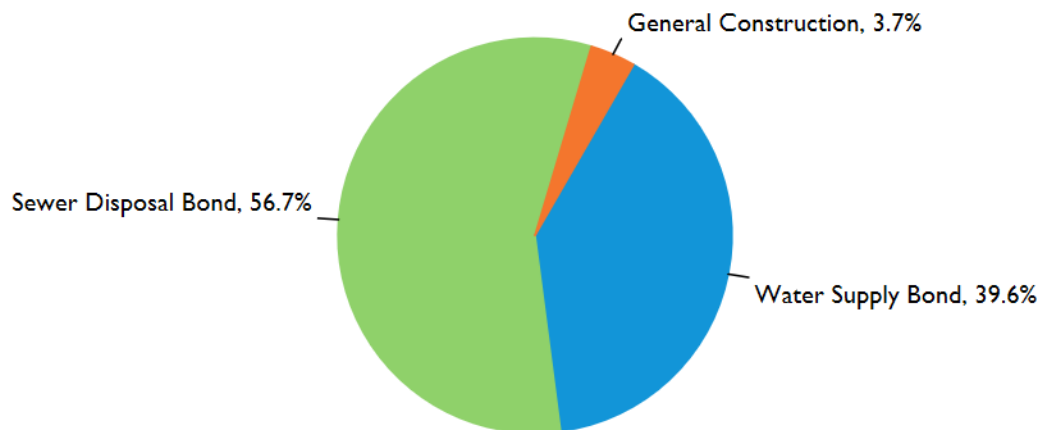
(\$ in thousands)	FY 2021 Actual			FY 2022 Approved			FY 2023 Approved		
	Capital	Operating	Total	Capital	Operating	Total	Capital	Operating	Total
Expense Categories									
Salaries & Wages	\$ 25,911	\$ 131,799	\$ 157,710	\$ 27,449	\$ 133,730	\$ 161,179	\$ 27,547	\$ 134,461	\$ 162,008
Heat, Light & Power	-	18,234	18,234	222	18,501	18,723	230	18,829	19,059
Regional Sewage Disposal	-	58,658	58,658	-	59,160	59,160	-	60,343	60,343
Contract Work	217,590	-	217,590	444,405	21,337	465,742	351,478	-	351,478
Consulting Engineers	42,349	-	42,349	79,614	19,890	99,504	72,122	-	72,122
Debt Service	-	291,980	291,980	-	316,827	316,827	-	328,524	328,524
All Other	141,043	247,959	389,002	152,055	282,648	434,703	153,405	322,449	475,854
Grand Total	\$ 426,893	\$ 748,630	\$ 1,175,523	\$ 703,745	\$ 852,093	\$ 1,555,838	\$ 604,782	\$ 864,606	\$ 1,469,388

FY 2023 APPROVED BUDGET BY FUND

Grand Total = \$1,469,388



Operating Funds = \$864,606



Capital Funds = \$604,782

\$ in thousands

HOW EACH OPERATING DOLLAR IS SPENT



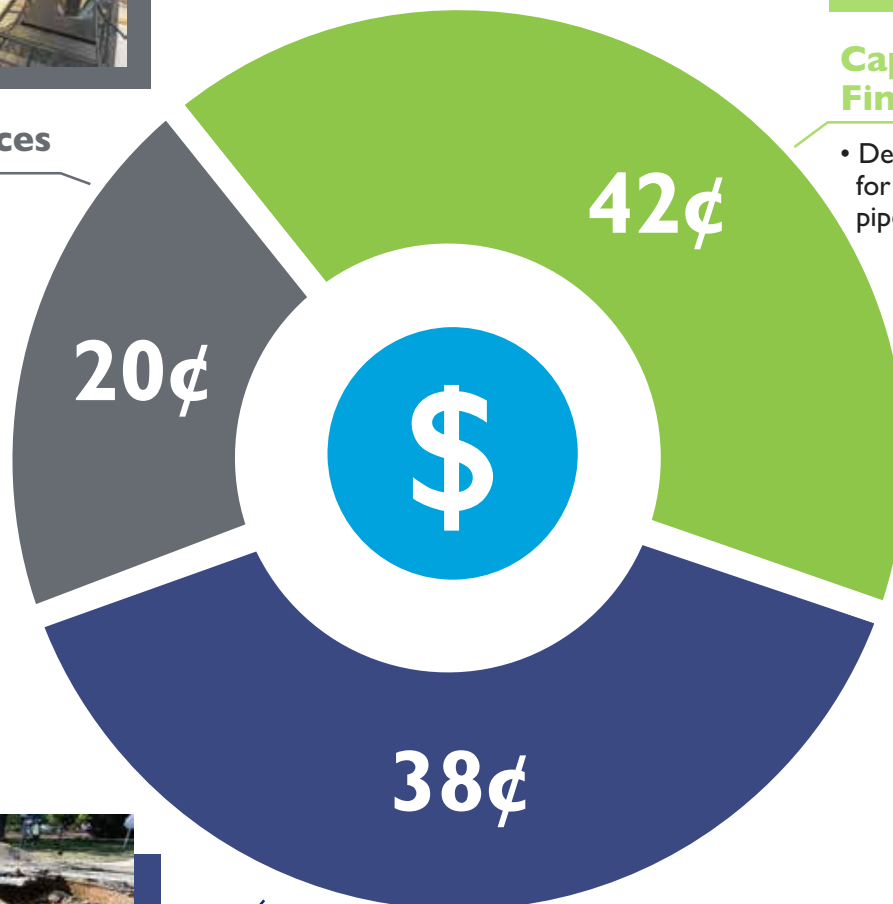
Support Services

- Governance and management of organization
- Customer service
- Corporate finance
- Employee benefits
- IT Services



Capital Project Financing

- Debt payments and cash for the construction of pipes and facilities



Operations & Maintenance

- Operations and maintenance for facilities (including share of Blue Plains)
- Fixing broken or leaking pipes and repairing roads
- Heat, light, and power for facilities
- Maintaining vehicles and equipment

REVENUE AND EXPENSE TRENDS

Water & Sewer Operating Funds - Combined

(\$ in thousands)	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Approved	FY 2023 Approved
Revenues					
Water Consumption Charges	\$ 273,753	\$ 271,173	\$ 275,019	\$ 318,941	\$ 334,564
Sewer Use Charges	341,496	346,985	353,536	398,862	411,886
Account Maintenance Fees	32,116	35,922	32,346	31,866	33,887
Infrastructure Investment Fees	39,278	42,781	39,886	38,808	41,290
Plumbing and Inspection Fees	13,594	14,425	16,882	14,350	16,780
Rockville Sewer Use	3,106	3,147	3,147	3,100	3,100
Miscellaneous	20,913	21,053	16,948	21,600	19,000
Interest Income	9,306	4,881	392	1,000	2,800
Uncollectable	-	-	-	-	(6,000)
Cost Sharing Reimbursement	-	-	-	-	635
Total Operating Revenues	\$ 733,562	\$ 740,367	\$ 738,156	\$ 828,527	\$ 857,942
Other Credits and Transfers					
Use of Fund Balance	11,580	11,341	8,000	-	-
Reconstruction Debt Service Offset	12,500	11,600	9,500	6,000	4,000
SDC Debt Service Offset	5,551	6,695	5,772	5,772	5,772
Premium Transfer	-	7,904	7,151	-	2,500
Underwriters Discount Transfer	-	-	2,000	2,000	2,000
Total Funds Available	\$ 763,193	\$ 777,907	\$ 770,579	\$ 842,299	\$ 872,214
Expenses					
Salaries & Wages	125,100	131,711	130,884	133,039	133,765
Heat, Light & Power	19,683	15,534	18,234	18,493	18,817
Regional Sewage Disposal	54,809	56,414	58,658	59,160	60,343
Debt Service					
Principal Payments	153,565	154,238	151,398	170,902	180,349
Interest Payments	121,819	125,507	130,446	138,143	141,495
PAYGO	15,754	-	-	27,585	31,016
All Other	268,103	268,488	247,004	294,977	290,160
Total Expenses	\$ 758,833	\$ 751,892	\$ 736,624	\$ 842,299	\$ 855,945

Note: In the FY 2023 Approved Budget, WSSC Water revenues appear higher than the expenditures as there is a budgeted \$16.3 million increase in reserves to improve the Days Operating Reserve-on-Hand metric. See page 4-4.

REVENUE AND EXPENSE TRENDS (Continued)

General Bond Debt Service Fund

(\$ in thousands)	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Approved	FY 2023 Approved
Operating Revenues					
Front Foot Benefit & House Connection	\$ 15,809	\$ 12,824	\$ 10,664	\$ 8,428	\$ 6,744
Interest Income	1,127	483	20	-	90
Miscellaneous	268	174	189	130	160
Total Operating Revenues	\$ 17,204	\$ 13,481	\$ 10,873	\$ 8,558	\$ 6,994
Other Credits and Transfers					
Reconstruction Debt Service Offset	12,500	11,600	9,500	6,000	4,000
Use of Fund Balance	(12,500)	(11,600)	(9,500)	(6,000)	(4,000)
Total Funds Available	\$ 17,204	\$ 13,481	\$ 10,873	\$ 8,558	\$ 6,994
Expenses					
Salaries & Wages	751	863	915	691	696
Heat, Light & Power	-	-	7	8	12
All Other	825	852	948	1,313	1,274
Subtotal	\$ 1,576	\$ 1,715	\$ 1,870	\$ 2,012	\$ 1,982
Debt Service					
Principal Payments	13,337	9,445	7,985	5,803	5,332
Interest Payments	3,934	3,132	2,151	1,979	1,347
Subtotal	\$ 17,271	\$ 12,577	\$ 10,136	\$ 7,782	\$ 6,679
Total Expenses	\$ 18,847	\$ 14,292	\$ 12,006	\$ 9,794	\$ 8,661

REVENUE AND EXPENSE TRENDS (Continued)

Capital Funds

(\$ in thousands)	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Approved	FY 2023 Approved
Funds Provided					
Bonds and Notes Issues/Cash on Hand	\$ 338,012	\$ 289,097	\$ 402,261	\$ 607,766	\$ 499,417
PAYGO	15,754	-	-	27,585	31,016
Federal & State Grants	995	1,589	4,392	24,471	25,244
System Development Charge	15,000	14,077	8,393	31,329	29,606
Other Contributions	7,667	12,451	14,192	12,594	19,499
Total Capital Funds	\$ 377,428	\$ 317,214	\$ 429,238	\$ 703,745	\$ 604,782
Expenses					
Salaries & Wages	\$ 27,293	\$ 26,388	\$ 25,911	\$ 27,449	\$ 27,547
Heat, Light & Power	213	155	-	222	230
Contract Work	202,735	211,404	217,590	444,405	351,478
Consulting Engineers	51,872	44,478	42,349	79,614	72,122
All Other	104,682	111,960	141,043	152,055	153,405
Total Capital Expenses	\$ 386,795	\$ 394,385	\$ 426,893	\$ 703,745	\$ 604,782

SECTION 2
APPROVED RATES, FEES AND CHARGES

APPROVED RATES, FEES AND CHARGES

Presented in this section are the Fiscal Year (FY) 2023 approved variable and fixed rates, as well as fees and charges that will be effective July 1, 2022. The majority of WSSC Water's revenue is derived from user charges for high-quality water and sewer services provided to customers. WSSC Water assessed these rates through an in-depth process ensuring revenue stability, cost recovery, conservation management and affordability.

COMBINED WATER AND SEWER OPERATING FUNDS - APPROVED RATE IMPACT

6.5% Average Water and Sewer Rate Increase

		FY 2023 Approved (\$ in thousands)
FUNDING SOURCES		
<u>Revenues at Current Rates</u>		
Consumption Charges	\$	707,460
Account Maintenance Fees (AMF)		31,838
Infrastructure Investment Fees (IIF)		38,794
Uncollectable		(6,000)
Revenue Shortfall		(7,041)
Miscellaneous Revenues		42,315
Subtotal	\$	807,366
<u>Other Credits and Transfers</u>		
Reconstruction Debt Service Offset		4,000
Systems Development Charges (SDC) Debt Service Offset		5,772
Premium Transfer		2,500
Underwriters Discount Transfer		2,000
Total Funding Sources	\$	821,638
EXPENSES		
Operating, Maintenance & Support Services Expenses		503,085
Debt Service		321,844
Pay-As-You-GO (PAYGO)		31,016
Additional Cash Balance Reserve		16,269
Total Expenses	\$	872,214
Shortfall to be Covered by Rate Increase	\$	(50,576)
Approved Average Water and Sewer Rate Increase (Shortfall divided by Consumption Charges, AMF and IIF)		6.5 %

The FY 2023 Approved Budget calls for a combined 6.5% average increase in water consumption, sewer use revenue, AMF and IIF. This approved increase meets the 6.5% Spending Affordability Guidelines (SAG) limit recommended by both Prince George's and Montgomery Counties. Even with this rate increase, WSSC Water rates remain favorable when compared to many other comparable water and sewer utilities as shown on page 3-19.

WATER AND SEWER RATE SCHEDULES

Approved Rate Schedule Effective July 1, 2022

Average Daily Consumption by Customer Unit During Billing Period (Gallons Per Day)	FY 2023 July 1, 2022 Approved		Total
	Water Rates	Sewer Rates	Combined
	Per 1,000 Gallons		
0 - 80.9999	\$ 6.10	\$ 8.11	\$ 14.21
81 - 165.9999	6.89	9.01	15.90
166 - 275.9999	7.94	11.30	19.24
276 & Greater	9.30	14.93	24.23

Approved Flat Rate Sewer Charge - \$142.00 per quarter

QUARTERLY CUSTOMER BILLS AT VARIOUS CONSUMPTION LEVELS

Meter Size	Average Daily Consumption (Gallons Per Quarter)	Approved FY 2019	Approved FY 2020	Approved FY 2021	Approved FY 2022	Approved FY 2023
3/4" Residential Meter	100 (9,125 gal/qtr)	\$ 127.01	\$ 138.94	\$ 145.58	\$ 152.48	\$ 162.42
3/4" Residential Meter	165 (15,056 gal/qtr)	213.95	217.83	229.21	241.04	256.72
3/4" Residential Meter	500 (45,625 gal/qtr)	851.99	794.66	840.78	888.79	946.56
2" Meter	1,000 (91,250 gal/qtr)	1,952.14	1,903.02	2,004.81	2,110.76	2,248.01
3" Meter	5,000 (456,250 gal/qtr)	9,552.44	9,736.92	10,284.01	10,853.51	11,559.50
6" Meter	10,000 (912,500 gal/qtr)	19,878.88	19,748.55	20,852.26	22,001.19	23,432.35

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

ACCOUNT MAINTENANCE FEES

Approved For Implementation July 1, 2022

Meter Size	FY 2022 Current Quarterly Charges	FY 2023 Approved Quarterly Charges
<u>Small Meters</u>		
5/8" to 1"	\$ 16.00	\$ 17.04
<u>Large Meters</u>		
1-1/2"	16.00	17.04
2"	27.00	28.76
3"	66.00	70.29
4"	142.00	151.23
6"	154.00	164.01
8"	200.00	213.00
10"	246.00	261.99
<u>Detector Check Meters</u>		
2"	33.00	35.15
4"	177.00	188.51
6"	255.00	271.58
8"	461.00	490.97
10"	633.00	674.15
<u>Fire Service Meters</u>		
4"	182.00	193.83
6"	293.00	312.05
8"	452.00	481.38
10"	682.00	726.33
12"	989.00	1,053.29

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

INFRASTRUCTURE INVESTMENT FEES

Approved For Implementation July 1, 2022

Meter Size	FY 2022 Current Quarterly Charges	FY 2023 Approved Quarterly Charges
<u>Small Meters</u>		
5/8"	\$ 11.00	\$ 11.72
3/4"	12.00	12.78
1"	14.00	14.91
<u>Large Meters</u>		
1-1/2"	90.00	95.85
2"	185.00	197.03
3"	585.00	623.03
4"	813.00	865.85
6"	1,265.00	1,347.23
8"	2,845.00	3,029.93
10"	4,425.00	4,712.63
<u>Fire Service Meters</u>		
4"	499.00	531.44
6"	616.00	656.04
8"	2,524.00	2,688.06
10"	2,714.00	2,890.41
12"	5,214.00	5,552.91

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

SYSTEM DEVELOPMENT CHARGES

Approved For Implementation July 1, 2022

SDC Category	FY 2023 Approved Charges	Approved Maximum Allowable
Apartment		
Water	\$ 896	\$ 1,456
Sewer	1,140	1,852
1-2 toilets/residential		
Water	1,344	2,185
Sewer	1,710	2,776
3-4 toilets/residential		
Water	2,240	3,641
Sewer	2,850	4,633
5 toilets/residential		
Water	3,135	5,095
Sewer	3,991	6,486
6+ toilets/residential (per fixture unit)		
Water	88	145
Sewer	115	189
Non-residential (per fixture unit)		
Water	88	145
Sewer	115	189

MISCELLANEOUS FEES AND CHARGES - APPROVED FOR IMPLEMENTATION JULY 1, 2022

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 approved to be effective July 1, 2022.

Fee/Charge Number and Name	FY 2023 Approved
INSPECTIONS, LICENSES AND PERMITS	
I Inspection Fees - Water/Sewer Connection Hookup, W II /Septic Hookup, Plumbing and Gas-fitting Inspections	
<u>Plumbing and Gas-fitting Inspections</u>	
New Single Family Detached Dwellings and Townhouses	\$ 1,225
New Attached Dwellings (townhouses/multiplex excluding apartments)	1,225
<u>All Other Residential</u>	
Water/Well Hookup	150
Meter Yoke Inspection (meter only installation)	150
Water Hookup Converting from Well (includes 2 inspections)	300
Sewer/Septic Hookup	150
First Plumbing Fixture	150
Each Additional Fixture	70
SDC Credit Fixture Inspection (per fixture)	60
Minimum Permit Fee	265
Permit Reprocessing Fee	75
Long Form Permit Refund Fee	265
Long Form Permit Re-Issue Fee	265
<u>All Non-Residential</u>	
<u>Plan Review without Permit Application</u>	
25 Fixtures or Less	535
26-200 Fixtures	2,670
Over 200 Fixtures	5,370
<u>2nd or 3rd Review (with or without permit application)</u>	
25 Fixtures or Less	215
26-200 Fixtures	605
Over 200 Fixtures	1,285
Water/Well Hookup	270
Meter Yoke Inspection (meter only installation)	270
Sewer/Septic Hookup	270
FOG Interceptor	270
First Plumbing Fixture	270
Each Additional Fixture	70
SDC Credit Fixture Inspection (per fixture)	60
Minimum Permit Fee	385
Permit Reprocessing Fee	75
Long Form Permit Refund Fee	385
Long Form Permit Re-Issue Fee	385

MISCELLANEOUS FEES AND CHARGES - APPROVED FOR IMPLEMENTATION JULY 1, 2022

Fee/Charge Number and Name	FY 2023 Approved
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)	\$ 140
Registration Renewal all types (for 2 years)	115
Late Registration Renewal	70
<u>Examined Master Plumber, Gas-fitter</u>	
Initial Registration per type (for 4 years)	150
Registration Renewal all types (for 4 years)	150
Late Registration Renewal	70
Cross-connection Technician Registration	35
Sewer and Drain Registration and Renewal (for 2 years)	60
Sewer and Drain Late Renewal Fee	30
<u>Journeyman License Registration</u>	
Initial Registration per type (for 2 years)	45
Registration Renewal (for 2 years)	45
Late Registration Renewal	30
License Transfer Fee	30
License Replacement Fee	20
Apprentice License Registration Renewal	15
Short Form Permit Fee (up to 3 fixtures) - Non-Refundable	135
4 Long Form Permit Transfer Fee (with inspection)	220
5 Tapper License Fees	
Permit Fee	360
Duplicate	35
6 Watershed Use Permit Fees	
<u>Boat Removal and Impoundment Fees</u>	
Boat/Craft Removal and Impoundment Fee	105
Removed Boat/Craft Storage Fee (Monthly)	80
<u>Watershed Use Permit Fees</u>	
Watershed Use Permit (January 1-December 31)	70
Watershed Use Permit (Single Day)	5
Open Season Boat Mooring (March 15 - November 30)	80
Winter Boat Mooring (December 1 - March 14)	60
Azalea Garden Rental (4 hours)	75
Bio-Brick Pavilion Rental (4 hours)	90
Boarding Stable Entrance Permit (Single Day)	260
Adjacent Landowner Entrance Permit (Single Day)	80
<u>Picnic Permit</u>	
Picnic Permit - Groups of 1-5 Persons (Single Day)	5
Picnic Permit - Groups of 6-10 Persons (Single Day)	10
Picnic Permit - Groups of 11-15 Persons (Single Day)	15
7 Site Utility Inspection Fees (Non-Minor)	
Base Fee	1,780
Pipeline (per foot)	9.30

Fee/Charge Number and Name	FY 2023 Approved
DISCHARGE AND WATER PROTECTION	
8 Septic Hauler Discharge Permit Fees	
<u>Category I - Residential & Septic Waste & Grease</u>	
1-49 gallons (per vehicle)	\$ 255
50-799 gallons (per vehicle)	6,750
800-2,999 gallons (per vehicle)	19,250
3,000 gallons & up (per vehicle)	42,050
January thru June (50% of fee)	50% of fee
Transfer and/or Replacement Permit Sticker	155
Industrial/Special Waste Disposal Fee (per 1,000 gallons)	380
Zero Discharge Permit Fee	155
Temporary Discharge Permit Fee <u>plus</u> sewer rate per 1,000 gallons	185
Sewer Rate - Hauled Waste (1,000 gallons of truck capacity)	50
9 Industrial Discharge Control Program Fees By Category	
<u>Industrial Users Subject to Categorical Pretreatment Standards</u>	
Less than 5,000 gpd (double visit)	6,770
Greater than 5,000 gpd (double visit)	10,370
Non-Discharging Categorical Industries (zero discharge)	1,825
<u>Significant Industrial Users</u>	
Less than 25,000 gpd (single visit - priority pollutant sampling)	6,770
Greater than 25,000 gpd (double visit - priority pollutant sampling)	10,370
Penalty Charge for Late Fee Payment	5% of fee
10 Discharge Authorization Permit Fees	
Significant Industrial User - Initial Permit (for 4 years)	8,050
Significant Industrial User - Renewal (for 4 years)	3,945
Initial Zero-Discharge CIU Permit (for 4 years)	3,055
Reissued Zero-Discharge CIU Permit (for 4 years)	2,035
Temporary Discharge Permit (non-SIU)	8,050
11 Discharge Fees - Food Service Establishment	
Full Permit FSE	535
BMP Permit FSE	155
12 Cross Connection Fees	
Test Report Fee (per report)	55
Base Fee for High Hazard Commercial Water Customer (per month)	25
Base Fee for All Other Commercial Water Customer (per month)	12.50

MISCELLANEOUS FEES AND CHARGES - APPROVED FOR IMPLEMENTATION JULY 1, 2022

Fee/Charge Number and Name	FY 2023 Approved
METERS AND RELATED SERVICES	
13 Small Meter Replacement Fee (at Customer Request)	\$ 215
14 Meter Replacement Fees (Damaged or Stolen Meter)	
5/8" w/ touch pad (inside w/remote)	135
5/8" w/ pit pad (outside w/o remote)	140
5/8 Meter - pad encoder	135
5/8" x 3/4" w/ touch pad (inside w/ remote)	135
3/4" w/ touch pad (inside w/ remote)	160
3/4" w/ pit pad (outside w/o remote)	165
1" w/ touch pad (inside w/ remote)	205
1" w/ pit pad (outside w/o remote)	210
1" Kamstrup Meter, UT	370
1 1/2" Badger Flanged Meter	570
1 1/2" Flanged Meter	630
1 1/2" Nipple Meter	740
2" Flanged Meter	960
2" 15 1/4 Flanged Meter	1,210
3" Compound Meter	2,200
4" Compound Meter	3,240
6" Compound Meter	5,210
Turbine, Horizontal 3" Neptune w/ pit pad	1,475
Turbine, Horizontal 4" Neptune w/ pit pad	1,975
2" Hersey MVR Turbine	990
3" Hersey MVR Turbine	2,300
4" Hersey MVR Turbine	3,130
6" Hersey MVR Turbine	4,800
2" Detector Check	4,620
4" Detector Check	3,275
6" Detector Check	3,850
8" Detector Check	4,990
10" Detector Check	6,350
12" Detector Check	22,210
4" Fire Service Meter	8,160
6" Fire Service Meter	10,040
8" Fire Service Meter	12,505
10" Fire Service Meter	14,390
12" Fire Service Meter	20,400
3" Octave UT L=24	3,100
4" Octave UT L=29/ L=33	4,100
6" Octave UT L=45	6,030
8" Octave UT L=53	9,680
10" Octave UT L=68	13,080
15 Meter Testing Fees	
5/8" to 1"	260
1-1/2"	420
2" and up	470

MISCELLANEOUS FEES AND CHARGES - APPROVED FOR IMPLEMENTATION JULY 1, 2022

Fee/Charge Number and Name	FY 2023 Approved
METERS AND RELATED SERVICES (Continued)	
16 Sub-Meter Installation Fees	
One-time Sub-Meter Charge - Small	\$ 260
One-time Sub-Meter Charge - Large	525
One-time Inspection Fee	85
Minimum Permit Inspection fee	265
17 Water Turn-Off, Turn-On Fees	
A. Customer Requested - Water Turn-Off, Turn-On Fees	
Small Meter Turn-Off	60
Small Meter Turn-On	90
Large Meter Turn-Off	200
Large Meter Turn-On	230
B. WSSC Water Scheduled Action - Water Turn-Off, Turn-On Fees	
Small Meter Turn-On	135
Large Meter Turn-On	405
18 Call Back Fee (small meters, plumbers)	90
19 Call Back Fee (large meters, plumbers)	355
20 Missed Appointment Fees	
First Missed Appointment or Restoration of Service Turn-On	95
Each Additional Missed Appointment	110
21 Meter Reinstallation Correction Fee	385
22 Sewer Meter Maintenance Fee (per year)	18,255
Quarterly Calibrations (per quarter)	4,565
23 Property Inspection Fee	120
24 Warehouse Restocking Fee	65

MISCELLANEOUS FEES AND CHARGES - APPROVED FOR IMPLEMENTATION JULY 1, 2022

Fee/Charge Number and Name	FY 2023 Approved
FIRE HYDRANT SERVICES	
25 Temporary Fire Hydrant Connection Fees	
<u>3/4" Meter - Deposit</u>	
3/4" Meter Deposit	\$ 380
<u>3" Meter - Deposit</u>	
3" Meter Deposit	2,420
<u>Service Charge</u>	
2 Weeks or Less (3/4" meter) 2 Weeks or Less (3" meter)	85
Over 2 Weeks (3/4" and 3" meters)	130
Water Consumption - 3/4" meter	175
(Minimum charge or Tier 4 rate per 1,000 gallons flat rate)	
Water Consumption - 3" meter	35
(Minimum charge or Tier 4 rate per 1,000 gallons flat rate)	
Late Fee for Return of Meter (per day)	240
	10
Fee on Unpaid Temporary Fire Hydrant Billings	
	1.5% per month
Loss/Destruction of Meter	Replacement
	cost
Loss/Destruction of Wrench	40
26 Truck Inspection Fee with Attached Fire Hydrant Meter (for 2 years)	50
27 Fire Hydrant Flow Test Fees	
No Current Test	690
Current Test	80

MISCELLANEOUS FEES AND CHARGES - APPROVED FOR IMPLEMENTATION JULY 1, 2022

Fee/Charge Number and Name	FY 2023 Approved
DEVELOPMENT SERVICES	
28 Feasibility Review Fees (WSSC Water Built)	
Feasibility Submission Fee (non-refundable)	\$ 1,960
Feasibility Review & Report Fee Deposit (can be deferred as deficit when extension is completed)	15,790
29 Construction Services Fee	9.3% of WSSC Water's unit cost estimate or 12% of contractor's cost estimate
30 Design Review	
Development is More than 10 Residential Units or Commercial	8,645
Development is 10 Residential Units or Less	4,325
31 Hydraulic Planning Analysis and System Planning Forecast	
Modeling and Re-Modeling Fee - Up to 3 parts	3,235
Modeling and Re-Modeling Fee - per part over 3	1,080
Pressure Sewer System Review Fee (per system)	590
32 Extra Review Fees	
<u>Per SEP Plan Review</u>	
Minor Additional Reviews of Unsigned or Signed Plans (per review)	1,600
Major/Splitting Additional Reviews of Unsigned or Signed Plans (per review)	3,265
<u>Per Site Utility/Minor Utility Additional Unsigned or Signed Plan Review</u>	
Site Utility (per review)	1,940
Minor Site Utility (per review)	505
<u>Per Hydraulic Planning Analysis/Systems Planning Forecast Application</u>	
Additional Review of Required Data (per application)	1,145
33 In-House Design Deposit	Deposit
34 Partial Certificate of Substantial Completion Release Fee (up to 50% of construction)	1,620
35 Off-Property Service Connection Reimbursement	Reimbursement
36 Service Connection Application and Inspection Fee (per permit)	2,430 water and/or sewer connection
37 Government Referred Plan Review	
Major Development - Over 10 Units	1,695
Minor Development - 10 or Less Units	790
Re-Review Fee for Major Development	790
Re-Review Fee for Minor Development	395
38 Pre-Screen Fee All Plan Types	405
39 Site Utility (On-site) Review Fees	
Base Fee	4,025
Additional Fee per 100 feet	390
Minor (Waived) Site Utility (On-Site) Fee	1,420
40 Name/Transfer of Ownership Change Fee	325
41 Variance Review Fee	1,500

MISCELLANEOUS FEES AND CHARGES - APPROVED FOR IMPLEMENTATION JULY 1, 2022

Fee/Charge Number and Name	FY 2023 Approved
PIPELINE, ENGINEERING AND ENVIRONMENTAL SERVICES	
42 Shutdown/Charge Water Main Fee	\$ 1,180
Shutdown Complex Water Main Fee	2,145
43 Review and Inspection Fees for Site Work Potentially Impacting WSSC Water Pipelines	
Simple Review	400
Complex Review / Non-DR Developer Review	4,520
Inspection for Minor Adjustment / Non-DR Developer (per inspection)	270
44 Relocation Fee	
Inspection for MOU project (minimum charge up to 4 hours)	600
45 Connection Abandonment Fees	
County Roads (except Arterial Roads) - Water	1,470
County Roads (except Arterial Roads) - Sewer	1,870
State Roads and County Arterial Roads - Water	1,770
State Roads and County Arterial Roads- Sewer	2,200
46 Chlorination Confirmation Test Fee (per first test)	245
Re-Test or Additional Tests (per hour)	185
47 Re-Test or Additional Tests Chlorination and Pressure Test (per test)	185
Inspector Overtime (per hour)	205
48 Review Fee for Additional Reviews of Contract Documents As-Builts (per hour)	206
49 Residential Outside Meter Housing Upgrade/Pipe Alteration	6,805
50 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)	0.45
Major Projects	0.45
Minimum Charge for Major Projects	120
51 Right-of Way Release (or Subordination) Review Fee (per document)	1,500
52 Right-of Way Acquisition and Condemnation for SEP Projects	Reimbursement
53 Environmental Site Review Fee	
With Database Search Submitted by Applicant	505
54 Feasibility Report and Committee Review Fee for On-Site Takeover Projects	1,705

MISCELLANEOUS FEES AND CHARGES - APPROVED FOR IMPLEMENTATION JULY 1, 2022

Fee/Charge Number and Name	FY 2023 Approved
PUBLICATIONS AND ADMINISTRATIVE	
55 Plans, Plats and 200' Reference Maps Copies	
Xerographic bond paper copy (per sheet)	\$ 5
56 WSSC Water Plumbing and Fuel Gas Code (Plumbing Code)	
Sale of Plumbing Regulation (per book)	55
57 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
Facility Contracts (up to \$450)	40 - 450
Construction Standard Details	80
Construction General Conditions & Standard Specifications	80
SEP Construction General Conditions & Standard Specifications	80
<u>Procurement Specifications/Drawings/General Conditions</u>	
With Routine Specifications	No charge
With Complex/Voluminous Specifications (up to \$200)	40 - 200
58 Photocopies of WSSC Water Documents Charges	
Readily Available Source Material (per single sided page)	0.30
Certified Copy of Readily Available Source Material (per single sided page)	0.60
Scanning Documents (per single sided page)	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)	
59 WSSC Water Pipeline Design Manual Fee	90
60 WSSD Laws	
Bound Volume	85
Supplements	45
61 Transcribed Tape of a Hearing or Meeting Fee	
	Prevailing fee
	charged by
	vendor

MISCELLANEOUS FEES AND CHARGES - APPROVED FOR IMPLEMENTATION JULY 1, 2022

Fee/Charge Number and Name	FY 2023 Approved
OTHER FEES AND CHARGES	
62 Patuxent Watershed Civil Citation Fees (State Mandated)	
First Offense	\$ 150
Each Additional Offense within Calendar Year	300
63 Civil Citation Fees - Sediment Control, Theft of Service and Plumbing	
Civil Citations (State Mandated)	
First Offense	250
Second Offense	500
Third Offense	750
Each Violation in Excess of Three	1,000
64 Lobbyist Registration Fee (Code of Ethics)	125
65 Dishonored Check Fee & Electronic Payment Fee	35
(applies to all dishonored checks and dishonored electronic payments)	
66 Credit Card Surcharge (Applies to customer payment of the Point-of-Sale	2% of amount
fee/charge by credit card other than water and sewer billing)	charged
67 Protest Filing Fee	857
68 Preparation of Hold Harmless Agreement Fee	1,635
69 Connection Redemption Fee	16
70 Financial Disclosure Filer Late Fee (per day \$500 max)	5

SECTION 3

RACIAL EQUITY AND SOCIAL JUSTICE

RACIAL EQUITY AND SOCIAL JUSTICE

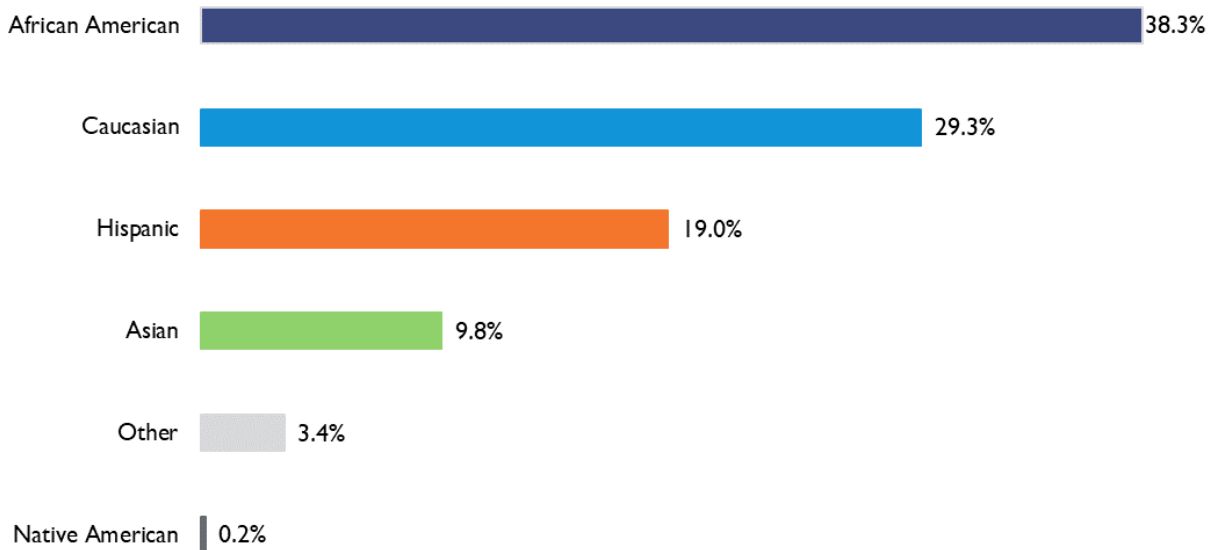
This section discusses racial equity and social justice (RESJ) topics related to WSSC Water’s operations, including demographics about our customer base, equity issues in the provision of water and sewer services, supplier diversity, workforce diversity and customer affordability. In addition, this section highlights future and existing RESJ programs supported by the Fiscal Year (FY) 2023 Approved Budget and data related to these focus areas.

CUSTOMER DEMOGRAPHICS

WSSC Water provides water and sewer services to a diverse customer base of approximately 1.9 million residents across Montgomery and Prince George’s Counties. The demographic data presented in this section is based on combined 5-year data for Montgomery and Prince George’s Counties from the U.S. Census Bureau’s American Community Survey (www.census.gov). The data represents estimates for calendar year 2019, which is the latest year for which data is available, but is based on sampling data for calendar years 2015 through 2019 in order to improve the accuracy of the estimates. Due to the impact of the COVID-19 pandemic, the U.S. Census Bureau changed the 2020 American Community Survey release schedule and calendar year estimates for 2020 based on 5-year data is not scheduled to be available until March 2022. The water and sewer services provided by WSSC Water include most areas, but not all, of the two Counties. Therefore, the demographics of the population served may vary slightly from those reported for the Counties as a whole.

The chart below shows the ethnic and racial makeup of the Montgomery and Prince George’s residents. The two Counties have a diverse and majority-minority population. The residents are 38.3% African American, 29.3% Caucasian, 19.0% Hispanic, 9.8% Asian, 0.2% Native American, and 3.4% Other.

Population by Race/Ethnicity



CUSTOMER DEMOGRAPHICS (Continued)

The table below shows the breakdown of the population of Montgomery and Prince George's Counties by age. There is a relatively even distribution between the age brackets for those under 65 years of age. Summarizing the data further, 31.6% of the population is under 25 years of age, 41.4% is between the ages of 25 and 54, and 27.0% is 55 years of age or older.

Age Bracket	Share of Population (%)
Under 5 Years	6.4%
5 to 14 Years	12.7%
15 to 24 Years	12.5%
25 to 34 Years	13.7%
35 to 44 Years	13.6%
45 to 54 Years	14.1%
55 to 64 Years	13.0%
65 to 74 Years	8.3%
75 to 84 Years	4.0%
85 Years and Over	1.7%
Total	100.0%

As shown in the table below, the median household income for Montgomery and Prince George's Counties was \$97,914 in calendar year 2019. This compares favorably to the state-wide median household income of \$84,805 and the national median household income of \$62,843. This means that the median household income in the two Counties is approximately 15.5% higher than the state-wide figure and 55.8% higher than the national figure.

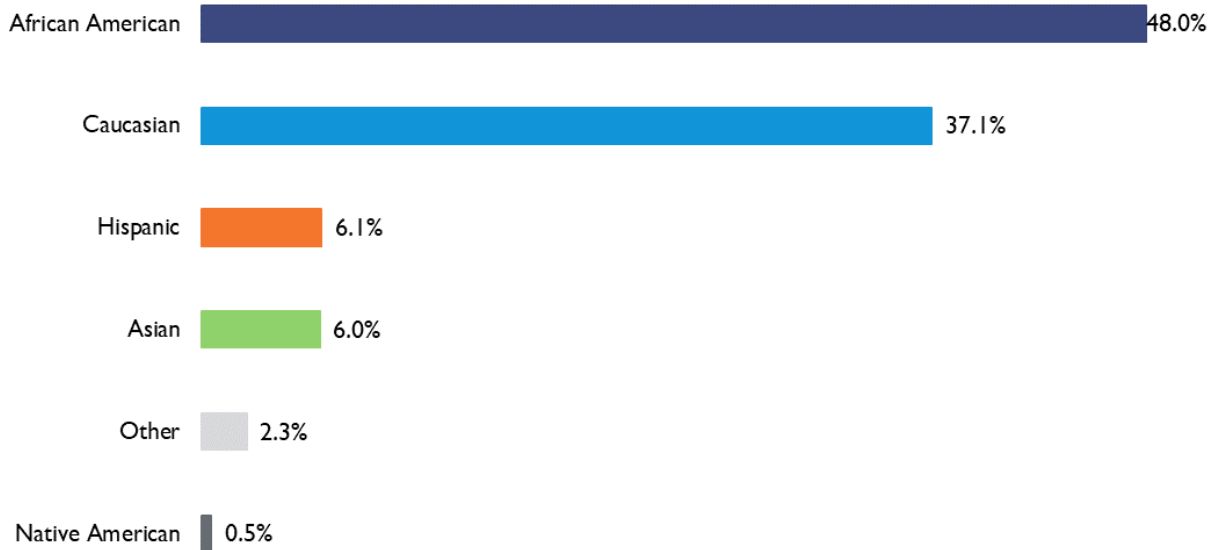
The table below also shows the percent of the population that is below the poverty level in Montgomery and Prince George's Counties combined, the State of Maryland, and the United States. In Montgomery and Prince George's Counties, approximately 7.6% of the population is below the poverty level. This is lower than the 9.2% figure for the State of Maryland and well below the national figure of 13.4%.

Region	Median Household Income	Population Below Poverty Level (%)
Montgomery & Prince George's Counties	\$ 97,914	7.6%
Maryland	\$ 84,805	9.2%
United States	\$ 62,843	13.4%

WSSC WATER WORKFORCE DIVERSITY

WSSC Water employs a diverse, majority-minority workforce. As shown in the chart below, as of December 30, 2020, the workforce is 48.0% African American, 37.1% Caucasian, 6.1% Hispanic, 6.0% Asian, 0.5% Native American, and 2.3% Other. Compared to the ethnic and racial makeup of Montgomery and Prince George's Counties, the WSSC Water workforce is generally overrepresented in the African American and Caucasian groups and underrepresented in the Hispanic and Asian groups. WSSC Water promotes a diverse workplace that is free of discrimination and harassment based upon race, color, religion, gender, sexual orientation, national origin, age, disability, genetic information and retaliation or reprisal through the Equity, Engagement and Inclusion Division within the Human Resources Office.

Workforce by Race/Ethnicity



OFFICE OF SUPPLIER DIVERSITY & INCLUSION

The Office of Supplier Diversity & Inclusion (OSDI) is responsible for carrying out WSSC Water's commitment to ensure that our vendor base is reflective of the community that we serve. OSDI is dedicated to creating an inclusive purchasing environment and adding value to the organization and community by building sustainable relationships, expanding opportunities and cultivating growth with small, local and minority businesses. OSDI helps the organization achieve these goals through its management of the Minority Business Enterprise (MBE) Program and the Small Local Business Enterprise (SLBE) Program. The key components that OSDI uses to support these programs are supplier advocacy, compliance, outreach and development.

OSDI is also responsible for ensuring that the MBE and SLBE programs conform to all legal requirements. As part of these duties, OSDI prepares annual performance reports on the MBE and SLBE programs and conducts a disparity study that is typically done once every five years. The annual performance reports are required under state law to be sent to the elected officials from Montgomery and Prince George's Counties in the Maryland General Assembly by October 31st of each year. The performance reports provide details on the implementation and administration of the MBE and SLBE programs during the prior fiscal year and provide any appropriate recommendations regarding the programs. The disparity studies determine the following:

- The extent to which MBEs participate in the procurement of construction services, architectural and engineering services, goods and general services and professional services with WSSC Water
- If MBE participation is representative of the availability of MBE firms that are ready, willing and able to participate in WSSC Water contracts
- If discrimination exists, and is found, identifies the race, ethnicity and gender of the affected individuals
- Best practices to assist in administering the MBE Program and the establishment of an overall aspirational goal

The 2015 Disparity Study, which is the most recent available, reached the following conclusions:

- Evidence exists to support a WSSC Water MBE Program based primarily on statistical disparities in current MBE utilization, evidence of discrimination in business formation and revenue earned from self-employment, very low MBE utilization in the commercial building permit evidence, credit disparities and business owner reports of disparate treatment
 - WSSC Water should tailor its MBE and SLBE programs participation policies to remedy each of these specific disparities
 - The core theme should be that prime contractors should document their outreach efforts and the reasons why they may have rejected qualified MBEs and MBEs that were the low-bidding subcontractors
- WSSC Water should be commended for its extensive set of incentives for SLBE participation, including SLBE bid incentives, sheltered markets, subcontractor goals, mentor-protégé program and small contracts rotation
 - These SLBE incentives are some of the broadest set of small business incentives by a local government agency in general, let alone a local public utility, in the country
- WSSC Water should be commended for its extensive outreach activities, which include widespread coverage of the program on the WSSC Water website, partnerships with numerous business organizations, participation in numerous events, monthly training and other activities
- One solution to the issues with size standards is to adopt a two-tier standard MBE and SLBE certification in which contracts can be set aside for small and very small firms and goals that include very large MBEs and SLBEs can be established on large projects
- WSSC Water should work to improve prime contractor compliance with entering non-MBE subcontractor data into the system of record

OFFICE OF SUPPLIER DIVERSITY & INCLUSION (Continued)

MBE Program

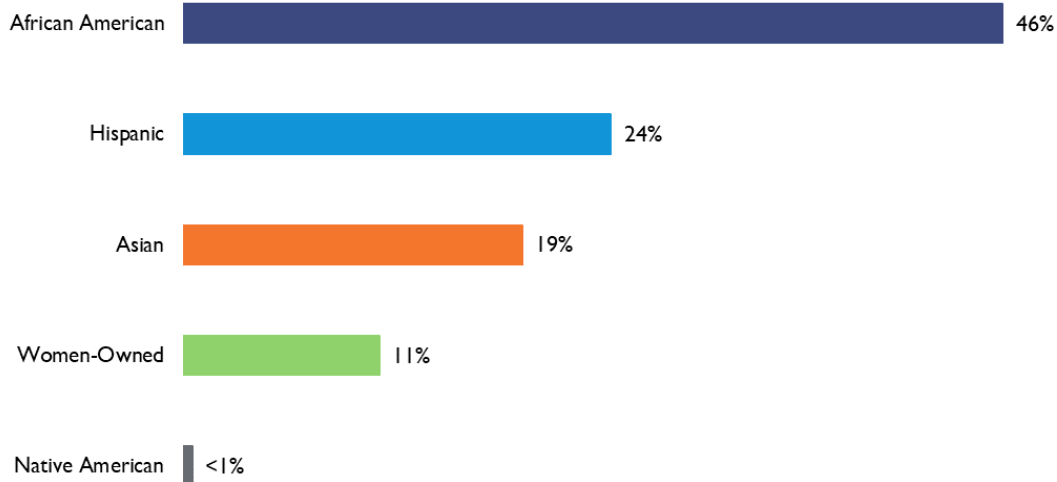
WSSC Water's MBE Program was originally developed in 1978. For more than 40 years, the MBE Program has sought to promote fair and inclusive contract participation, provide greater access for diverse firms and produce educational content to further develop diverse businesses. The program seeks to eliminate barriers to success in the public marketplace for both prime contractors and subcontractors. The MBE Program recognizes certifications for minority-owned companies, women-owned companies and disadvantaged companies from five local and national entities.

Since 2012, the MBE Program has resulted in more than \$1.6 billion in payments to diverse businesses. In FY 2021, WSSC Water spent more than \$154.8 million with MBE firms. This represents 33% of the total contract payments in FY 2021 for construction services, architectural and engineering services, goods and general services and professional services. Approximately 77% of the payments to MBE firms in FY 2021 went to firms located in the State of Maryland or Washington D.C. The table below summarizes the contract payments performance of WSSC Water's MBE Program over the last five years.

Fiscal Year	MBE Contract Payments	Total Contract Payments	MBE Share (%)
2017	\$ 156,900,804	\$ 588,775,203	27%
2018	146,562,712	518,434,501	28%
2019	152,510,264	517,153,557	29%
2020	136,209,781	481,475,872	28%
2021	154,826,411	474,978,466	33%
Total	\$ 747,009,972	\$ 2,580,817,599	29%

The chart below shows the breakdown of the FY 2021 contract payments by the type of MBE firm that received the payments. As shown in the chart, African American firms received the largest share of the MBE contract payments with a 46% share.

Share of Contract Payments



The MBE Program also tracks contract awards as they are a leading indicator of future contract payments to MBE firms. In FY 2021, WSSC Water awarded approximately \$136.4 million in contracts to MBE firms in the construction services, architectural and engineering services, goods and general services and professional services contracting areas. This equates to 29% of the approximately \$471.5 million of total contract awards issued in these four contracting areas.

OFFICE OF SUPPLIER DIVERSITY & INCLUSION (Continued)

SLBE Program

WSSC Water's SLBE Program was created in 2001 to provide race and gender-neutral contracting opportunities for small businesses principally located in Montgomery and Prince George's Counties. To qualify for the SLBE Program, firms must meet several eligibility criteria. Some examples of the eligibility criteria include the firm being principally located within or having a significant employment presence (at least 25% of the firm's total number of employees) in Montgomery County or Prince George's County, the firm not being a subsidiary of another business and the firm meeting size eligibility requirements. In FY 2021, approximately \$45.9 million was spent with SLBE firms for construction services, architectural and engineering services, goods and general services and professional services. Another approximately \$24.7 million was awarded in contracts to SLBE firms in these four contracting areas in FY 2021.

Additional information on the WSSC Water MBE and SLBE programs, including copies of the most recent performance report and disparity study, can be found on our website at <https://www.wsscwater.com/supplierdiversity>.

OTHER RACIAL EQUITY AND SOCIAL JUSTICE INITIATIVES

WSSC Water also has several other RESJ initiatives that are currently underway. Two examples of these initiatives are the effort to address the public health, equity and environmental justice concerns with unserved and underserved communities and the effort to incorporate RESJ criteria into the capital project prioritization process. The following sections describe these two initiatives in further detail, including the current status of each.

Unserved and Underserved Communities

An unserved community is defined as an area within the sewer service envelope where a new sewer main greater than 1,500 feet is required to extend sewer service to the homes within the community. An underserved community is defined as an area within the sewer service envelope where public sewer service is available to some homes within the community, but one or more houses cannot access the service until a new sewer main greater than 200 feet is built.

Thousands of homes throughout Montgomery and Prince George's Counties have septic systems despite being in communities that were planned for public sewer service. Many of these homes have old septic systems that are beginning to fail and many of these failing systems cannot be easily repaired or replaced either because the lot is too small or the soil conditions are inadequate. These unserved and underserved communities cannot access sewer service from WSSC Water until sewer mains are extended into their community. Under current state statute, homeowners are responsible for the cost of any new water or sewer infrastructure that is required to extend service to their homes. A typical sewer extension can cost up to \$700 per foot and total project costs can range from \$100,000 to over \$1.0 million. Although the current application process provides for long-term financing and limited subsidies in cases where failing septic systems are causing a public health problem in the community, very few homeowners can afford to extend water or sewer service into their communities. Since 2005, only 16 sewer extension projects have been constructed to provide service to approximately 84 homes with septic systems.

WSSC Water, in conjunction with Montgomery and Prince George's Counties, formed a subset of the Bi-County Infrastructure Working Group to identify policy challenges and deficiencies of the current system and to build a roadmap for an improved system of extending water and sewer service to unserved and underserved communities. The workgroup identified the following key legal, financial and policy challenges:

- The current approach places all of the burden of project financing on the homeowner, which makes most sewer extension projects unaffordable for the majority of homeowners
- There is a lack of fairness and equity in the current approach to extending sewer service to unserved and underserved communities because only homeowners who are requesting service pay for the extension project deficit costs over and above the front foot benefits assessments
 - Homeowners who decide to take advantage of the availability of sewer service in the future get a "free ride" because they only pay a front foot benefit assessment after they connect
- The current sewer extension process, which is applicant driven, impedes the Counties' ability to address septic system problems and other potential community health hazards comprehensively
 - Sewer service is not being extended into communities where it is most needed
 - This is preventing the Counties from addressing the public and environmental health impacts of septic systems in a systematic, cost-effective manner

The workgroup believes that WSSC Water and the Counties must adopt a collaborative approach to address the needs of homeowners in unserved and underserved communities. Over the last 18 months, the workgroup was able to reach consensus on eight discrete recommendations that lay the groundwork for a comprehensive, programmatic solution to the problems facing residents in these communities. The recommendations are as follow:

- Public subsidies for sewer extension projects in unserved and underserved communities should be increased
- A uniform, affordable fee for sewer service for homeowners in unserved and underserved communities should be implemented
- Additional assistance with up-front costs for homeowners who are experiencing other financial hardship should be provided

OTHER RACIAL EQUITY AND SOCIAL JUSTICE INITIATIVES (Continued)

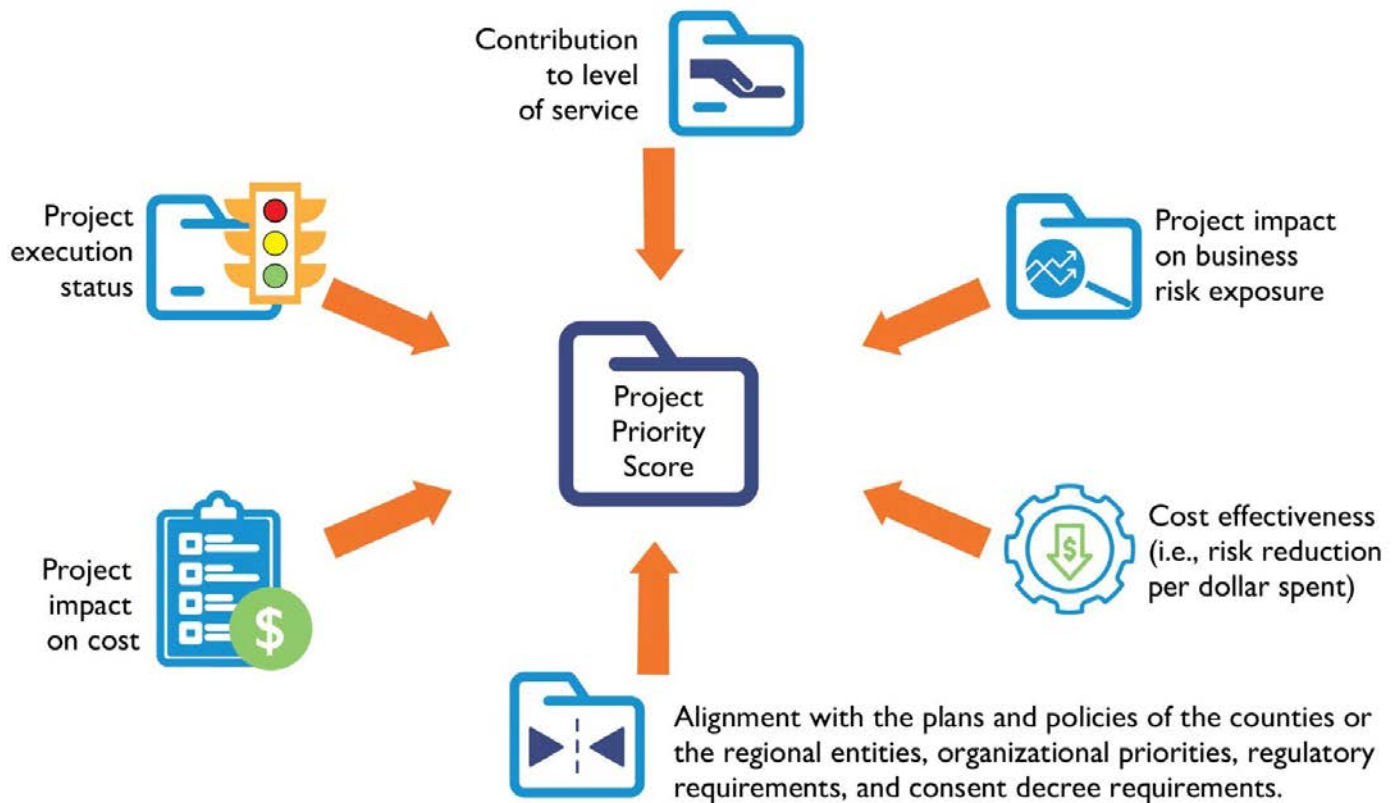
Unserved and Underserved Communities (Continued)

- A Pay-As-You-GO (PAYGO) funded Capital Improvements Program (CIP) project for sewer extensions to unserved and underserved communities should be established
- Program funding should be equitably allocated between Montgomery and Prince George's Counties
- The Counties and WSSC Water should aggressively pursue funding from the State of Maryland's Bay Restoration Fund for sewer extension projects in unserved and underserved communities
- A subdistrict process to secure support within unserved and underserved communities for sewer connection projects should be established
- Each County should develop an approach to identify and prioritize communities with the greatest need for sewer extensions

The workgroup's eight policy recommendations provide a starting point for further discussions between WSSC Water and the Counties on the development of an effective, long-term program to address the lack of water and sewer service in unserved and underserved communities.

Capital Project Prioritization Criteria

As part of the CIP process each year, the Asset Management Division prioritizes the projects in the CIP based on a predetermined set of criteria. The graphic below shows the six elements that make up the CIP prioritization criteria.



OTHER RACIAL EQUITY AND SOCIAL JUSTICE INITIATIVES (Continued)

Capital Project Prioritization Criteria (Continued)

The Asset Management Division undertook a pilot project in FY 2022 to examine ways to incorporate RESJ considerations into the CIP prioritization criteria shown on the prior page. The division identified the element concerning alignment with the plans and policies of the Counties as a potential way to incorporate RESJ factors into the criteria. Both Montgomery and Prince George's Counties have identified parts of their respective jurisdictions as focus areas based on RESJ or related criteria. Montgomery County has designated portions of the County as equity focus areas based on factors such as high concentrations of minorities, low-income households and people age 5 or older with lower levels of English language proficiency. Prince George's County has established revitalization tax credit districts throughout the County based on factors such as median household income, residential density of an area, land use in an area, economic factors and unemployment rates.

For the pilot, the Asset Management Division reviewed the geographic locations of the projects included in the CIP and identified those that either provided widespread benefits that impacted one of the areas designated by either County or that provided benefits to a specific location within one of the areas. The projects were then given a prioritization score that reflected their designation as a project that aligned with the plans and policies of the Counties based on the RESJ factors. All of the CIP projects were then re-ranked based on the new priority scores that incorporated RESJ considerations. The results of the pilot were then presented to other departments throughout WSSC Water. Based on the results of the pilot project, it was decided that the Asset Management Division should incorporate RESJ factors into the CIP prioritization criteria utilizing the identified methodology beginning with the FYs 2024-2029 CIP cycle.

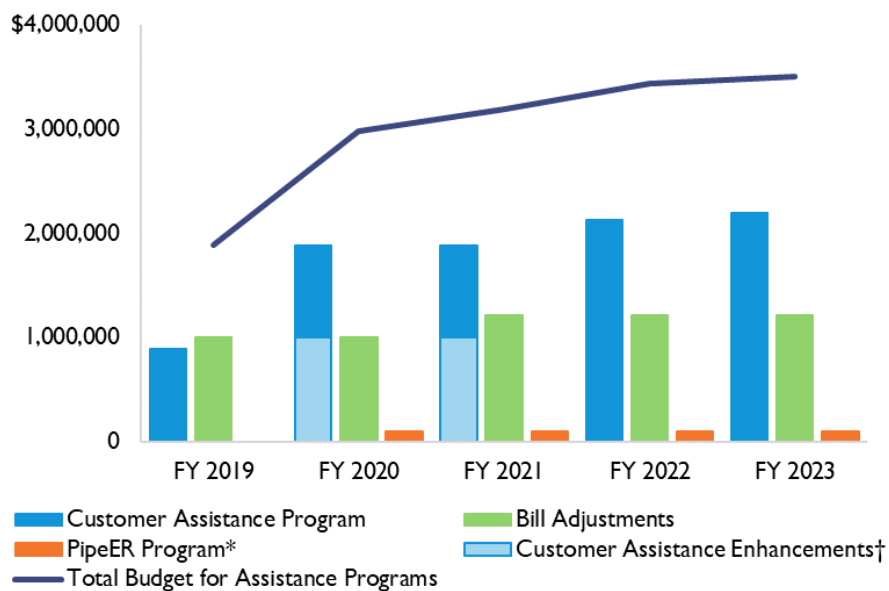
WSSC WATER FINANCIAL ASSISTANCE PROGRAMS

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

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

These programs aim to tackle customer affordability from several different angles, depending on the specific needs of the customer. The CAP, PipeER Program, and bill adjustments are funded as part of WSSC Water's annual budget process. The chart below shows the funding levels for these programs, individually and overall, from FY 2019 through FY 2023. As shown in the chart, WSSC Water has increased the funding for its financial assistance programs by approximately 86% over the last several years, from about \$1.9 million in FY 2019 to over \$3.5 million in FY 2023.

WSSC Water Financial Assistance Programs Budget



*The PipeER Program was established in FY 2020.

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

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

WSSC WATER FINANCIAL ASSISTANCE PROGRAMS (Continued)

Customer Assistance Program

CAP provides financial assistance to approved residential customers via credits for WSSC Water's fixed fees (the Account Maintenance Fee and the Infrastructure Investment Fee). The credits are capped for FY 2022 at \$28 per quarterly bill or \$112 per year, which is equivalent to the fees for a 3/4" meter. The cap will increase to \$29.82 per quarterly bill or \$119.28 per year in FY 2023. Eligibility for CAP is determined based on enrollment in the Maryland Office of Home Energy Programs' (OHEP) energy assistance program. If a customer is enrolled in this state program, then they also qualify for WSSC Water's CAP. Customers are required to annually re-enroll with OHEP to continue their CAP enrollment. The current income eligibility criteria established by OHEP for its energy assistance program are outlined in the tables below.

Income Eligibility Limits Effective July 1, 2021 to June 30, 2022 (Based on 175% of the Federal Poverty Level) For Households with NO Members 67 Years of Age or Older at the Time of Application			
Household Size		Maximum Gross Monthly Income Standards	Maximum Gross Annual Income Standards
1	\$	1,878	\$ 22,540
2		2,540	30,485
3		3,203	38,430
4		3,865	46,375
5		4,527	54,320
6		5,189	62,265
7		5,851	70,210
8		6,513	78,155
For Each Additional Person, Add		662	7,945

Income Eligibility Limits Effective July 1, 2021 to June 30, 2022 (Based on 200% of the Federal Poverty Level) For Households with ONE OR MORE Members 67 Years of Age or Older at the Time of Application			
Household Size		Maximum Gross Monthly Income Standards	Maximum Gross Annual Income Standards
1	\$	2,147	\$ 25,760
2		2,903	34,840
3		3,660	43,920
4		4,417	53,000
5		5,173	62,080
6		5,930	71,160
7		6,687	80,240
8		7,443	89,320
For Each Additional Person, Add		757	9,080

WSSC Water was given the authority to establish CAP via legislation passed by the Maryland General Assembly and signed by the Governor in 2015. Per the enabling legislation, CAP is 100% funded via WSSC Water revenues. For FY 2023, CAP funding increased to \$2.2 million from \$2.1 million in FY 2022. To date, WSSC Water's CAP has assisted more than 15,500 customers.

WSSC WATER FINANCIAL ASSISTANCE PROGRAMS (Continued)

Water Fund

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

Income Eligibility Limits Effective July 1, 2021 to June 30, 2022 (Based on 200% of the Federal Poverty Level)		
Household Size	Maximum Gross Monthly Income Standards	Maximum Gross Annual Income Standards
1	\$ 2,147	\$ 25,760
2	2,903	34,840
3	3,660	43,920
4	4,417	53,000
5	5,173	62,080
6	5,930	71,160
7	6,687	80,240
8	7,443	89,320
For Each Additional Person, Add	757	9,080

The Water Fund is funded entirely by contributions from customers, employees and other sources. Customers can donate to the Water Fund via direct online donations, through lump sum donations added when paying their bill or through participation in the bill round up program. WSSC Water employees contribute to the Water Fund through the agency's annual giving campaign and special events that support the Water Fund, like the annual Manhole Open golf tournament. WSSC Water pays the administrative and promotional fees while The Salvation Army assists participants and manages the fund, which ensures that 100% of all donations go directly to those in need. Since 1994, the Water Fund, in partnership with The Salvation Army, has distributed nearly \$1.9 million to help nearly 20,000 people throughout Montgomery and Prince George's counties. In FY 2021, the Water Fund provided water bill assistance to 3,774 people by disbursing almost \$514,000 in aid.

PipeER Program



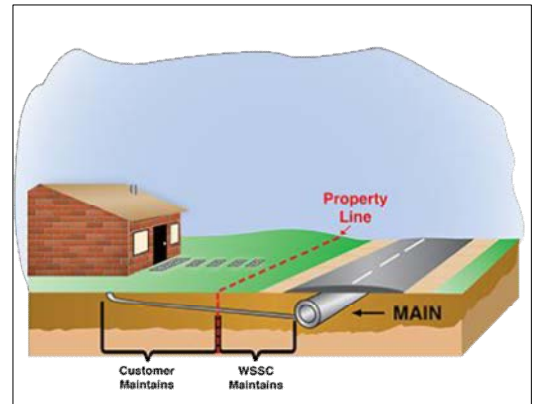
The PipeER Program, also known as the Connection Pipe Emergency Replacement Loan Program, provides loans to eligible residential customers to finance the replacement of their water service line, which is located on their property and connects WSSC Water's main line to the home. The program makes available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

WSSC WATER FINANCIAL ASSISTANCE PROGRAMS (Continued)

PipeER Program (Continued)

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

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



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

Bay Restoration Fund Exemption Program

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

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



WSSC WATER FINANCIAL ASSISTANCE PROGRAMS (Continued)

Bay Restoration Fund Exemption Program (Continued)

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

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

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

Income Eligibility Limits Effective July 1, 2021 to June 30, 2022 (Based on 175% of the Federal Poverty Level) For Households with NO Members 67 Years of Age or Older at the Time of Application			
Household Size		Maximum Gross Monthly Income Standards	Maximum Gross Annual Income Standards
1	\$	1,878	\$ 22,540
2		2,540	30,485
3		3,203	38,430
4		3,865	46,375
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8		6,513	78,155
For Each Additional Person, Add		662	7,945

Income Eligibility Limits Effective July 1, 2021 to June 30, 2022 (Based on 200% of the Federal Poverty Level) For Households with ONE OR MORE Members 67 Years of Age or Older at the Time of Application			
Household Size		Maximum Gross Monthly Income Standards	Maximum Gross Annual Income Standards
1	\$	2,147	\$ 25,760
2		2,903	34,840
3		3,660	43,920
4		4,417	53,000
5		5,173	62,080
6		5,930	71,160
7		6,687	80,240
8		7,443	89,320
For Each Additional Person, Add		757	9,080

WSSC WATER FINANCIAL ASSISTANCE PROGRAMS (Continued)

Bill Adjustments

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

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

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

Flexible Payment Options

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



WSSC WATER BILL AFFORDABILITY

Federal Affordability Standard

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

Median Household Income

Based on 5-year data from the U.S. Census Bureau's American Community Survey, the median household income for Montgomery and Prince George's Counties was \$97,914 in calendar year 2019, which is the latest year for which data is available. Based on the FY 2023 approved rates, WSSC Water's average annual residential bill for water and sewer services at 165 gallons per day is approximately \$1,027. The consumption level of 165 gallons per day is used because it represents the average household in WSSC Water's service area, a 3-person household using 55 gallons of water per person per day. Therefore, it is estimated that the annual cost of water and sewer services from WSSC Water for the average customer will be 1.0% of the median household income in FY 2023, absent any changes in household income between 2019 and 2023. This level is well below the 4.5% standard set by the EPA.

Median Household Income	Average WSSC Water Bill	Share of Median Income
\$ 97,914	\$ 1,027	1.0%

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

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

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

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

[†]The average WSSC Water bill for the 7-or-more person household size was calculated based on a 7-person household.

WSSC WATER BILL AFFORDABILITY (Continued)

Household Income Quintiles

The table below compares the average household income by income quintile to the average WSSC Water bill for a three-person household. Each income quintile contains 20% of the population of Montgomery and Prince George's Counties based on where their household income falls on the spectrum for all households. As shown in the table, the average household income for the first quintile is \$23,806 per year. At this level of income, a three-person household would spend about 4.3% of their annual income on water and sewer services, which is below the 4.5% EPA affordability threshold. Therefore, WSSC Water's average bill for water and sewer services is affordable for the average customer at the lower end of the household income distribution in Montgomery and Prince George's Counties.

Quintile	Average Household Income	Average WSSC Water Bill*	Share of Average Income
First	\$ 23,806	\$ 1,027	4.3%
Second	61,318	1,027	1.7%
Third	98,399	1,027	1.0%
Fourth	149,591	1,027	0.7%
Fifth	307,194	1,027	0.3%

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

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

Household Income Brackets

The table below shows a more detailed breakdown of household incomes in Montgomery and Prince George's Counties and how the average WSSC Water bill for a three-person household compares to each income level. Looking at this more detailed breakdown, the average WSSC Water bill begins to exceed the EPA affordability threshold towards the upper bound of the fourth income bracket (\$20,000-\$24,999 per year). The income at which the 4.5% threshold is crossed for a three-person household is about \$22,936 per year. The first through third income brackets contain approximately 7.6% of households and the fourth contains about 2.3%, so the average bill for a three-person household would exceed the EPA threshold for fewer than 9.9% of households in Montgomery and Prince George's Counties without any financial assistance from the agency.

Income Bracket Lower Bound	Income Bracket Upper Bound	Number of Households	Share of Households	Average WSSC Water Bill*	Share of Lower Bound	Share of Upper Bound
\$ -	\$ 9,999	24,601	3.6%	\$ 1,027	N/A	10.3%
10,000	14,999	13,415	2.0%	1,027	10.3%	6.8%
15,000	19,999	13,945	2.0%	1,027	6.8%	5.1%
20,000	24,999	15,365	2.3%	1,027	5.1%	4.1%
25,000	29,999	17,367	2.5%	1,027	4.1%	3.4%
30,000	34,999	20,075	2.9%	1,027	3.4%	2.9%
35,000	39,999	18,736	2.7%	1,027	2.9%	2.6%
40,000	44,999	19,382	2.8%	1,027	2.6%	2.3%
45,000	49,999	18,558	2.7%	1,027	2.3%	2.1%
50,000	59,999	42,137	6.2%	1,027	2.1%	1.7%
60,000	74,999	58,748	8.6%	1,027	1.7%	1.4%
75,000	99,999	91,221	13.4%	1,027	1.4%	1.0%
100,000	124,999	75,834	11.1%	1,027	1.0%	0.8%
125,000	149,999	56,645	8.3%	1,027	0.8%	0.7%
150,000	199,999	80,870	11.9%	1,027	0.7%	0.5%
200,000	N/A	115,394	16.9%	1,027	0.5%	N/A
Total		682,293	100.0%			

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

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

WSSC WATER BILL AFFORDABILITY (Continued)

Household Income Brackets (Continued)

WSSC Water's income-based financial assistance programs, CAP and the Water Fund, would provide help to most of the customers in the four lowest income brackets, even if they are in single-person households. CAP provides assistance for single-person households with annual incomes of up to \$22,540 if under 67 years of age and \$25,760 if 67 years of age or older. For a three-person household, the income limits increase to \$38,430 if all household members are under 67 years of age and \$43,920 if one household member is 67 years of age or older. The Water Fund provides assistance to single-person households with up to \$25,760 in annual income. For a three-person household, the income limit increases to \$43,920. Therefore, WSSC Water's financial assistance programs can help keep the costs of water and sewer services affordable for many of those who are most likely to struggle to pay their bills.

The table below shows how WSSC Water's CAP can increase bill affordability for our lowest income customers. As previously mentioned, CAP provides financial assistance to approved residential customers via credits for WSSC Water's fixed fees (the Account Maintenance Fee and the Infrastructure Investment Fee). It is anticipated that up to \$119.28 in assistance will be available in FY 2023 to match the fixed fees for a 3/4" meter. This would lower the average WSSC Water bill, which is based on a three-person household with a 3/4" meter, from approximately \$1,027 per year to \$908 per year. The income at which the 4.5% threshold is crossed for a three-person household would similarly decrease from about \$22,936 per year to \$20,270 per year. Consequently, the percentage of households for which the average three-person bill would exceed the EPA threshold would drop to about 7.6%, from the previous figure of less than 9.9%. The Water Fund, which provides up to \$500 in financial assistance per year for eligible residential customers, can further help those customers facing affordability concerns even after the CAP assistance is taken into account.

Income Bracket Lower Bound	Income Bracket Upper Bound	Number of Households	Share of Households	Average WSSC Water Bill (w/ CAP)*†	Share of Lower Bound	Share of Upper Bound
\$ -	\$ 9,999	24,601	3.6%	\$ 908	N/A	9.1%
10,000	14,999	13,415	2.0%	908	9.1%	6.1%
15,000	19,999	13,945	2.0%	908	6.1%	4.5%
20,000	24,999	15,365	2.3%	908	4.5%	3.6%
25,000	29,999	17,367	2.5%	908	3.6%	3.0%
30,000	34,999	20,075	2.9%	908	3.0%	2.6%
35,000	39,999	18,736	2.7%	908	2.6%	N/A

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

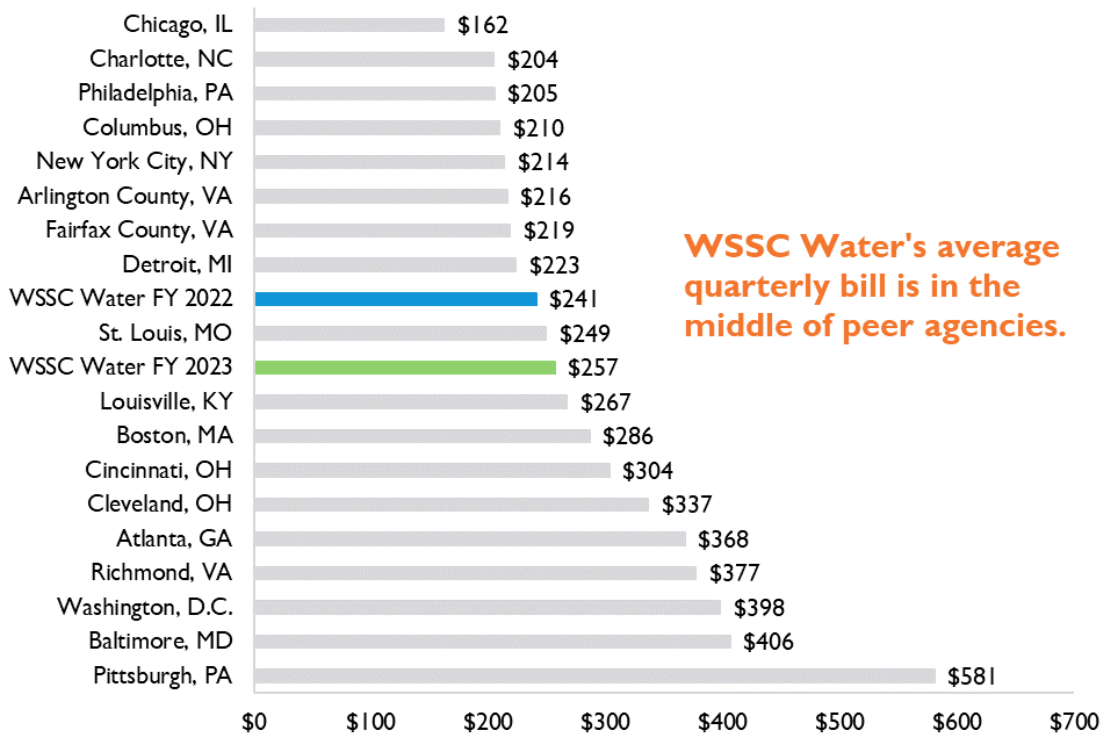
*The average WSSC Water bill is based on a 3-person household using 55 gallons of water per person per day.

WATER AND SEWER BILL COMPARISONS

Quarterly Bill Comparison

Presented below is a comparison of WSSC Water's average quarterly residential bill for water and sewer services at 165 gallons per day to the equivalent bill from 18 other cities and communities, both locally and nationally. The consumption level of 165 gallons per day represents the average household in WSSC Water's service area, a 3-person household using 55 gallons of water per person per day. The rates and fees used in this comparison were in effect as of December 2021. The chart includes WSSC Water bills at FY 2022 approved and FY 2023 approved rates. As shown in the chart, the quarterly bills in the other communities range from a low of \$162 in Chicago, Illinois to a high of \$581 in Pittsburgh, Pennsylvania. WSSC Water ranks in the middle of the peer agencies, with quarterly bills of \$241 in FY 2022 and \$257 in FY 2023. This shows that WSSC Water's rates and fees are competitive both locally and nationally.

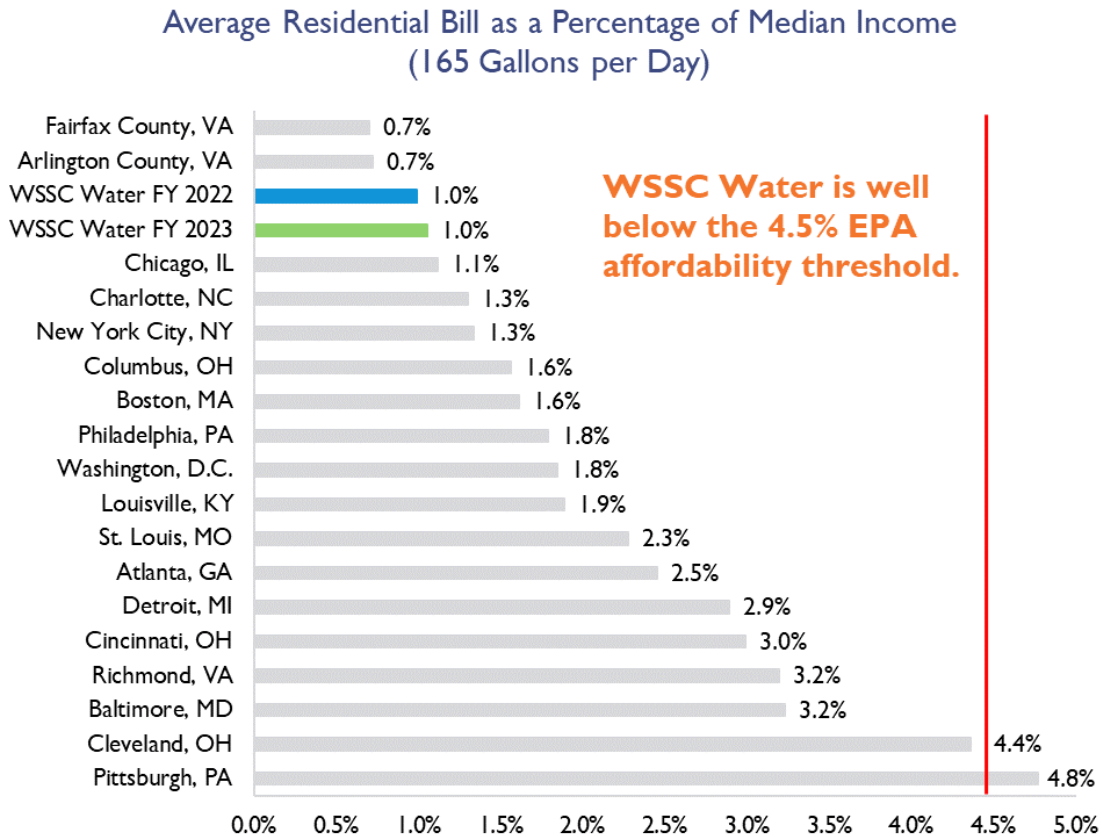
Residential Quarterly Water/Sewer Bill Comparison
(165 Gallons per Day)



WATER AND SEWER BILL COMPARISONS (Continued)

Bill as a Percentage of Median Household Income Comparison

The chart below shows a comparison of the average residential bills as a percentage of median household income for WSSC Water and the 18 other cities and communities analyzed for customers using 165 gallons of water per day. The average annual bill from WSSC Water in FY 2023 is only 1.0% of the median household income of its customers. This places WSSC Water among the most affordable of its peer agencies, with only two agencies (Fairfax County and Arlington County in Virginia) having lower percentages. Additionally, WSSC Water is well below the 4.5% threshold that the EPA considers to be affordable for customers.

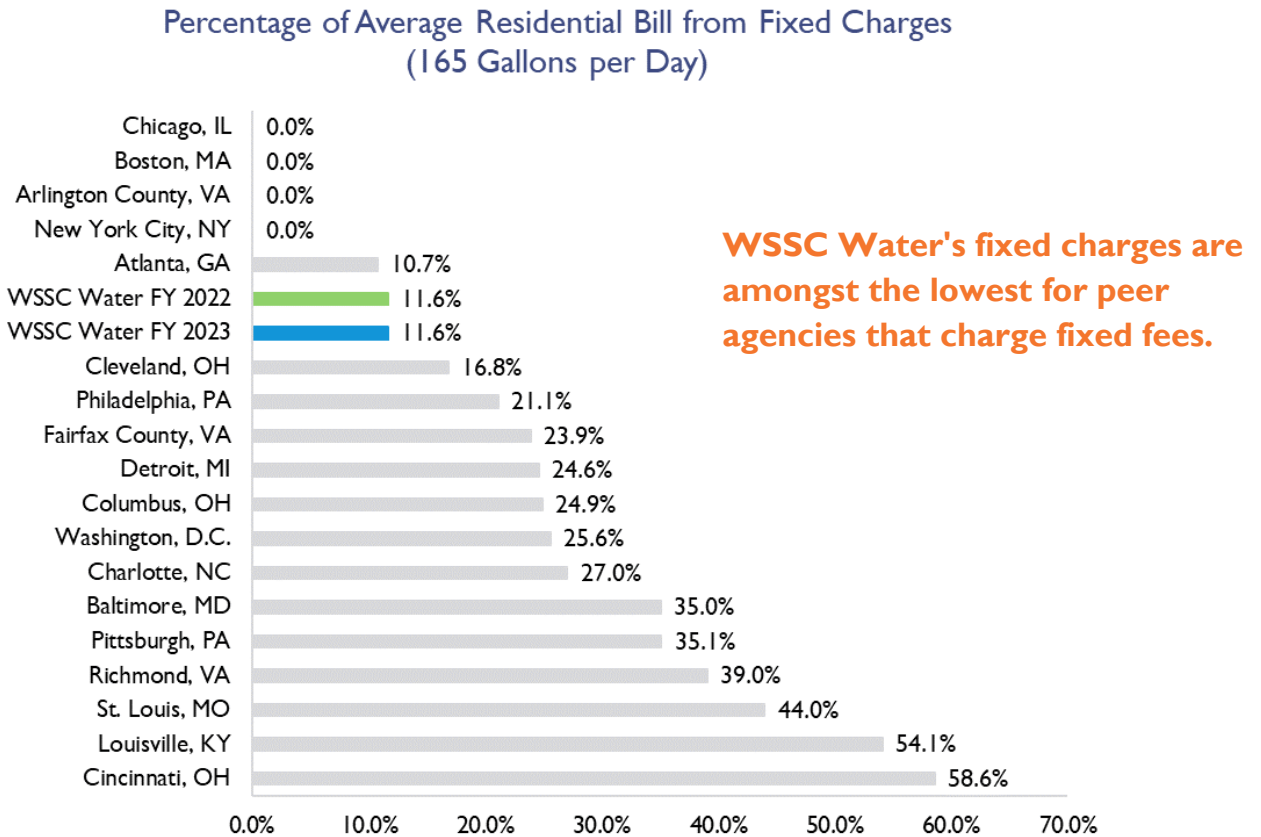


Median household income figures (in 2019 dollars) from the U.S. Census Bureau (www.census.gov), American Community Survey 5-Year Estimates for 2015-2019.

WATER AND SEWER BILL COMPARISONS (Continued)

Percentage of Bill from Fixed Charges Comparison

The chart below compares fixed charges as a portion of the average residential bill for WSSC Water and the 18 other cities and communities reviewed. Four of the peer agencies (Chicago, Illinois; Boston, Massachusetts; Arlington County, Virginia; and New York City, New York) do not have any fixed fees as part of their water and sewer bills. Of the agencies that do charge fixed fees, WSSC Water's fixed charges are the second lowest as a percentage of the average bill. In FY 2022 and FY 2023, 11.6% of the average residential bill from WSSC Water is attributable to fixed fees. WSSC Water's CAP focuses on limiting the impact of these fixed fees on those who are most likely to struggle to pay their bills.

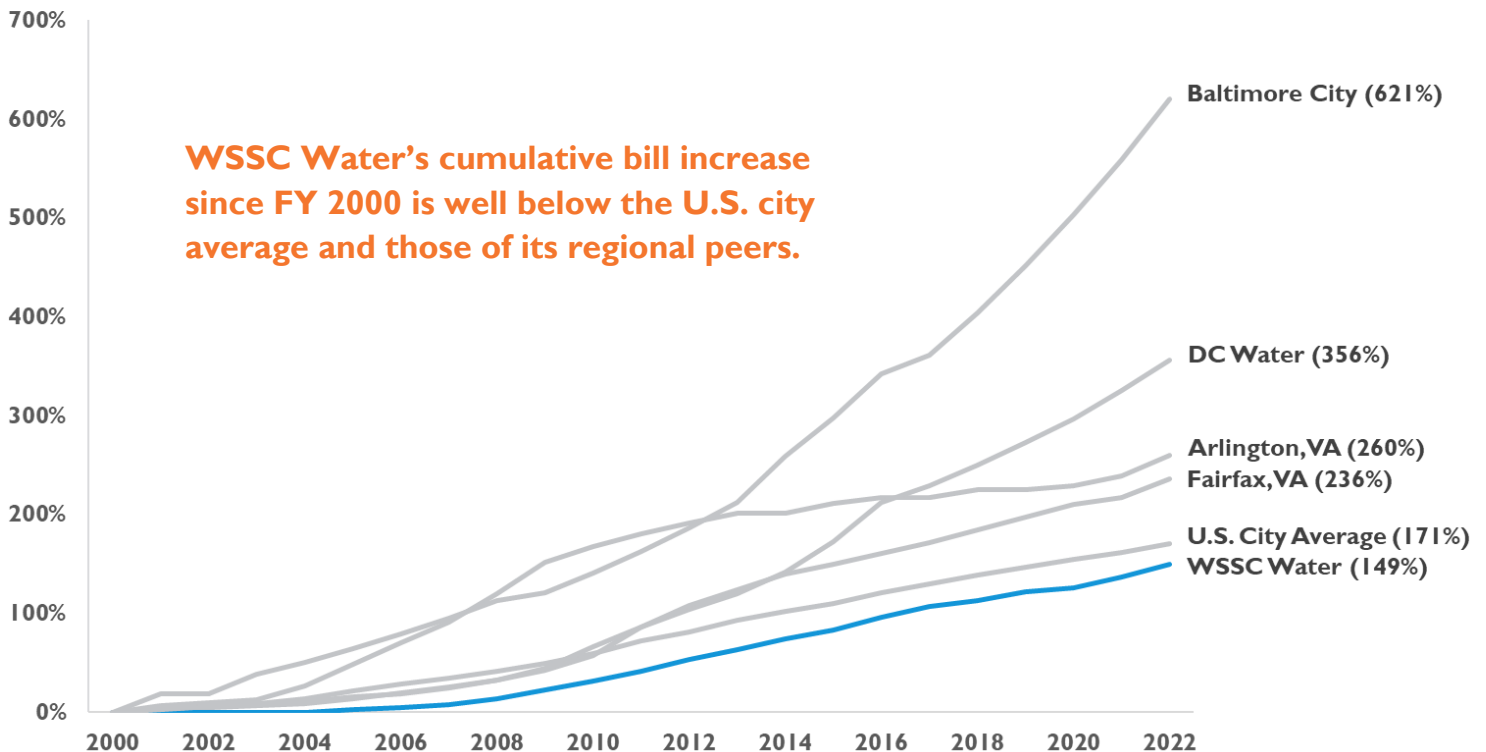


WATER AND SEWER BILL COMPARISONS (Continued)

Bill Increases Over Time Comparison

The chart below shows a comparison of the cumulative bill increases for comparable water and sewer providers in the greater Washington-Baltimore-Arlington combined statistical area and the U.S. city average for FYs 2000-2022. As with the previous comparisons, the consumption level used is 165 gallons per day to represent the average 3-person household using 55 gallons of water per person per day. The chart shows that the cumulative increase in the average WSSC Water bill was about 149% over the last 22 years, which is lower than the increases for all of the peer agencies and the U.S. city average over the same time period. The increases for the comparable regional providers range from a low of 236% for Fairfax, Virginia to a high of 621% for Baltimore City, Maryland. The U.S. city average increased by 171% over the 22-year analysis period.

FYs 2000-2022 Bill Increase Comparison
(165 Gallons per Day)



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

The U.S. city average is based on the water and sewerage maintenance component of the Consumer Price Index for Urban Wage Earners and Clerical Workers, not seasonally adjusted, from the U.S. Bureau of Labor Statistics (www.bls.gov). Values for July of each fiscal year (i.e., July 2021 = FY 2022).

WATER AND SEWER BILL COMPARISONS (Continued)

Electric and Cell Phone Service Bill Comparison

Another useful comparison is looking at the cost of other utility or utility-like services. Two such services for which there is readily available data from government sources are electric services and cell phone service. The most recent year for which data are available for all three services (electricity, cell phone and WSSC Water services) is 2020. The data show that in 2020 the average cost of electricity from the two primary providers in Montgomery and Prince George's Counties, Baltimore Gas and Electric Company (BGE) and Potomac Electric Power Company (PEPCO), was approximately \$114 per month. For cell phone service, the 2020 data for the South Census Region, which includes the State of Maryland, has a monthly cost of about \$106. The average monthly cost of water and sewer services from WSSC Water, based on a three-person household using FY 2020 rates and fees, was only about \$73 in comparison. This means that the monthly cost of water and sewer was only around 64% of the cost of electricity and 68% of the cost of cell phone service in 2020.

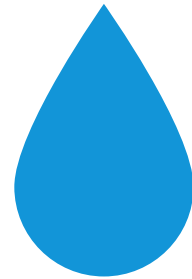
In 2020, the average household spent per month...



\$114
on electricity from
BGE and PEPCO



\$106
on cell phone
service



\$73
on water and sewer
services from WSSC
Water

Electric sales, revenue and average price data from the U.S. Energy Information Administration (www.eia.gov), 2020 Electricity Reports.

Cellular phone service expenditures from the U.S. Bureau of Labor Statistics (www.bls.gov), Consumer Expenditure Survey, September 2021.

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

SECTION 4

SPENDING AFFORDABILITY AND LONG-RANGE

FINANCIAL PLAN

SPENDING AFFORDABILITY AND LONG-RANGE FINANCIAL PLAN

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

Each year, the spending affordability process focuses debate, analysis and evaluation on balancing affordability considerations against the provision of resources necessary to serve existing customers (including infrastructure replacement/rehabilitation), meet environmental mandates and maintain operating and capital budgets and debt service at prudent and sustainable levels.

The FY 2023 Spending Affordability Guidelines (SAG) rate increase recommended by the two County Councils is 6.5% for both water and sewer volumetric and ready-to-serve charges. The agency prepared the preliminary proposed budget based on the 7.0% water and sewer rate increase that exceeds the recommended limits established by both the Counties to limit the extent the operating budget reductions will have on services. The FY 2023 Approved Budget is based on the 6.5% average water and sewer rate increase to the volumetric and ready-to-serve charges.

A long-range financial plan (the 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 2023 SAG process.

- Fund Balance – It was assumed for the purpose of preparing the FY 2023 Approved Budget that, at the end of FY 2022, accumulated net revenues for the water and sewer operating funds would total \$166.2 million. For FY 2023, the total water and sewer operating revenues are \$857.9 million; therefore, at least \$128.7 million will be held in accumulated net revenues in adherence to WSSC Water's 15% reserve policy (see Fiscal Guidelines page 6-1). The budgeted accumulated net revenue of \$182.5 million exceeds the reserve target and is 21.3% of the total operating revenues.
- Revenues – The estimated FY 2023 revenues from water consumption and sewer use charges are \$334.6 million and \$411.9 million, respectively. Water production is assumed to be 163.0 million gallons per day (MGD) in FY 2023 and water consumption is projected to decrease from 125.5 MGD in FY 2022 to 124.5 MGD in FY 2023.
- 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 2023 Capital Budget is \$604.8 million.
- Debt Service – The debt service estimates for FY 2023 assume that \$155.6 million in Water Supply bonds and \$203.2 million in Sewage Disposal bonds will be issued in FY 2023, 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 2023, \$4.0 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 – Ten additional authorized workyears are included. A marker is included for salary enhancements in the FY 2023 budget.

MAJOR ASSUMPTIONS, WORKLOAD INDICES AND DEMAND PROJECTIONS (Continued)

The following table presents data used during the SAG process to develop the FY 2023 Approved Budget.

Workload Data	Actual					Projected	
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Water and Sewer Combined Rate Increase (%)	3.0	3.5	4.5	5.0	6.0	5.9	6.5
Population to be Served (000s)*	1,785	1,777	1,801	1,910	1,915	1,920	1,926
Customer Accounts (000s): **	460	460	461	464	467	475	475
Residential (%)	95.6	95.7	95.5	95.4	95.4	95.4	95.4
Commercial and Industrial (%)	3.7	3.7	3.7	3.8	3.7	3.7	3.7
Government and Other (%)	0.7	0.6	0.8	0.8	0.9	0.9	0.9
Water Program:							
Water Production (Average MGD)	163.1	163.9	161.7	162.6	162.8	163.0	163.0
Water Consumption (Average MGD)	130.5	126.6	123.2	128.6	126.4	125.5	124.5
Water Mains Maintained (Miles)	5,647	5,768	5,816	5,844	5,869	5,900	6,000
Water House Connections Maintained (000s)	461	465	469	471	473	476	479
Sewer Program:							
Sewage Treated (Average MGD)	179.0	172.8	218.7	188.3	204.1	192.1	196.9
Sewer Use (Average MGD)	118.6	116.3	113.3	116.0	114.6	113.7	112.7
Sewer Mains Maintained (Miles)	5,549	5,578	5,604	5,624	5,615	5,620	5,700
Sewer House Connections Maintained (000s)	435	438	441	443	445	447	449
House Connections added:							
Water	3,498	2,931	3,480	2,410	2,553	2,700	2,700
Sewer	2,997	2,500	3,152	1,868	1,869	2,100	2,100
New Water & Sewer Bond & Notes Debt Issues (\$ in millions)	455	459	390	234	350	350	359
Average Annual Interest Rate for New Bond Issuance (%)	3.6	3.3	3.6	2.6	2.0	2.3	4.0

* FY 2020 population served is based on the decennial census which is conducted by the U.S. Census Bureau every 10-years.

** Beginning FY 2020, the data source for the customer accounts is based on the Customer-to-Meter (C2M) billing system.

PENSION OBLIGATIONS AND OTHER UNFUNDED LIABILITY

WSSC Water makes continued funding contributions as part of its operating budget planning to remedy unfunded liabilities. While these liabilities will continue to persist over the long-term, WSSC Water's management is committed to making substantial forward progress in addressing these liabilities as part of our long-term financial plan, while balancing such need within the context of actuarial review, reasonableness, and affordability. If market and/or actuarial changes reflect a need for more strict and rapid progress in addressing these liabilities, WSSC Water management will consider appropriate action and make course changes as necessary.

Pension

Benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Pension costs are impacted by fluctuations in the market affecting actual and projected investment income and related deferred outflows or inflows. Investment activities are reported as non-operating revenues, therefore pension costs are allocated amongst operating and non-operating costs and/or revenues.

WSSC Water's net pension liability as of December 2020 is \$121,613,000 and the net pension liability is 11.9% of the total pension liability. The actuarial assumptions for pension are: 2.5% inflation factor, 2.75% - 7.5% salary increase, and 7% investment rate of return.

Other Post-Employment Benefits (OPEB)

WSSC Water employees are eligible to continue group insurance coverage after retirement provided that retiring employees have had coverage in effect for two years prior to retirement.

WSSC Water's net OPEB liability as of December 2020 is \$85,245,000 and net OPEB liability is 32.1% of the total OPEB liability. The actuarial assumptions for OPEB are: 2.5% inflation factor, a salary increase, and 7% investment rate of return.

More information can be found within WSSC Water's Annual Financial Report or on our website at the following <https://wsscwater.com/financereports>.

LONG-RANGE FINANCIAL PLAN FOR WATER AND SEWER OPERATING FUNDS

(\$ in thousands)	FY 2022 Approved	FY 2023 Approved	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected	FY 2028 Projected
New Water and Sewer Debt Issues	\$ 409,704	\$ 358,840	\$ 380,883	\$ 382,820	\$ 390,730	\$ 362,710	\$ 320,000
Water and Sewer Combined Rate Increase (Average)	5.9 %	6.5 %	8.5 %	6.0 %	4.0 %	4.0 %	4.0 %
Operating Revenues							
Consumption Charges	\$ 717,803	\$ 746,450	\$ 809,905	\$ 859,581	\$ 895,142	\$ 932,200	\$ 970,795
Account Maintenance Fees (AMF)	31,866	33,887	36,767	38,973	40,532	42,154	43,840
Infrastructure Investment Fees (IIF)	38,808	41,290	44,800	47,488	49,387	51,363	53,417
Plumbing and Inspection Fees	14,350	16,780	17,283	17,802	18,336	18,886	19,453
Rockville Sewer Use	3,100	3,100	3,100	3,100	3,100	3,100	3,100
Miscellaneous	21,600	19,000	19,190	19,382	19,576	19,771	19,969
Interest Income	1,000	2,800	2,800	2,800	2,800	2,800	2,800
Uncollectable	-	(6,000)	(6,000)	(6,000)	(6,000)	(6,000)	(6,000)
Cost Sharing Reimbursement	-	635	514	80	5,857	5,857	154
Total Operating Revenues	\$ 828,527	\$ 857,942	\$ 928,359	\$ 983,206	\$ 1,028,730	\$ 1,070,131	\$ 1,107,528
Other Credits and Transfers							
Reconstruction Debt Service Offset	6,000	4,000	2,000	-	-	-	-
SDC Debt Service Offset	5,772	5,772	5,772	5,772	5,772	5,748	5,748
Premium Transfer	-	2,500	-	-	-	-	-
Underwriters Discount Transfer	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total Funds Available	\$ 842,299	\$ 872,214	\$ 938,131	\$ 990,978	\$ 1,036,502	\$ 1,077,879	\$ 1,115,276
Operating Expenses							
Salaries & Wages	133,039	133,765	139,784	146,075	152,648	159,517	166,696
Heat, Light & Power	18,493	18,817	19,570	18,776	18,015	18,861	19,522
Regional Sewage Disposal	59,160	60,343	61,550	62,781	64,037	65,317	66,624
All Other	294,977	290,160	295,668	300,779	317,570	323,728	319,394
Total Operating Expenses	\$ 505,669	\$ 503,085	\$ 516,572	\$ 528,411	\$ 552,270	\$ 567,423	\$ 572,236
Debt Service							
Bonds and Notes Principal and Interest	309,045	321,844	340,585	370,973	395,080	416,747	436,037
Other Transfers and Adjustments							
Additional and Reinstated	-	-	-	-	(5,000)	(7,500)	(7,500)
PAYGO	27,585	31,016	44,000	65,000	80,000	80,000	100,000
Total Expenses	\$ 842,299	\$ 855,945	\$ 901,157	\$ 964,384	\$ 1,022,350	\$ 1,056,670	\$ 1,100,773
Net Revenue (Loss)	\$ -	\$ 16,269	\$ 36,974	\$ 26,594	\$ 14,152	\$ 21,209	\$ 14,503
Beginning Fund Balance - July 1	\$ 168,897	\$ 166,179	\$ 182,448	\$ 219,422	\$ 246,016	\$ 260,168	\$ 281,377
Net Increase (Decrease) in Fund Balance	-	16,269	36,974	26,594	14,152	21,209	14,503
Adjustments	(2,718)	-	-	-	-	-	-
Ending Fund Balance - June 30	\$ 166,179	\$ 182,448	\$ 219,422	\$ 246,016	\$ 260,168	\$ 281,377	\$ 295,880
Debt Service Coverage (1.10 - 1.25 is Target)	1.04	1.10	1.21	1.23	1.22	1.22	1.24
Leverage Ratio - Credit Rating Preservation (<10.0)	n/a	9.9	9.0	8.6	8.5	8.2	7.9
Debt Service as a % of Total Expenses (< 40% is Target)	36.7 %	37.6 %	37.8 %	38.5 %	38.6 %	39.4 %	39.6 %
End Fund Balance as a % of Operating Revenue (min. 15%)	20.1 %	21.3 %	23.6 %	25.0 %	25.3 %	26.3 %	26.7 %
Days Operating Reserve-on-Hand (120-150 Days is Target)	72.0	124.7	142.9	151.3	151.4	160.5	162.5
Total Workyears (All Funds)	1,786	1,796	1,796	1,796	1,796	1,796	1,796

Assumptions:

- The FYs 2024-2028 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 2023 Approved Budget. Data excludes General Construction Debt Service and General Construction Bonds.
- Leverage ratio is calculated as net adjusted debt (debt outstanding less cash and cash equivalent) to adjusted funds available for debt service (operating revenues less operating expenses excluding depreciation plus adjustments for miscellaneous revenues and expenses).
- Debt service for bonds and notes includes Maryland Water Quality Bonds and interfund debt service transfers.
- Adjustments to Consumption Charges, AMF and IIF 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.
- Beginning FY 2023, Days Operating Reserve-on-Hand target was revised to provide a more robust reserve and to align with the rating agency calculations which do not include debt service as an operating expense.
- The FY 2022 adjustments reflect FY 2022 estimated Net Revenue.

SECTION 5
EXPLANATION
OF BUDGET AND SUMMARIES

EXPLANATION OF BUDGET AND SUMMARIES

Maryland state law requires that WSSC Water prepare capital and operating budgets each fiscal year. The FY 2023 Approved 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 according to 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 hearings. A preliminary proposed budget document must be available to the public by January 15. Hearings on the WSSC Water budget are held in each County or virtually via livestream before February 15. The agency considers comments and testimony given at the public hearings before the proposed budget is transmitted to the Counties. The flow chart on page 5-3 depicts the budget and CIP process.

State law requires that WSSC Water transmit its proposed budget to the Counties by March 1 of each year. The County Councils, County Executives and their staffs review the budget and make recommendations. Both Counties must approve any amendments to the budget on or before June 1. Once the Counties' actions have been received, the agency adopts an approved budget and sets the levels for charges, fees and taxes to finance approved expenditures. The approved budget takes effect on July 1. Once the budget is adopted, total expenditures may not exceed the final total approved budget without an approved budget supplement. Budget supplements must be approved by the Montgomery and Prince George's County Councils and are transmitted to them through their respective County Executives.

Fiscal Year

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

Capital Budget & Capital Improvements Program

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

Only the debt service requirements for bond funded capital expenditures in the first budget year of the six-year CIP are included in the operating budget. By July, the General Manager submits a draft CIP to WSSC Water's Commissioners for their consideration, and work sessions are conducted to solicit input from County governments, Maryland-National Capital Park and Planning Commission and local municipality representatives. A draft proposed document is made available to the public in August and public hearings on the CIP are held in September. WSSC Water is required by state law to transmit the Proposed CIP to both County governments by October 1 of each year.

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

BUDGET FORMULATION (Continued)

Capital Budget & Capital Improvements Program (Continued)

Between January and May of the following year, each County approves, modifies or removes 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.

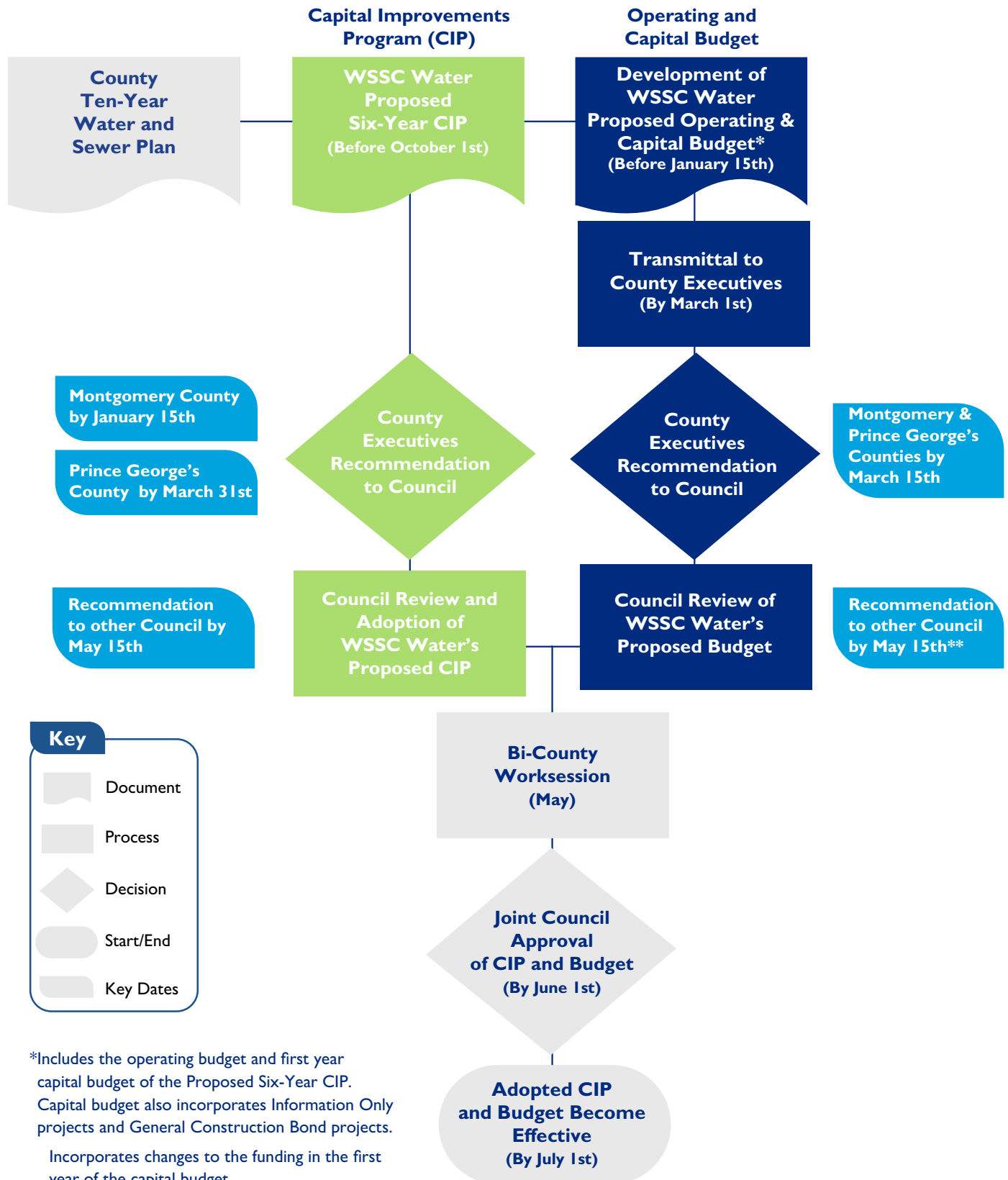
Operating Budget

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 recommended 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



FUND STRUCTURE

The budget consists of six separate funds, three in the capital budget (Water Supply Bond, Sewage Disposal Bond and General Construction Bond Funds) and three in the operating budget (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

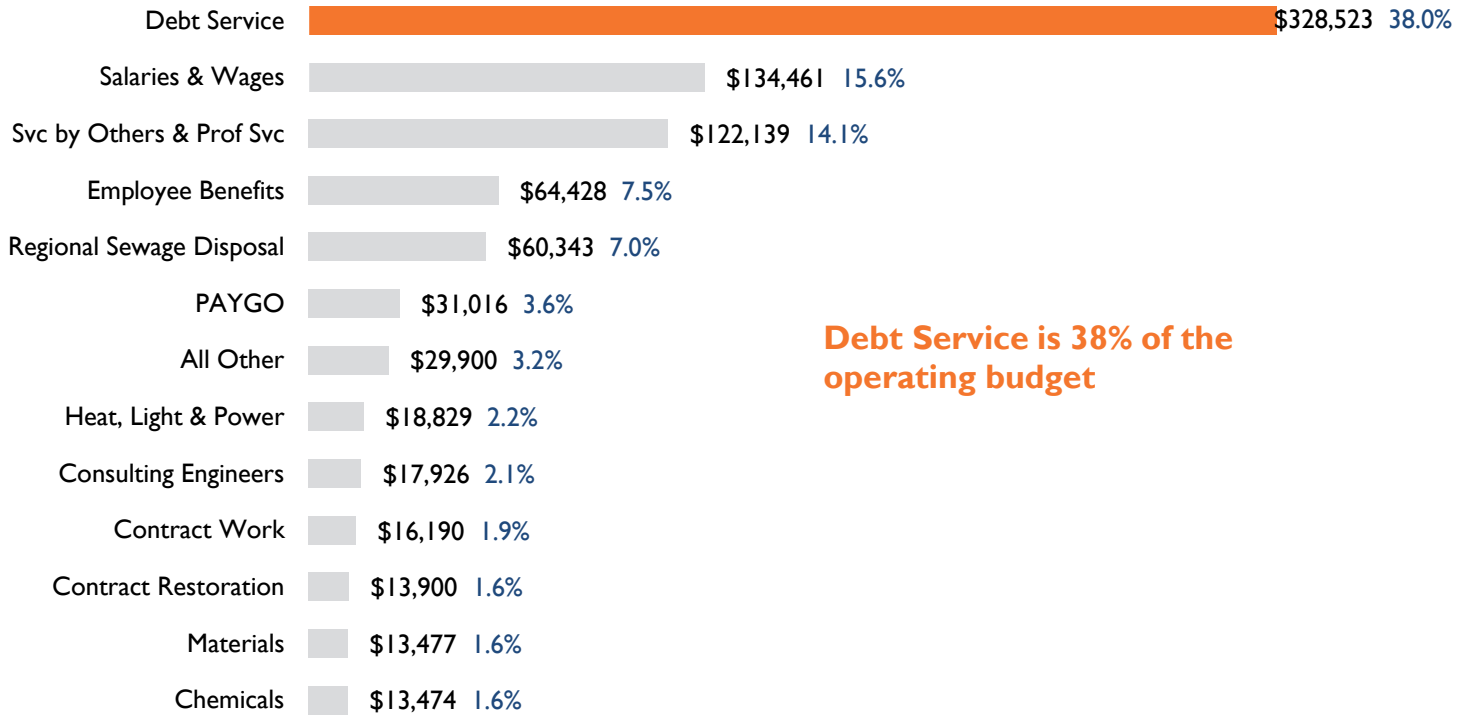
WSSC Water issues Sewage Disposal Bonds (Capital Fund), collects SDC, and receives grants to finance the planning, design and construction of major sewage disposal and treatment facilities and the reconstruction of the sewerage collection system. The facilities include sewage pumping stations and force 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 16" in diameter and sewer lines less than 15" in diameter) and support facilities. General Bond Debt Service Fund revenues - customer payments for FFBC - are used to pay the debt service on construction of minor water and sewer lines. House connection construction costs are underwritten by a direct charge to the applicant.

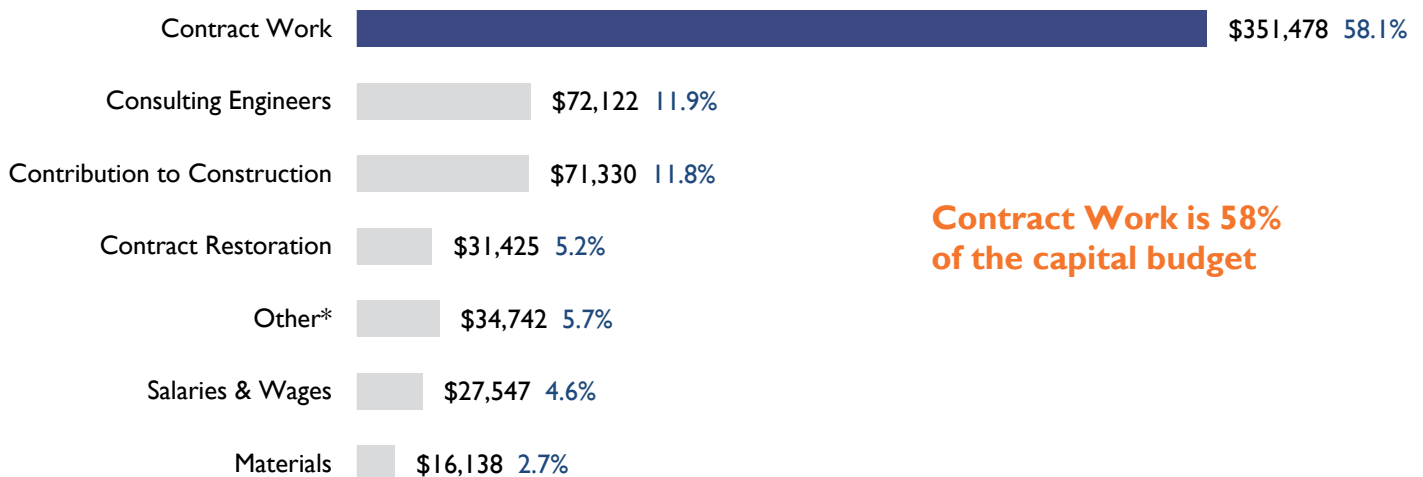
FY 2023 APPROVED BUDGET – BY MAJOR EXPENSE CATEGORIES

Total Operating Budget = \$864,606 (\$ in thousands)



Includes Water Operating, Sewer Operating and General Bond Debt Service

Total Capital Budget = \$604,782 (\$ in thousands)

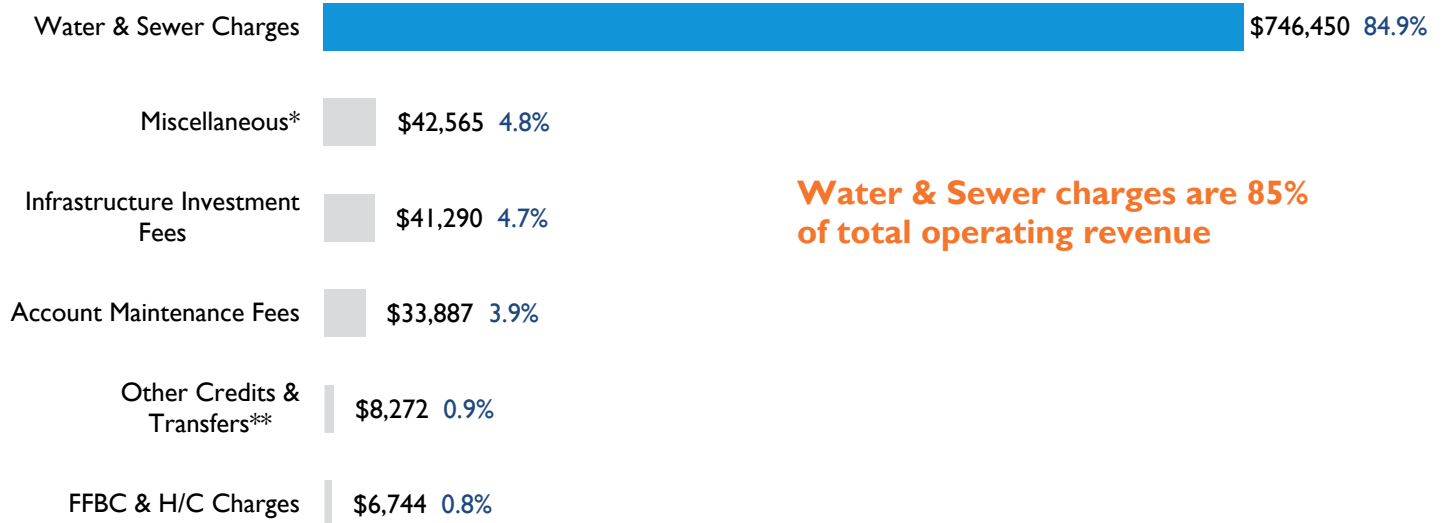


(*) Includes Land, Professional Services, Water Meters and Non-Departmental Accounts

Includes Water Supply, Sewage Disposal and General Construction Bond

FY 2023 APPROVED BUDGET – BY SOURCES

Total Operating Funding Sources = \$879,208 (\$ in thousands)

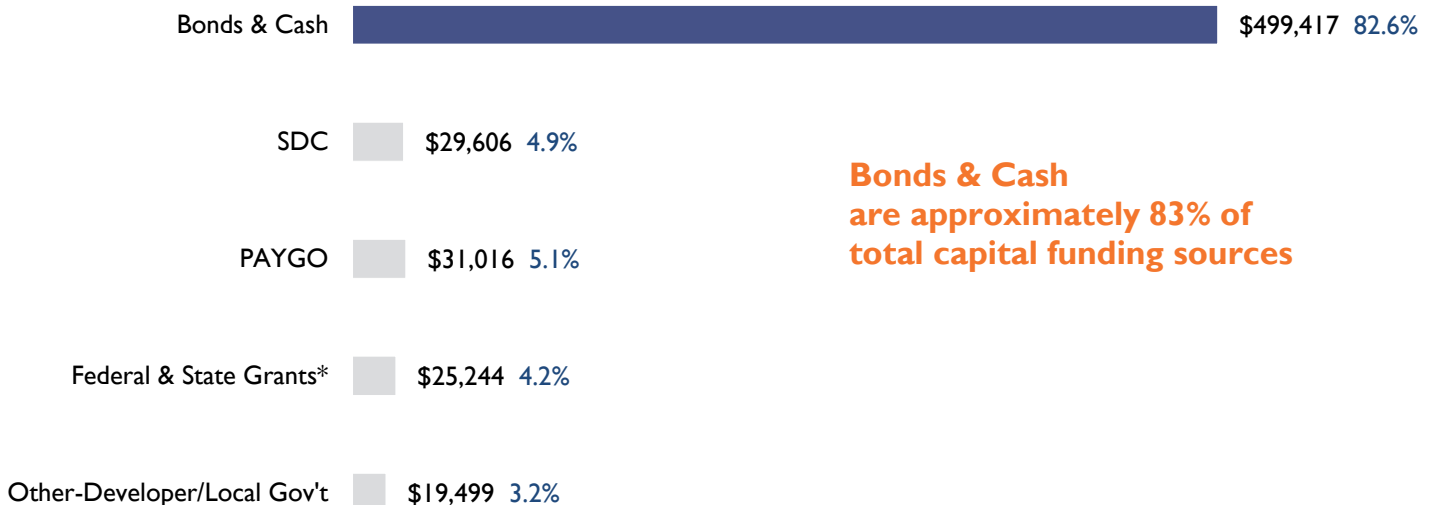


(*) Plumbing and inspection fees, Rockville sewer use, interest income and other miscellaneous fees

(**) Includes Reconstruction Debt Service Offset (REDO), SDC Debt Service Offset, Premium Transfer, Underwriters Discount and Uncollectable Revenue

Includes Water Operating, Sewer Operating and General Bond Debt Service

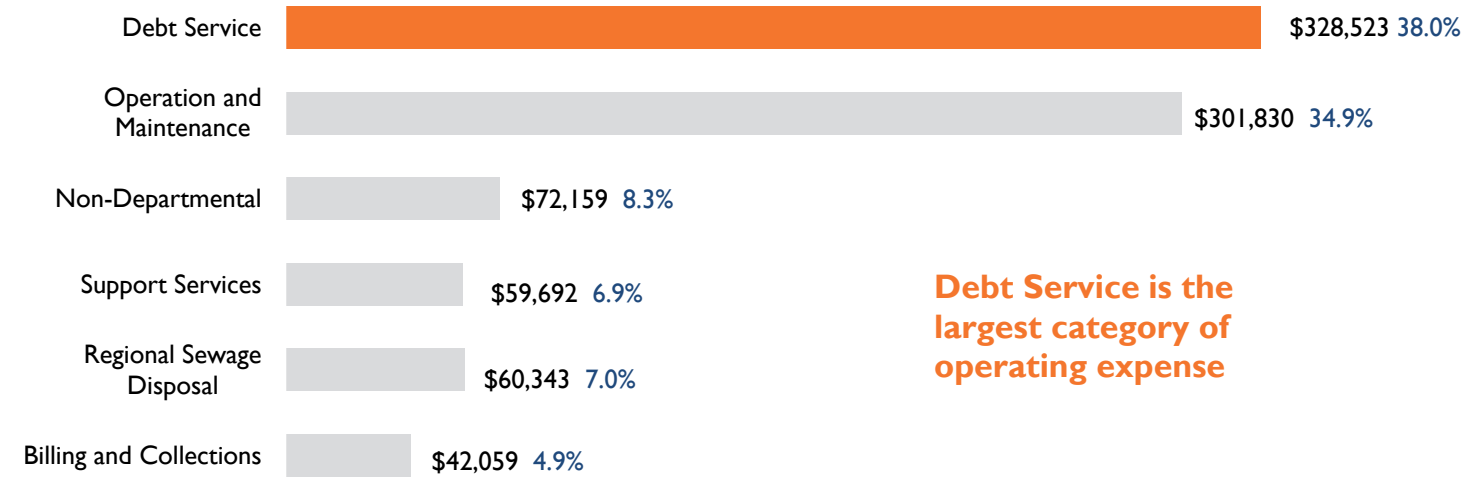
Total Capital Funding Sources = \$604,782 (\$ in thousands)



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

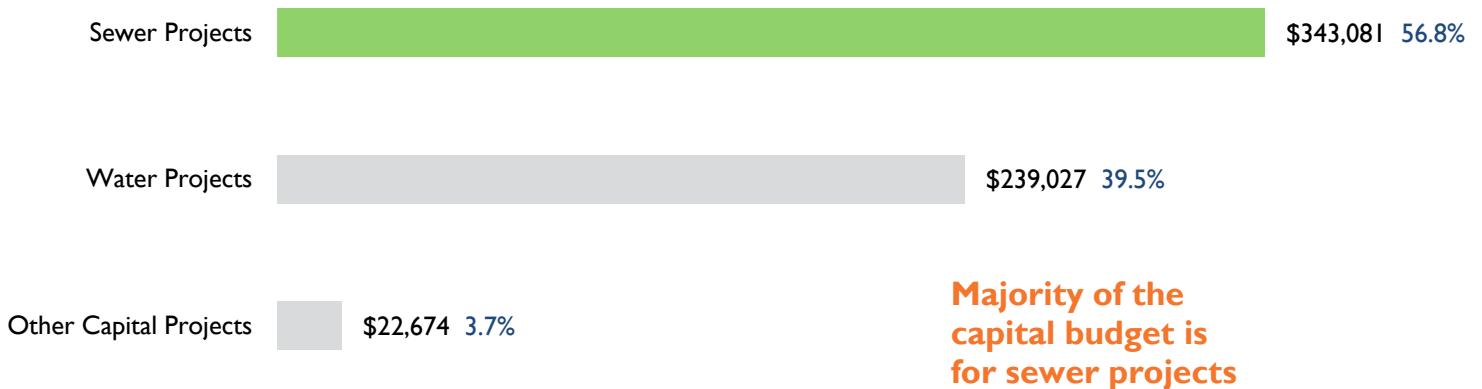
FY 2023 APPROVED BUDGET – BY FUND USES

Total Operating Uses = \$864,606 (\$ in thousands)



Includes Water Operating, Sewer Operating and General Bond Debt Service

Total Capital Uses = \$604,782 (\$ in thousands)



Includes Water Supply, Sewage Disposal and General Construction Bond

OPERATING REVENUE & EXPENSE BY MAJOR SOURCE CATEGORY & FUND TYPE

(\$ in thousands)	Water Operating		Sewer Operating		General Bond Debt Service		Total			
	FY 2022 Approved	FY 2023 Approved	FY 2022 Approved	FY 2023 Approved	FY 2022 Approved	FY 2023 Approved	FY 2022 Approved	FY 2023 Approved	% Chg	
Operating Revenues										
Water Consumption Charges	\$ 318,941	\$ 334,564	\$ -	\$ -	\$ -	\$ -	\$ 318,941	\$ 334,564	4.9 %	
Sewer Use Charges	-	-	398,862	411,886	-	-	398,862	411,886	3.3 %	
FFBC & H/C Charges	-	-	-	-	8,428	6,744	8,428	6,744	(20.0)%	
Account Maintenance Fees	16,251	17,185	15,615	16,702	-	-	31,866	33,887	6.3 %	
Infrastructure Investment Fees	19,792	20,939	19,016	20,351	-	-	38,808	41,290	6.4 %	
Plumbing & Inspection Fees	8,180	9,900	6,170	6,880	-	-	14,350	16,780	16.9 %	
Rockville Sewer Use	-	-	3,100	3,100	-	-	3,100	3,100	0.0 %	
Miscellaneous	10,200	8,900	11,400	10,100	130	160	21,730	19,160	(11.8)%	
Interest Income	500	668	500	2,132	-	90	1,000	2,890	189.0 %	
Uncollectable	-	(3,060)	-	(2,940)	-	-	-	(6,000)	100.0 %	
Cost Sharing Reimbursement	-	635	-	-	-	-	-	635	100.0 %	
Total Operating Revenues	\$ 373,864	\$ 389,731	\$ 454,663	\$ 468,211	\$ 8,558	\$ 6,994	\$ 837,085	\$ 864,936	3.3 %	
Other Credits and Transfers										
Other	-	-	-	-	6,000	4,000	6,000	4,000	(33.3)%	
REDO	3,060	2,040	2,940	1,960	(6,000)	(4,000)	-	-	0.0 %	
SDC Debt Service Offset	2,731	2,731	3,041	3,041	-	-	5,772	5,772	0.0 %	
Premium Transfer	-	703	-	1,797	-	-	-	2,500	100.0 %	
Underwriters Discount Transfer	910	872	1,090	1,128	-	-	2,000	2,000	0.0 %	
Total Funds Available	\$ 380,565	\$ 396,077	\$ 461,734	\$ 476,137	\$ 8,558	\$ 6,994	\$ 850,857	\$ 879,208	3.3 %	
Operating Expenses										
Salaries & Wages	72,834	72,596	60,205	61,169	691	696	133,730	134,461	0.5 %	
Heat, Light & Power	10,541	11,021	7,952	7,796	8	12	18,501	18,829	1.8 %	
Regional Sewage Disposal	-	-	59,160	60,343	-	-	59,160	60,343	2.0 %	
All Other	147,825	146,193	147,152	143,967	1,313	1,274	296,290	291,434	(1.6)%	
Total Operating Expenses	\$ 231,200	\$ 229,810	\$ 274,469	\$ 273,275	\$ 2,012	\$ 1,982	\$ 507,681	\$ 505,067	(0.5)%	
Debt Service										
Principal Payments	73,453	73,799	97,449	106,550	5,803	5,332	176,705	185,681	5.1 %	
Interest Payments	67,045	65,747	71,098	75,748	1,979	1,347	140,122	142,842	1.9 %	
Total Debt Service	\$ 140,498	\$ 139,546	\$ 168,547	\$ 182,298	\$ 7,782	\$ 6,679	\$ 316,827	\$ 328,523	3.7 %	
Other Transfers										
PAYGO	8,867	10,452	18,718	20,564	-	-	27,585	31,016	12.4 %	
Total Expenses	\$ 380,565	\$ 379,808	\$ 461,734	\$ 476,137	\$ 9,794	\$ 8,661	\$ 852,093	\$ 864,606	1.5 %	
Net Revenue (Loss)	\$ -	\$ 16,269	\$ -	\$ -	\$ (1,236)	\$ (1,667)	\$ (1,236)	\$ 14,602	(1,281.4)%	
Fund Balance - July 1										
Net Increase (Decrease) in Fund Balance	\$ 37,547	\$ 36,161	\$ 131,350	\$ 130,018	\$ 11,185	\$ 9,949				
Adjustments	-	16,269	-	-	(1,236)	(1,667)				
	(1,386)	-	(1,332)	-	-	-				
Fund Balance - June 30	\$ 36,161	\$ 52,430	\$ 130,018	\$ 130,018	\$ 9,949	\$ 8,282				

Assumption:

The FY 2022 adjustments reflect FY 2022 estimated Net Revenue.

CAPITAL FUNDING & EXPENSE BY MAJOR SOURCE CATEGORY & FUND TYPE

(\$ in thousands)	Water Supply Bond		Sewer Disposal Bond		General Construction Bond		Total		
	FY 2022 Approved	FY 2023 Approved	FY 2022 Approved	FY 2023 Approved	FY 2022 Approved	FY 2023 Approved	FY 2022 Approved	FY 2023 Approved	% Chg
Funds Provided									
Bonds & Notes Issues/Cash on Hand \$	251,069	\$ 202,213	\$ 329,510	\$ 274,530	\$ 27,187	\$ 22,674	\$ 607,766	\$ 499,417	(17.8) %
PAYGO	8,867	10,452	18,718	20,564	-	-	27,585	31,016	12.4 %
Anticipated Contributions:									
Federal & State Grants	4,120	4,285	20,351	20,959	-	-	24,471	25,244	3.2 %
SDC	24,718	18,264	6,611	11,342	-	-	31,329	29,606	(5.5) %
Other Contributions	2,893	3,813	9,411	15,686	290	-	12,594	19,499	54.8 %
Total Funds Provided	\$ 291,667	\$ 239,027	\$ 384,601	\$ 343,081	\$ 27,477	\$ 22,674	\$ 703,745	\$ 604,782	(14.1) %
Construction Costs									
Salaries & Wages	\$ 15,601	\$ 15,694	\$ 8,521	\$ 8,606	\$ 3,327	\$ 3,247	\$ 27,449	\$ 27,547	0.4 %
Contract Work	174,144	133,685	267,089	214,590	3,172	3,203	444,405	351,478	(20.9) %
Consulting Engineers	34,681	31,879	38,901	36,223	6,032	4,020	79,614	72,122	(9.4) %
All Other	67,241	57,769	70,090	83,662	14,946	12,204	152,277	153,635	0.9 %
Total Construction Costs	\$ 291,667	\$ 239,027	\$ 384,601	\$ 343,081	\$ 27,477	\$ 22,674	\$ 703,745	\$ 604,782	(14.1) %

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 2022	\$ 37,547	\$ 373,864	\$ (380,565)	\$ 6,701	\$ (1,386)	\$ 36,161	\$ (1,386)	(3.7) %
FY 2023	36,161	389,731	(379,808)	6,346	-	52,430	16,269	45.0 %
Sewer Operating								
FY 2022	131,350	454,663	(461,734)	7,071	(1,332)	130,018	(1,332)	(1.0) %
FY 2023	130,018	468,211	(476,137)	7,926	-	130,018	-	- %
General Bond Debt Service								
FY 2022	11,185	8,558	(9,794)	-	-	9,949	(1,236)	(11.1) %
FY 2023	9,949	6,994	(8,661)	-	-	8,282	(1,667)	(16.8) %

Operating expenses include debt service.

Explanation of Significant Changes to Fund Balance

Water and Sewer Operating Funds

The FY 2023 Approved Budget ending fund balance is higher than the projected FY 2022 ending balance for the Water Operating Fund by 45.0% or \$16.3 million with the budgeted increase in the fund balance to build up cash reserves and improve the financial metrics.

General Bond Debt Service Fund

The FY 2023 Approved Budget ending fund balance is 16.8% lower than the projected FY 2022 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 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Approved	FY 2023 Approved
Expenses					
Salaries & Wages	\$ 125,100	\$ 131,711	\$ 130,884	\$ 133,039	\$ 133,765
Heat, Light & Power	19,683	15,534	18,234	18,493	18,817
Regional Sewage Disposal	54,809	56,414	58,658	59,160	60,343
All Other	268,103	268,488	247,004	294,977	290,160
Subtotal	\$ 467,695	\$ 472,147	\$ 454,780	\$ 505,669	\$ 503,085
Debt Service					
Principal Payments	153,565	154,238	151,398	170,902	180,349
Interest Payments	121,819	125,507	130,446	138,143	141,495
Subtotal	\$ 275,384	\$ 279,745	\$ 281,844	\$ 309,045	\$ 321,844
Other Transfers					
PAYGO	15,754	-	-	27,585	31,016
Total Expenses	\$ 758,833	\$ 751,892	\$ 736,624	\$ 842,299	\$ 855,945

General Bond Debt Service Fund

(\$ in thousands)	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Approved	FY 2023 Approved
Expenses					
Salaries & Wages	\$ 751	\$ 863	\$ 915	\$ 691	\$ 696
Heat, Light & Power	-	-	7	8	12
All Other	825	852	948	1,313	1,274
Subtotal	\$ 1,576	\$ 1,715	\$ 1,870	\$ 2,012	\$ 1,982
Debt Service					
Principal Payments	13,337	9,445	7,985	5,803	5,332
Interest Payments	3,934	3,132	2,151	1,979	1,347
Subtotal	\$ 17,271	\$ 12,577	\$ 10,136	\$ 7,782	\$ 6,679
Total Expenses	\$ 18,847	\$ 14,292	\$ 12,006	\$ 9,794	\$ 8,661

Capital Budget

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

(\$ in thousands)	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Approved	FY 2023 Approved
Expenses					
Salaries & Wages	\$ 27,293	\$ 26,388	\$ 25,911	\$ 27,449	\$ 27,547
Heat, Light & Power	213	155	-	222	230
Contract Work	202,734	211,404	217,590	444,405	351,478
Consulting Engineers	51,873	44,478	42,349	79,614	72,122
All Other	104,682	111,960	141,043	152,055	153,405
Total Expenses	\$ 386,795	\$ 394,385	\$ 426,893	\$ 703,745	\$ 604,782

SECTION 6
FISCAL GUIDELINES

FISCAL GUIDELINES

This section discusses fiscal guidelines that correspond to the practices of WSSC Water with respect to revenues, expenditures and debt management. Fiscal planning, generally done within the context of the operating budget and the capital budget/Capital Improvements Program (CIP), reflects and helps shape fiscal guidelines.

FISCAL CONTROL

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

Structurally Balanced Budget

WSSC Water prepares a structurally balanced budget. Budgeted expenditures equal projected revenues from water and sewer services inclusive of recurring net transfers and any mandatory contributions to reserves for that fiscal year. Recurring revenues should fund recurring expenses with minimal reliance on non-recurring (one-time) revenues or resources. Note that for the FY 2023 Approved Budget, WSSC Water revenues appear higher than the expenditures as there is a budgeted \$16.3 million increase in reserves to improve the Days Operating Reserve-on-Hand metric.

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 is 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. In FY 2022, PAYGO was lowered to \$27.6 million due to financial challenges related to the COVID-19 savings plan, but is back to \$31.0 million in FY 2023.

Fiscal Plan

WSSC Water develops and publishes a fiscal plan and provides updated six-year projections of the operating and capital budgets - revenues and expenditures - to ensure that the agency has the best possible knowledge of the impacts of contemplated actions and emerging conditions.

Budgetary Control

Budgetary control over WSSC Water is exercised following a joint review by Montgomery County and Prince George's County governments through the annual review and approval of operating and capital budgets. WSSC Water's Budget Division administers and monitors operating and capital expenditures during the fiscal year.

FISCAL CONTROL (Continued)

Financial Management

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

Audits

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

EXPENDITURES AND ALLOCATION OF COSTS

Content of Budgets

WSSC Water will include in the operating budget all programs and facilities which are not included in the CIP. There are three major impacts of the CIP on the operating budget: debt service; PAYGO (revenues applied to the CIP for debt avoidance or for projects which are not debt-eligible); and presumed costs of operating new or expanded facilities. Details on the CIP can be found at <https://www.wsscwater.com/fin>.

Expenditure Growth

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

Spending affordability guidelines are adopted each year and include recommended limits on the amount of water and sewer 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 strategic sourcing team 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 approved 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 FY 2023 limit of \$29.82 per quarterly bill or \$119.28 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 makes available \$100,000 annually to eligible residential customers to finance up to \$5,000 for 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 a fiscal year, 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 included:

- Flat or declining water consumption revenues
- Sewer revenue reduction to re-baseline
- Compliance with consent decrees
- Aging infrastructure
- Growth in past due accounts
- Uncertainty regarding potential changes in environmental regulations

The FY 2023 Approved Budget calls for a combined 6.5% average increase to both water and sewer volumetric and ready-to-serve charges. This approved increase is in accordance to the Spending Affordability Guidelines (SAG) of 6.5% as recommended by Prince George's and Montgomery Counties' Councils. To develop a budget based on the 6.5% rate increase, \$133 million in cuts were made to the operating and capital budgets in the proposed budget and an additional \$3.9 million of operating cuts were made to achieve the Counties' Councils recommended rate of 6.5%. The current budget does support some of WSSC Water's strategic priorities, but customers will feel the impact on services.

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 included:

- 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 2023 Approved Budget. Together with the long-term guidelines discussed elsewhere in this section, the short-term guidelines described here have allowed WSSC Water to construct a fiscally responsible budget consistent with current economic and fiscal realities while achieving the agency's priorities.

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" in diameter, sewer mains at least 15" 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 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 40.0% 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) – This ratio helps assess WSSC Water's ability to pay its debt obligations. The ratio is calculated as 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.
- Leverage Ratio – This ratio helps assess WSSC Water's ability to pay its debt obligations. The ratio is calculated as net adjusted debt (debt outstanding less cash and cash equivalents) to adjusted funds available for debt service (operating revenues less operating expenses excluding depreciation plus adjustments for miscellaneous revenues and expenses). WSSC Water's target is that net adjusted debt be less than 10.0 times adjusted funds available for debt service.

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.

CIP FISCAL GUIDELINES (Continued)

Guideline on Other Forms of Debt (Continued)

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

The agency participates in the State of Maryland 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 WSSC Water, 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, WSSC Water 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, an 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 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 responsible 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.

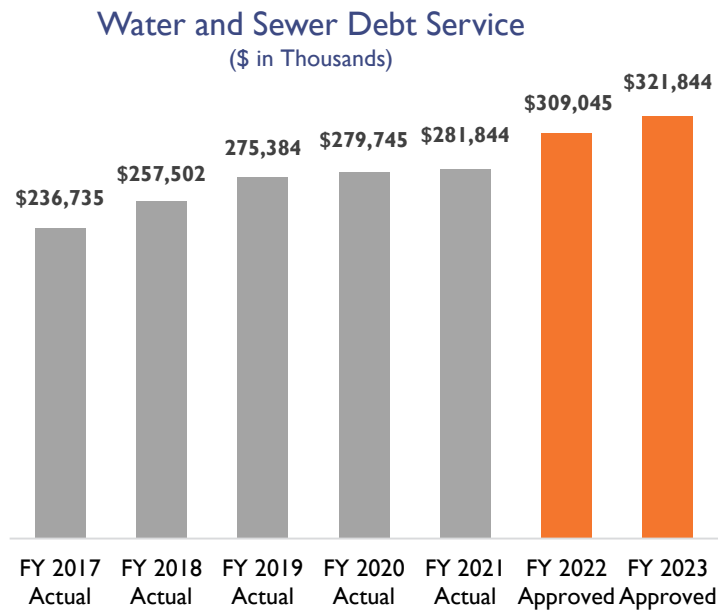
Infrastructure Investment Fee

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

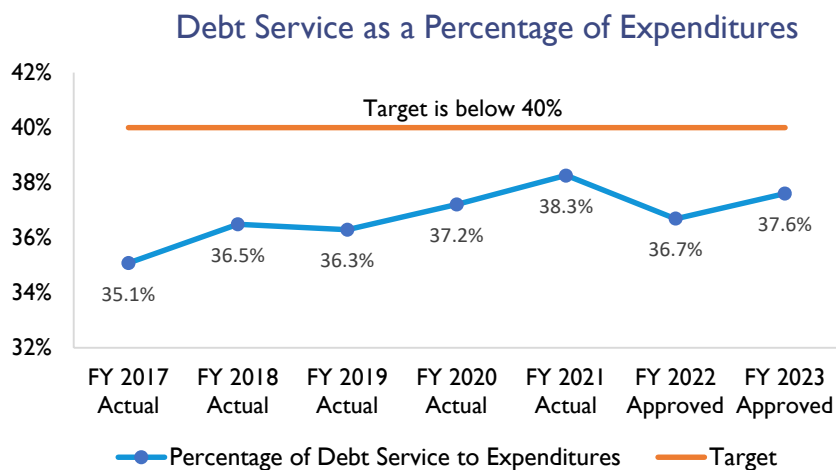
Debt Service

The largest expenditure in the FY 2023 approved water and sewer operating budget is debt service. Debt service increased by \$12.8 million from \$309.0 million in FY 2022 to \$321.8 million in FY 2023. The increase is due in part to an estimated ramp-up in expenditures associated with the Potomac Water Filtration Plant Consent Decree, eight new WSSC Water-built projects and the ramp up of Blue Plains' project. 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 about 36.8% of the FY 2023 Proposed CIP and highlights can be found in the FY 2023 to FY 2028 Proposed CIP at <https://www.wsscwater.com/fin>.



Debt Service as a Percentage of Expenditure

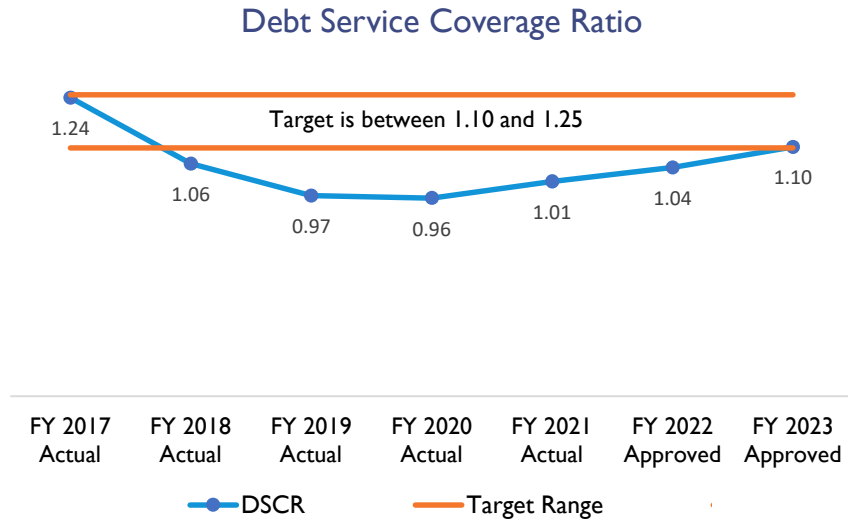
As part of the long-range financial plan, WSSC Water has a target of keeping water and sewer debt service below the targeted 40.0% of total water and sewer expenditures. The chart below shows that the agency continues to be fiscally responsible in meeting this target. For FY 2023, the approved debt service percentage is 37.6% of water and sewer operating costs.



WATER AND SEWER DEBT SERVICE GUIDELINES (Continued)

Debt Service Coverage Ratio

The Debt Service Coverage Ratio (DSCR) is an important benchmark used in the measurement of the cash flow available to pay current debt obligations. WSSC Water's target DSCR is 1.10 – 1.25. The projected ratio for FY 2023 is 1.10 which is an improvement from the FY 2022 ratio of 1.04. The improvement in the projected DSCR is achieved by budgeting \$16.3 million in cash reserves as an effort towards maintaining the AAA bond rating.



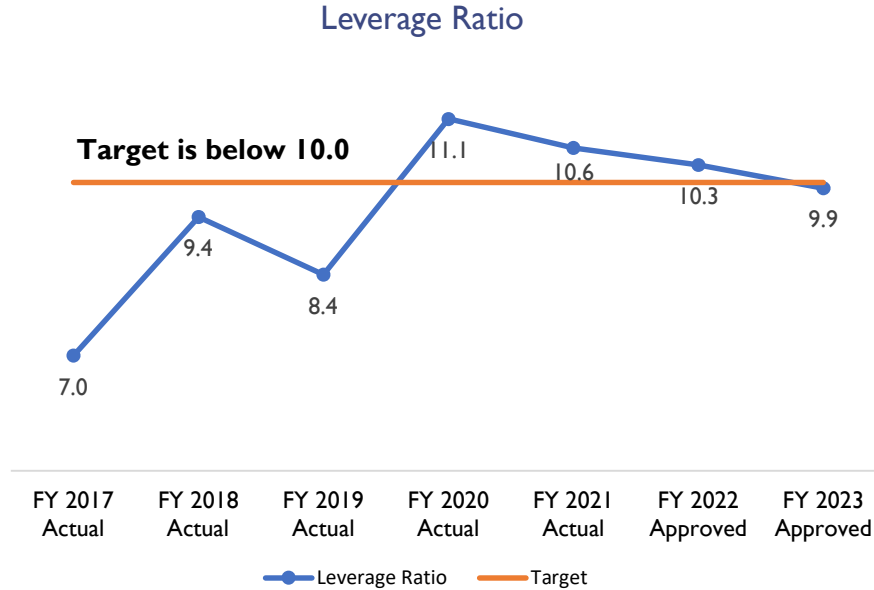
Below is the formula for calculating DSCR where Net Operating Revenue equals Operating Revenue minus Operating Expenses, excluding Debt Service and PAYGO.

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

WATER AND SEWER DEBT SERVICE GUIDELINES (Continued)

Leverage Ratio

The leverage ratio is an important financial metric for measuring the ability to pay debt obligations. Beginning FY 2023, WSSC Water included the leverage ratio as one of the metrics to the agency's long-range financial plan. WSSC Water's target for the leverage ratio is a value below 10.0. The projected ratio for FY 2023 is 9.9, which is slightly below the target. However, as shown in the chart below, the ratio has been fluctuating over the years where actuals were above the target in FY 2020 and FY 2021.



Below is the formula for calculating the leverage ratio.

$$\text{Leverage Ratio} = \frac{\text{Net Adjusted Debt}}{\text{Adjusted Funds Available for Debt Service}}$$

SECTION 7

REVENUES

REVENUES

This section provides assumptions, including discussions of the regional economy. Revenue sources used to fund WSSC Water's Fiscal Year (FY) 2023 Approved 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 2023 Approved 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.

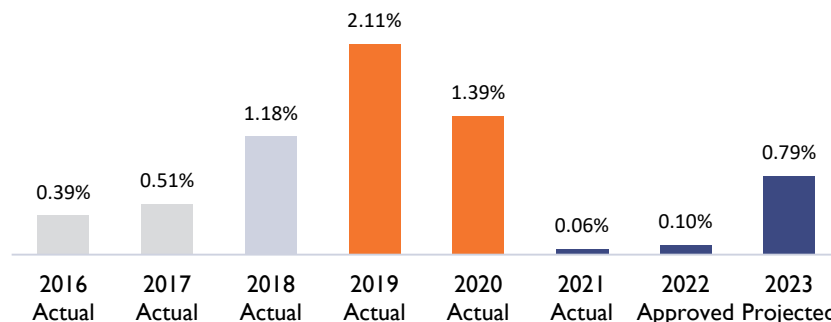
COVID-19 Impact to Assumptions

The FY 2023 Approved Operating Budget anticipates continued pressure on revenue resulting from the COVID-19 pandemic challenging customers' ability to pay utility and household expenses. Through the first half of FY 2022 WSSC Water lost approximately \$150 million in revenue due to more than 80,000 customers bill payment delinquencies. To date the agency has not received any federal, state or County financial support other than \$255,000 from the Federal Emergency Management Agency ("FEMA") as reimbursement for COVID-19 related costs. WSSC Water has required budget cuts of roughly \$150 million in FYs 2020 through 2022. Operating budget cuts of \$23.1 million and \$110.5 million of capital budget reductions are included in the FY 2023 Approved Budget across all departments, which will impact services. Additional expenditure cuts of \$3.9 million were made to the budget to achieve the 6.5% average water and sewer rate as recommended by the Counties' Councils. The FY 2023 operating budget also includes a \$6.0 million adjustment for uncollectable revenue, which is anticipated to grow in future years. To curtail the impact of revenue loss due to shift in the actual water and sewer consumption pattern from the highest rate tier to the lowest rate tier, we reduced our revenue projections by \$7.0 million in FY 2023. WSSC Water ensures protection of public health and safety by providing safe, clean and reliable water, but the budget reductions to the operations will impact the level of service.

Interest Rates

After cutting rates three times throughout 2019, the Federal Reserve Board, through its Federal Open Market Committee (FOMC), reduced rates twice in March of 2020 to address the effects of the global COVID-19 pandemic, bringing rates back to near zero. With the rampant inflation of 2021, the probability of FOMC rate increases has grown. Economists now predict interest rate hikes beginning in mid-2022 and into 2023. As a result, operating investment income is assumed to be \$2.9 million in FY 2023, a significant increase from FY 2022 Approved Budget levels. The return on WSSC Water's short-term investments highly correlate to the federal funds rate with a slight lag period.

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 may 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

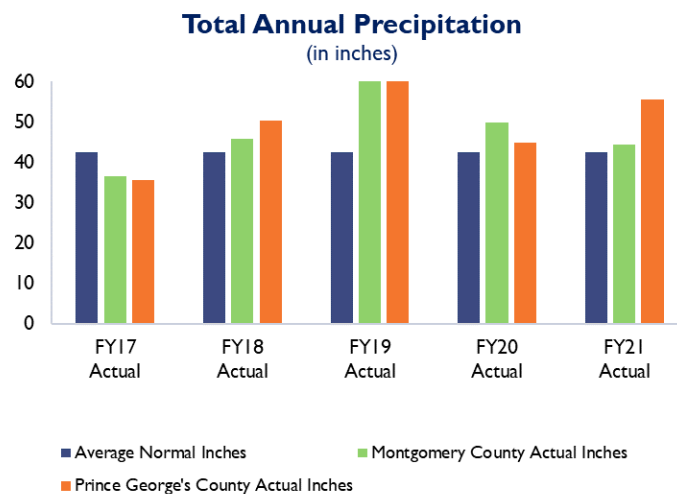
Based on both the 2020 U.S. Census and WSSC Water's research, the agency's FY 2020 population served is 1.9 million. Subsequent years are assumed to increase approximately 0.3% through FY 2023, based on historical trends.

As of June FY 2023, WSSC Water is estimated to have 475,000 customer accounts. Most accounts are residential at 95.4%, followed by commercial and industrial at 3.7%, and government and other at 0.9%.

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, customers take fewer showers and consume less drinking water because outdoor work decreases and average temperatures are lower on rainy days.

Normal annual precipitation for Montgomery County and Prince George's Counties averages 42.6". For the twelve month period through June 2021, Montgomery County received 44.4", a 11.2% decrease from the prior year, and Prince George's County received 55.7", a 24.1% increase over FY 2020. Water production increased slightly from 162.6 million gallons per day (MGD) in FY 2020 to 162.8 MGD in FY 2021.



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.

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 Maryland's economies, particularly Prince George's and Montgomery Counties, which had 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 June 2021 Prince George's County's received \$88.3 million of a total \$176.6 million in American Rescue Plan Act funds, with the remainder to be received in FY 2022, which can be used through FY 2024. In addition, Prince George's County received \$158.6 million in Coronavirus Aid, Relief and Economic Security Act (CARES) funding. Estimated revenue growth may slow due to commercial vacancy rates impacting valuation growth, thereby impacting tax revenues. The County's Approved FY 2022 budget includes a 1.3% increase over the Approved FY 2021 budget and notes the anticipated significant FY 2021 reduction in income taxes did not materialize due to the federal stimulus legislation. The County is home to vital government bureau and higher education facilities.

According to Montgomery County's FY 2021 financial statements, Montgomery County reduced FY 2021 operating and capital budget spending estimates by \$56.2 million by introducing two savings plans and implementing a hiring freeze. Montgomery County received \$183.3 million of CARES receipts for FY 2021 programs. The American Rescue Plan Act committed \$204.1 million to Montgomery County, \$102.0 million for 2021, and the remainder in 2022. Montgomery County also received \$73.3 million in federal and state funding for emergency rental assistance programs. The County's Approved FY 2022 budget includes a 2.3% increase from the Approved FY 2021 budget. The County's employment base includes the U.S. government and contractors in the information, intelligence, biotechnology and high-tech manufacturing industries.

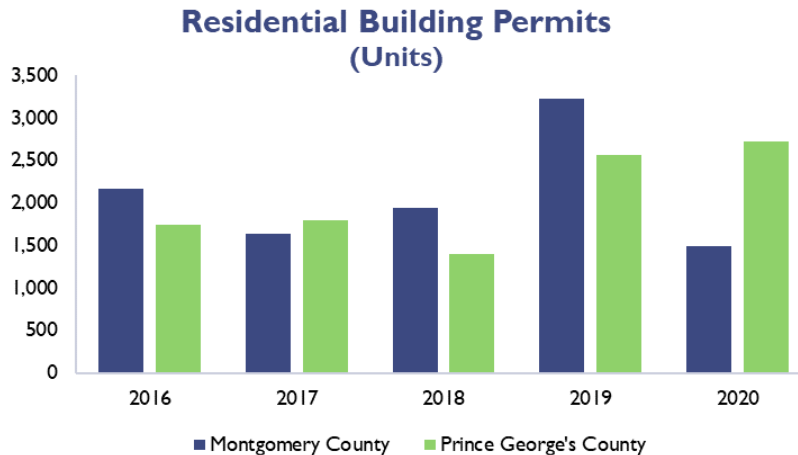
In FY 2021 the State of Maryland received more than \$341 million in FEMA reimbursements. Maryland's FY 2022 and FY 2023 budgets assumed \$80 million and \$100 million respectively in potential revenue volatility. Including the estimated revenue exposure, Maryland's FY 2022 revenues are estimated to increase \$995 million over budget, a 3.4% growth. FY 2023 revenue is estimated to increase 5.5% over FY 2022's revision.

Despite WSSC Water's approximate \$150 million in revenue losses due to over 80,000 account delinquencies and despite repeated requests for direct federal, state and County assistance, no funding has been received. The agency does anticipate receiving \$255,000 from FEMA for COVID-19 related cost reimbursements in FY 2022.

ECONOMIC OUTLOOK (Continued)

Real Estate and Construction Projects

The construction of new residential units in Montgomery County increased 65.6% in 2019 and then decreased 53.9% in 2020. The County had a 1.8% increase in median owner-occupied housing value in 2020. Prince George's County residential construction increased 82.8% in 2019 and 5.9% in 2020. Prince George's County saw increased median owner-occupied housing values of 3.1% over the prior year. Complete 2021 data is not yet available.



Large construction projects in Montgomery and Prince George's Counties also positively impact WSSC Water's revenue. The 16-mile Purple Line light rail system between Montgomery and Prince George's County is under construction. The University of Maryland Capital Region Medical Center, in Prince George's County, opened in 2021 and is the new 205 bed teaching medical center, which includes a level II trauma center, a cardiac surgery center and a neonatal intensive care unit. The 150-acre University of Maryland Discovery District continues to be developed and includes academic, research and commercial components.

Population

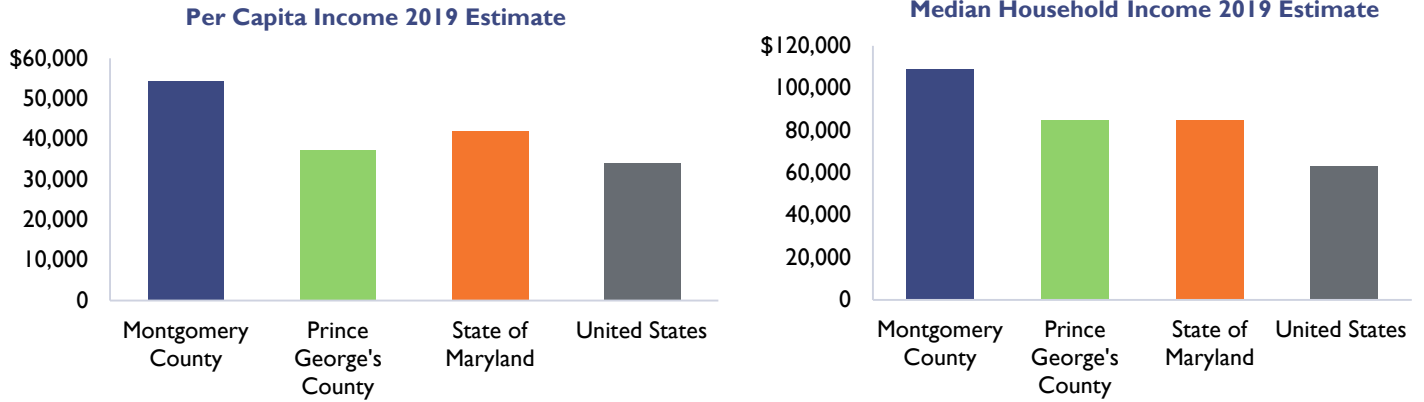
As of the spring of 2020, Montgomery County's population increased 1.1% over the prior period. During the same period Prince George's County's population grew 6.4% as compared to the overall State of Maryland growth rate of 2.2%.

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.

The data represents Census Bureau estimates for calendar year 2019, the latest year data is available. Census Bureau calendar year estimates for 2020 are not scheduled to be available until March 2022.

ECONOMIC OUTLOOK (Continued)



Employment

Montgomery County's 2020 unemployment rate grew to 6.3% from 2019's 2.9%, a direct result of the COVID-19 pandemic. The State of Maryland's 2020 unemployment rate was 6.8% versus 3.6% in 2019. As of October 2021, Montgomery County's unemployment rate has decreased to 4.7% versus Maryland's overall 5.1% rate. Montgomery County's Department of Finance forecasts continued economic improvement.

Prince George's County 2020 unemployment rate of 8.2% versus 2019's 3.7% also reflects the devastating economic impact of the pandemic. As of October 2021, the County's rate has improved to 6.4%. Prior to the COVID-19 public health crisis, Prince George's County's overall fiscal outlook was cautiously optimistic, noting the County has not yet returned to pre-recession growth rates.

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

RATEPAYER, READY-TO-SERVE AND MISCELLANEOUS REVENUES

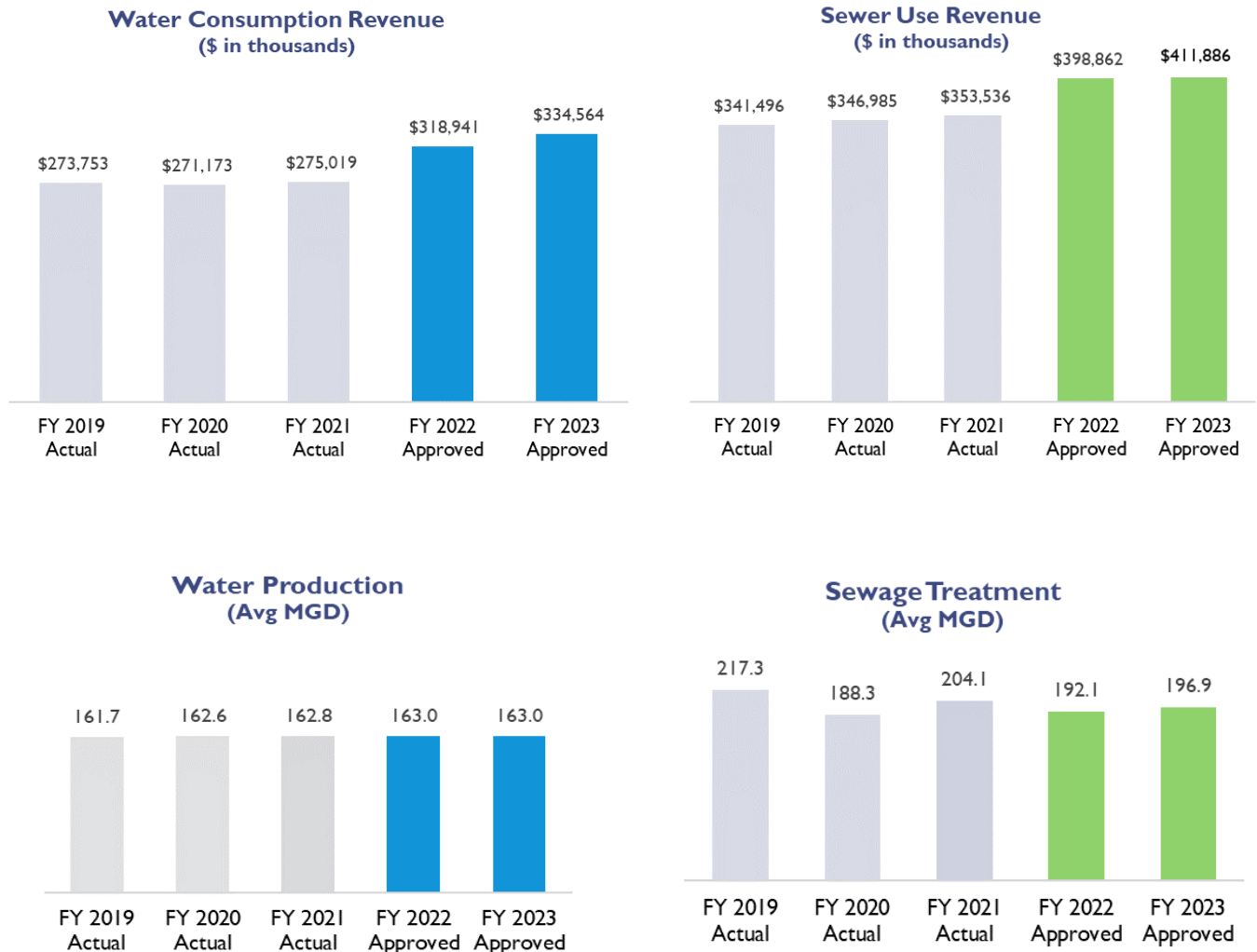
Revenues from the Water and Sewer Operating Funds are estimated at \$857.9 million in FY 2023. This is a \$29.4 million increase, or 3.5%, from the FY 2022 Approved Budget, primarily attributed to an increase in water and sewer use and ready-to-serve charges.

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 2023 water production is assumed to be 163.0 MGD and sewer treatment is projected to be 196.9 MGD.



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

Water and Sewer Consumption Revenues (Continued)

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 approved range of FY 2023 rates is \$6.10 to \$9.30 per 1,000 gallons of water consumed.

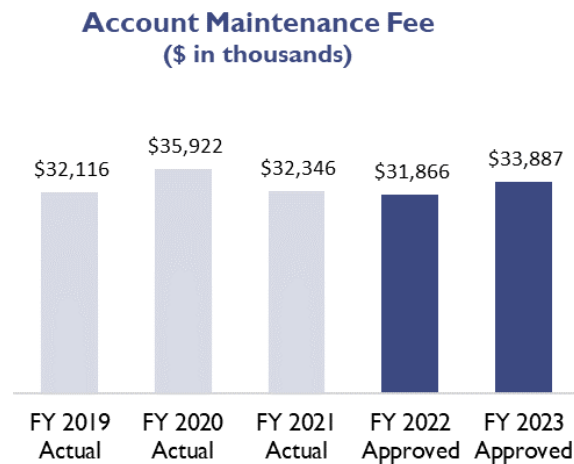
Sewer Use Charges – revenue is derived from applying an increasing rate schedule per 1,000 gallons of metered water use. The rate charged for each account is based upon the average daily water consumption during each billing period. The approved range of FY 2023 rates is \$8.11 to \$14.93 per 1,000 gallons of metered water. The approved rate for customers using sewage disposal only is a flat rate of \$142.00 per quarter.

The estimated FY 2023 revenues from water consumption and sewer use charges are \$334.6 million and \$411.9 million, respectively. A 6.5% average rate 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 2023 Approved Budget of \$33.9 million includes a 6.5% rate increase, the first increase since FY 2016.

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



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

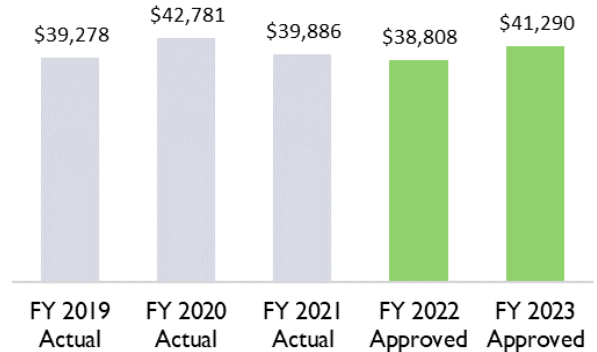
Infrastructure Investment Fee

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 held the fee at the FY 2017 level through FY 2022. The FY 2023 fee reflects the 6.5% rate increase, the first increase since FY 2017, and is based on meter size.

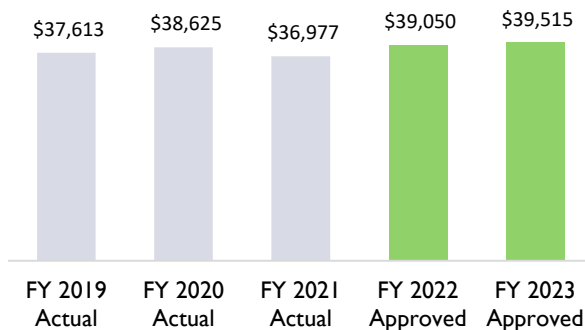
The FY 2023 Approved Budget is \$41.3 million.

Infrastructure Investment Fee (\$ in thousands)



Miscellaneous Revenues

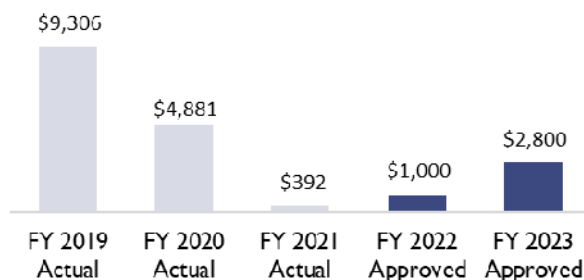
Miscellaneous Revenues (\$ in thousands)



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); sewage haulers' fees which are charged for discharging septic tank clean-out wastes into WSSC Water's sewerage system; and the Little Seneca Forebay sediment removal reimbursements.

The FY 2023 Approved Budget Miscellaneous Revenue will remain approximately the same as the FY 2022 Approved Budget, resulting in \$39.5 million in FY 2023 revenue.

Interest Income (\$ in thousands)



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 2.10% in interest income on its short-term portfolio for FY 2019 with a decrease to 1.40% in FY 2020, and a further decrease to 0.06% in FY 2021. Estimated returns for FY 2022 and FY 2023 are at 0.10% and 0.79% per annum, respectively. This assumption is based on the limited returns available in the market in FY22, with the probability of rate hikes in mid-2022 and into early-2023. As result, interest income is assumed to be approximately \$2.8 million in FY 2023.

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

The rates established each year apply mainly to the assessable properties that benefit from that year's construction. The rates cannot be increased and remain in effect during the life of the bonds issued to pay for the construction. Developers now install the water mains and sewers previously built by WSSC Water for new builds. As a result, property owners of newly developed sites do not pay FFBC to WSSC 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 2023 Approved Budget assumes that FFBC and H/C revenue will decrease approximately \$1.7 million (20.0%) from the FY 2022 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 2023 Approved 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 2023 Approved 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 2023 Approved Budget, REDO will be \$4.0 million.

REVENUE TRENDS

Water & Sewer Operating Funds - Combined

(\$ in thousands)	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Approved	FY 2023 Approved
Operating Revenues					
Water Consumption Charges	\$ 273,753	\$ 271,173	\$ 275,019	\$ 318,941	\$ 334,564
Sewer Use Charges	341,496	346,985	353,536	398,862	411,886
Account Maintenance Fees	32,116	35,922	32,346	31,866	33,887
Infrastructure Investment Fees	39,278	42,781	39,886	38,808	41,290
Plumbing & Inspection Fees	13,594	14,425	16,882	14,350	16,780
Rockville Sewer Use	3,106	3,147	3,147	3,100	3,100
Miscellaneous	20,913	21,053	16,948	21,600	19,000
Interest Income	9,306	4,881	392	1,000	2,800
Uncollectable	-	-	-	-	(6,000)
Cost Sharing Reimbursement	-	-	-	-	635
Total Operating Revenues	\$ 733,562	\$ 740,367	\$ 738,156	\$ 828,527	\$ 857,942
Other Credits and Transfers					
Use of Fund Balance	11,580	11,341	8,000	-	-
REDO	12,500	11,600	9,500	6,000	4,000
SDC Debt Service Offset	5,551	6,695	5,772	5,772	5,772
Premium Transfer	-	7,904	7,151	-	2,500
Underwriters Discount Transfer	-	-	2,000	2,000	2,000
Total Funds Available	\$ 763,193	\$ 777,907	\$ 770,579	\$ 842,299	\$ 872,214

General Bond Debt Service Fund

(\$ in thousands)	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Approved	FY 2023 Approved
Operating Revenues					
FFBC & H/C Charges	\$ 15,809	\$ 12,824	\$ 10,664	\$ 8,428	\$ 6,744
Interest Income	1,127	483	20	-	90
Miscellaneous	268	174	189	130	160
Total Operating Revenues	\$ 17,204	\$ 13,481	\$ 10,873	\$ 8,558	\$ 6,994
Other Credits and Transfers					
REDO	12,500	11,600	9,500	6,000	4,000
Use of Fund Balance	(12,500)	(11,600)	(9,500)	(6,000)	(4,000)
Total Funds Available	\$ 17,204	\$ 13,481	\$ 10,873	\$ 8,558	\$ 6,994

SECTION 8
CAPITAL BUDGET

CAPITAL BUDGET

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

CIP PROJECT DEVELOPMENT AND APPROVAL PROCESS

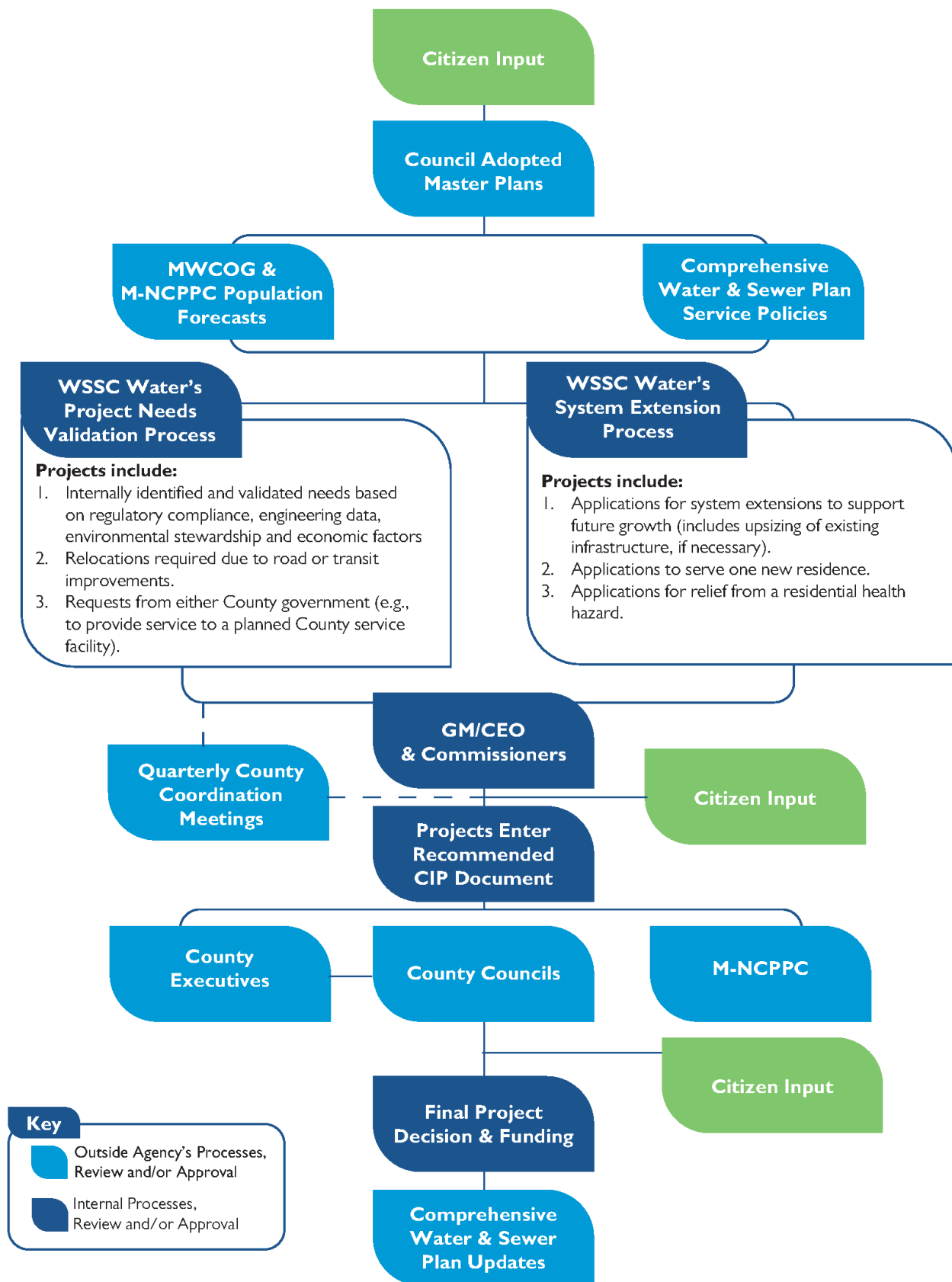
Projects are selected for inclusion in the capital budget based on our Capital Improvements Program (CIP) project development and approval process. The primary objectives of this process are to establish a sound basis for decision-making, to efficiently conduct and document specific work tasks and to successfully implement needed solutions. This is achieved by incorporating engineering data, environmental requirements, economic factors and public interaction. The guiding policy for the process is to have facilities in service when, or before, they are needed so that new development demands on the system do not result in a reduction of the level of service provided to existing customers. This policy provides for unrestricted water supply and no sewage overflows and avoids a water or sewer connection moratorium. It also requires that both the water and wastewater systems are sized to handle the peak or maximum demands, adjusted for weather-related usage. For most facilities, WSSC Water plans enough capacity to last 20 years or more. Other important goals of the process include producing a result that is acceptable to citizens, elected officials, regulatory agencies and WSSC Water at a reasonable cost and providing utility service to the type and location of development that each County governing body has approved, if economically and otherwise feasible.

The CIP project development and approval process is a combination of several internal and external processes. These component processes include the two Counties' master planning and water and sewer planning processes, WSSC Water's Project Needs Validation Process, WSSC Water's System Extension Process and the statutory approval process for the CIP. These various processes incorporate a significant amount of other outside influences and data. For example, they encompass numerous opportunities for citizen input, population forecasts from the Metropolitan Washington Council of Governments (MWCOC) and the Maryland-National Capital Park and Planning Commission (M-NCPPC) and regulatory, engineering, environmental and economic data. The overall CIP project development and approval process is shown in the diagram on the next page.

The two primary avenues through which a project may be added to the CIP are shown in the diagram and are WSSC Water's Project Needs Validation Process and WSSC Water's System Extension Process. The Project Needs Validation Process, which is overseen by WSSC Water's Asset Management Program, systematically identifies and validates the water, wastewater and support services needs of the agency, develops potential solutions to the validated needs and recommends a preferred solution. The System Extension Process addresses projects undertaken by applicants to support future growth, serve one new residence or provide relief from a residential health hazard. Projects may also be included in the CIP in response to relocation requirements due to road or transit improvements, at the request of either County government (e.g., to provide service to a planned County service facility) or when an existing project is split either at the request of the applicant or for administrative reasons (e.g., to afford better project management or to provide greater clarity to the reader). As shown in the process diagram, relocation and County driven projects are generally processed through the Project Needs Validation Process for consistency and transparency.

Additional information about the CIP project development and approval process is provided in the CIP document available through our Communications & Community Relations Office and on our website at <https://www.wsscwater.com/fin>.

CIP PROJECT DEVELOPMENT AND APPROVAL PROCESS (Continued)



EXPENSE CATEGORIES

The WSSC Water capital budget is comprised of two main expenditure categories: CIP projects 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

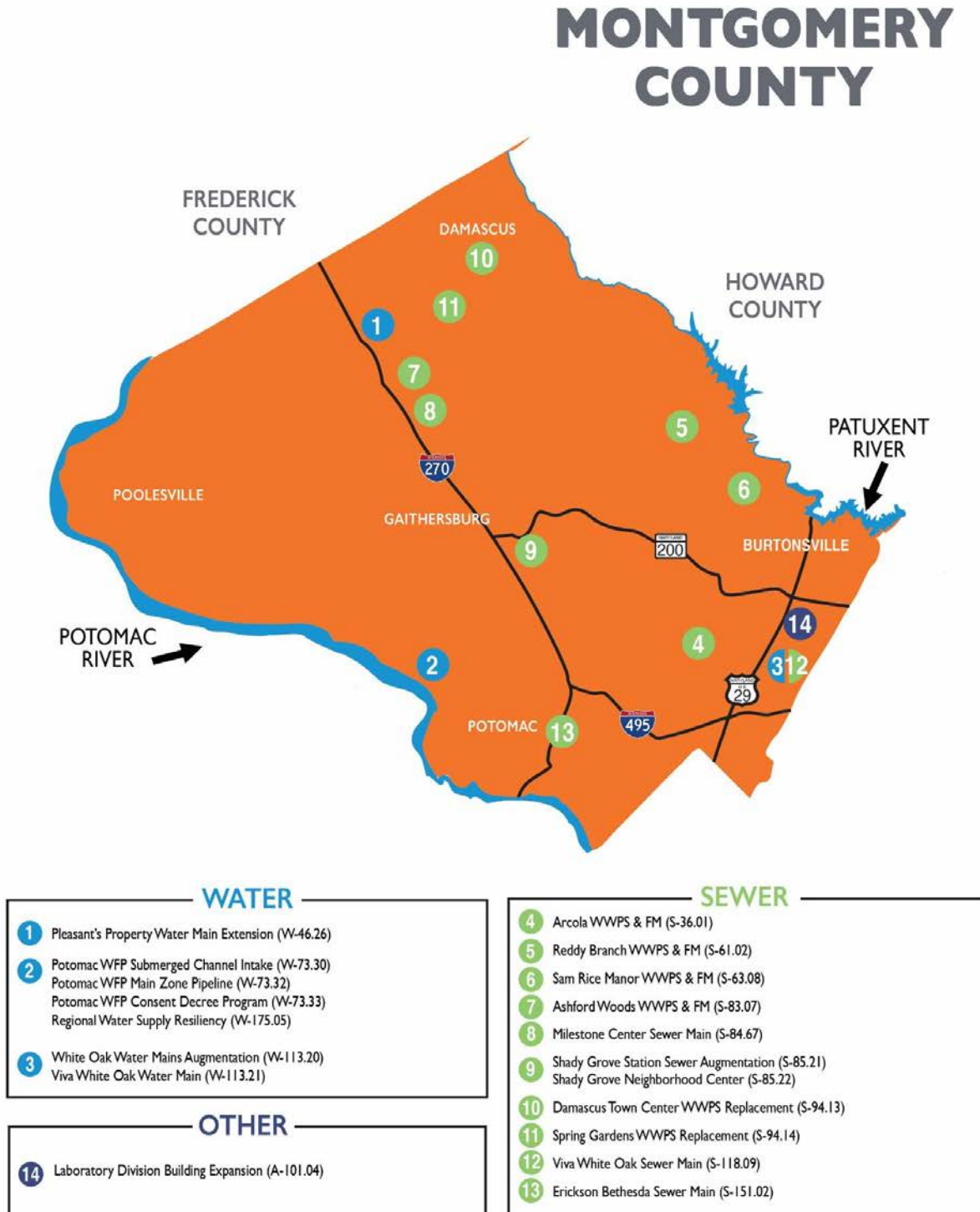
The total Fiscal Year (FY) 2023 Approved Capital Budget is \$604.8 million. This is comprised of \$413.5 million in CIP projects, \$212.0 million in Information Only projects and an adjustment of \$19.3 million to account for expenditures funded via developer contributions for projects with a signed System Extension Permit (SEP). Additional reductions of \$1.5 million were applied to the FY 2023 Approved Budget as part of the amendments to the budget. The FY 2023 Approved Capital Budget is \$98.7 million lower than the FY 2022 Approved Capital Budget. The decrease is driven by \$110.5 million in reductions to the FY 2023 Proposed Capital Budget required due to budget constraints and to respond to the concerns raised by the bond rating agencies. Key changes leading to the decrease are as follows:

- Reductions of approximately \$27.7 million to the Water Reconstruction Program in FY 2023
- Reductions of approximately \$18.6 million to the Large Diameter Water Pipe & Large Valve Rehabilitation Program in FY 2023
- Deferral of 2 water supply projects in Prince George's County for one year, totaling approximately \$37.0 million in reductions
- Deferral of the Septage Discharge Facility Planning & Implementation project for one year, totaling approximately \$13.0 million in reductions
- Reductions of approximately \$5.7 million to the Engineering Support Program in FY 2023
- Reductions of approximately \$5.2 million to the Other Capital Programs in FY 2023
- Deferral of 7 wastewater pumping station (WWPS) and force main (FM) projects for one year, totaling approximately \$2.0 million in reductions
- Deferral of the Anacostia Depot Reconfiguration project for one year, totaling approximately \$1.3 million in reductions

(\$ in thousands)	FY 2022 Approved	FY 2023 Approved
Capital Improvements Program:		
Montgomery County Water	\$ 2,864	\$ 2,621
Prince George's County Water	62,481	26,925
Bi-County Water	87,972	104,105
Montgomery County Sewer	8,512	4,242
Prince George's County Sewer	70,103	57,000
Bi-County Sewer	234,947	218,559
Total Capital Improvements Program	\$ 466,879	\$ 413,452
Information Only:		
Water Reconstruction Program	83,563	71,611
Sewer Reconstruction Program	71,083	50,540
Anacostia Depot Reconfiguration	-	-
Laboratory Division Building Expansion	9,482	12,320
RGH Building Upgrades	-	1,100
Engineering Support Program	18,000	12,301
Energy Performance Program	3,576	5,717
Water Storage Facility Rehabilitation Program	3,000	4,000
Specialty Valve Vault Rehabilitation Program	2,252	1,691
Other Capital Programs	53,738	52,473
D'Arcy Park North Relief Sewer	290	290
Total Information Only	\$ 244,984	\$ 212,043
Total Capital Expenses	\$ 711,863	\$ 625,495
Adjustment for Developer Contributions	(8,118)	(19,252)
Capital Reductions to the Approved Budget	-	(1,461)
Total Capital Budget	\$ 703,745	\$ 604,782

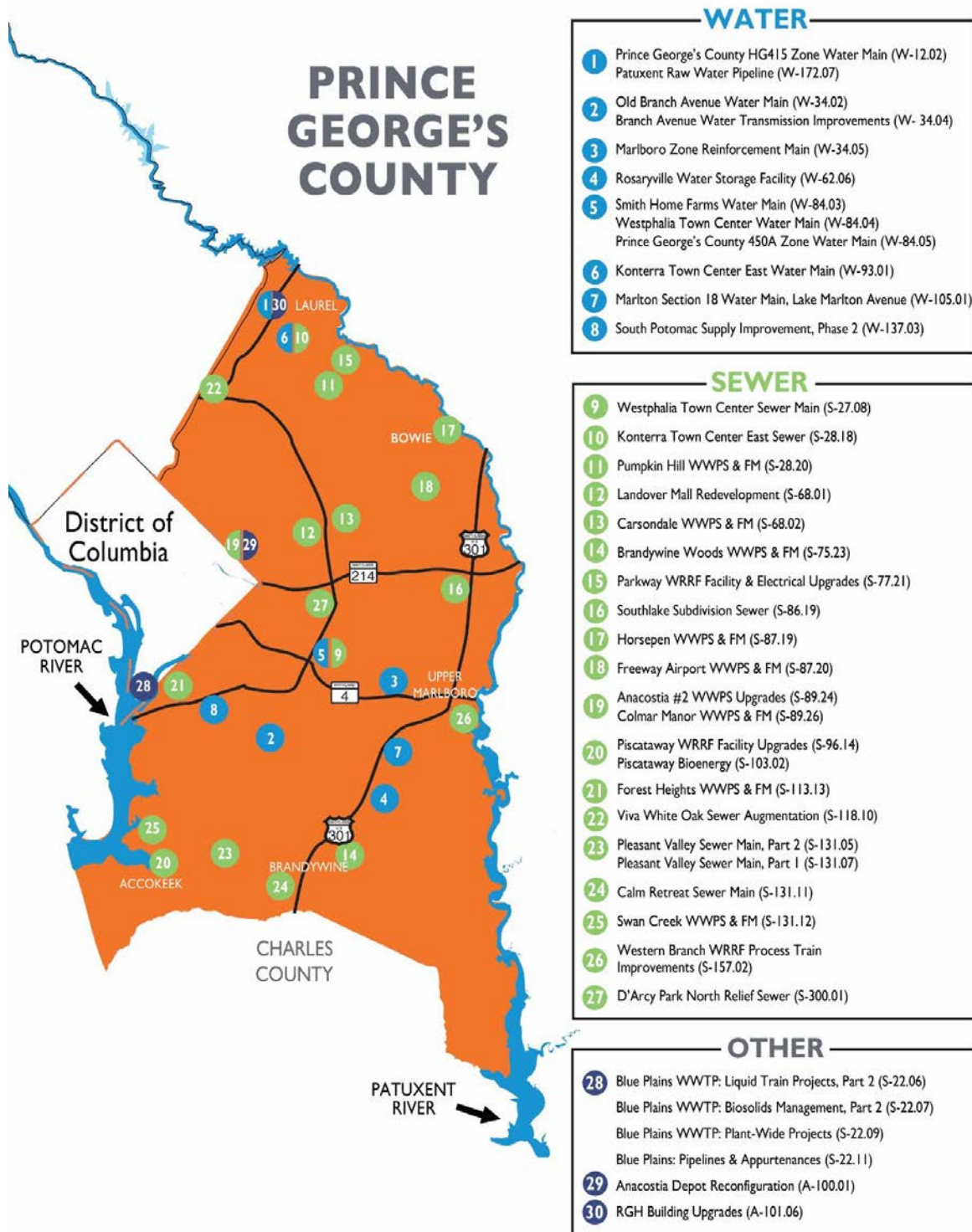
MAP OF PROJECTS IN MONTGOMERY COUNTY

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 four 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 2023 Approved Capital Budget. All five of the highlighted projects 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.

Potomac Water Filtration Plant Consent Decree Program



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

The total estimated cost for the Potomac WFP Consent Decree Program is \$182.3 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 on our website at <https://www.wsscwater.com/greenbond>.

Trunk Sewer Reconstruction Program

The Trunk Sewer Reconstruction Program provides for the planning, design and construction required for the rehabilitation of sewer mains and their associated manholes in environmentally sensitive areas (ESAs). This includes both trunk sewers 15" in diameter and greater, along with associated smaller diameter pipe less than 15" in diameter. The smaller diameter pipe is included due to its location within an ESA. The program also includes planning, design and construction for the prioritized replacement of force mains.

The reconstruction work performed under this program includes reduction of infiltration and inflow, replacement of substandard sewer pipes, lining of sewer pipes, pipeline and manhole protection, rebuilding of manholes and correction of structural defects and poor alignment. The reconstruction work in each sewer basin will be prioritized to most effectively prevent sanitary sewer overflows (SSOs) and backups. This program, in combination with the Sewer Reconstruction Program, addresses the terms of the SSO Consent Decree between WSSC Water, the Maryland Department of the Environment (MDE) and the U.S. Environmental Protection Agency, which was entered into on December 7, 2005.



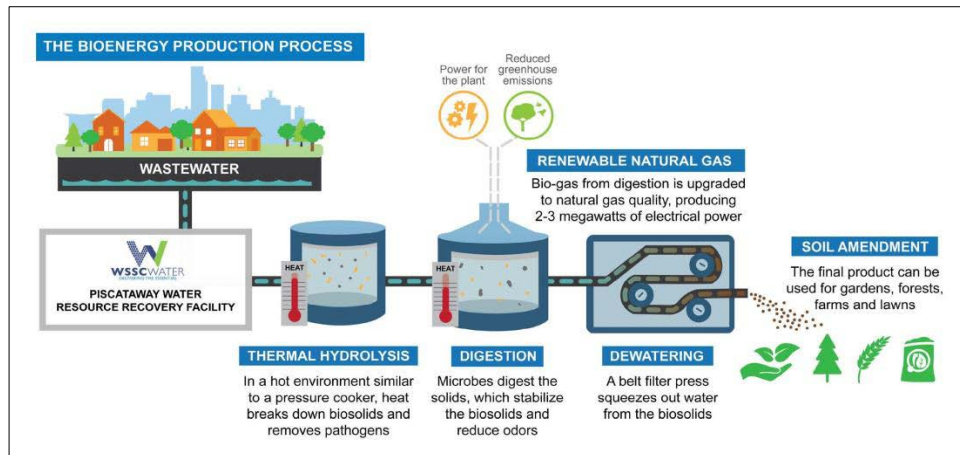
The estimated cost for this program in FY 2023 is \$56.9 million and the total costs over the six-year planning period for the CIP is \$289.2 million. This is an ongoing program and expenditures are expected to continue indefinitely. The work plan and expenditure schedule for the program are updated annually based upon the most recent recommendations from WSSC Water's Asset Management Program.

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 \$333.3 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 complete. Phase Two, the construction of the new facility, began in the summer of 2020. Preliminary start-up and testing are planned for spring 2023 and the entire project is expected to be complete and operational in 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.



HIGHLIGHTED PROJECTS (Continued)

Laboratory Division Building Expansion



The Laboratory Division Building Expansion project provides for the planning, design and construction of a 19,720 square-foot expansion to the Consolidated Laboratory Facility (CLF) at an estimated cost of \$27.3 million. The expansion is necessary to accommodate the increased analytical workload, ensure that all data meets requirements set forth by the regulators and to improve the safety of WSSC Water's employees and customers. The CLF is a MDE certified laboratory constructed in 2000 to meet the original laboratory program of a maximum of 500,000 tests per year. During the past 22 years, WSSC Water has experienced a significant increase in the analytical workload, number of employees and number of instruments, and also added new functions with the creation of the Water Quality Division. The historical workload of 500,000 tests per year is expected to grow to over 750,000 tests per year in the coming years.

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

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 WFP from 72 million gallons per day (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 was completed in June 2020. The Patuxent Raw Water Pipeline project is expected to be completed in FY 2025, 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" 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 began in December 2020. 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 \$30.8 million.



FUNDING SOURCES

The major funding sources for the capital budget are described in Section 6. There are three major types of funding sources for the capital budget: proceeds from bonds and other debt instruments; Pay-As-You-GO (PAYGO) financing; and grants, contributions and other funding sources.

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

Bonds and Other Debt Instruments

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

PAYGO

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

Grants, Contributions and Other Funding Sources

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

Federal Grants – an award of financial assistance from a federal agency to a recipient in support of a public policy goal, which usually includes some compliance and reporting requirements. For example, U.S. Department of Energy grants related to WSSC Water's Energy Performance Program and Piscataway Bioenergy projects to promote and develop green energy sources.

State Grants – an award of financial assistance from a state agency to a recipient in support of a public policy goal, which usually includes some compliance and reporting requirements. For example, a program for enhanced nutrient removal at existing WRRFs and for the rehabilitation of sewer mains as part of the Chesapeake Bay Program.

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

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

Contribution/Other – projects funded by applicants for growth projects where the County Councils have directed that no WSSC Water rate supported debt be used to pay for the project and other funds that do not fit in the above funding sources.

CAPITAL BUDGET FUNDING SUMMARY

The total funding for the FY 2023 Approved Capital Budget is \$604.8 million. The funding is comprised of \$500.9 million in bonds, \$31.0 million in PAYGO and \$72.9 million in grants, contributions and other funding sources. The \$98.7 million decrease from the FY 2022 Approved Capital Budget is driven by CIP projects funded with bonds, as the goal of the \$110.5 million in reductions to the FY 2023 Proposed Capital Budget was to lower the level of debt issuance in order to meet budget constraints and respond to the concerns raised by the bond rating agencies. Key changes leading to the decrease in bond funding are as follows:

- Reductions of approximately \$27.7 million to the Water Reconstruction Program in FY 2023
- Reductions of approximately \$18.6 million to the Large Diameter Water Pipe & Large Valve Rehabilitation Program in FY 2023
- Deferral of 2 water supply projects in Prince George's County for one year, totaling approximately \$37.0 million in reductions
- Deferral of the Septage Discharge Facility Planning & Implementation project for one year, totaling approximately \$13.0 million in reductions
- Reductions of approximately \$5.7 million to the Engineering Support Program in FY 2023
- Reductions of approximately \$5.2 million to the Other Capital Programs in FY 2023
- Deferral of 7 wastewater pumping station (WWPS) and force main (FM) projects for one year, totaling approximately \$2.0 million in reductions
- Deferral of the Anacostia Depot Reconfiguration project for one year, totaling approximately \$1.3 million in reductions

(\$ in thousands)	FY 2022 Approved	FY 2023 Approved
Capital Improvements Program:		
Bonds	\$ 383,072	\$ 309,733
PAYGO	27,585	31,016
Federal Grants	4,120	4,285
State Grants	351	351
Local Government Contribution	3,343	5,486
SDC	31,329	29,606
Contribution/Other	17,079	32,975
Total Capital Improvements Program	\$ 466,879	\$ 413,452
Information Only:		
Bonds	224,694	191,145
State Grants	20,000	20,608
Contribution/Other	290	290
Total Information Only	\$ 244,984	\$ 212,043
Total Capital Funding	\$ 711,863	\$ 625,495
Adjustment for Developer Contributions	(8,118)	(19,252)
Capital Reductions to the Approved Budget		(1,461)
Total Capital Budget Sources	\$ 703,745	\$ 604,782

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 \$358.8 million. The FY 2023 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 2023 Approved Operating Budget based upon projects included in the FY 2023 Approved Capital Budget:

(\$ in thousands)	FY 2022 Approved	FY 2023 Approved	FY 2023 Net Impact
Operating - Water and Sewer Program			
Debt Service Expense	\$ 309,045	\$ 321,844	\$ 12,799
Major Capital Projects Net Impact	196	2,802	2,606
Total	\$ 309,241	\$ 324,646	\$ 15,405

Major capital projects which will impact the FY 2023 Approved Operating Budget are summarized below:

- Little Anacostia WWPS & FM - This project provides for the planning, design and construction to restore an existing WWPS to service with a capacity of 3.3 MGD. It also includes the planning, design and construction of a new 14" diameter FM. The restored WWPS and new FM will provide adequate pumping capacity to alleviate flow in an existing 30" diameter sewer main which has experienced surcharging, repeated SSOs and caused basement backups. Operating and maintenance costs will increase to support this restored 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. Preliminary start-up and testing will begin in FY 2023. Once the new facility is fully operational, it is expected to reduce net operating costs by more than \$3.0 million per year as a result of significantly lower expenditures for energy, biosolids disposal and chemicals.

SECTION 9
DEBT SERVICE

DEBT SERVICE

WSSC Water issues bonds, a long-term debt financing instrument, to fund the planning, design and construction of long-lived additions or improvements to its infrastructure. The bonds are repaid to bondholders over a period of years with a series of principal and interest payments known as debt service. In this manner, the initial high cost of capital improvements is spread over time and paid for by customers benefiting from the facilities in the future, as well as by current customers. Due to various federal and state policies, interest costs on the debt are kept low because the interest on WSSC Water debt is exempt from federal and state taxation.

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

Should the revenues from these sources be inadequate to service the debt repayments, state law provides for the levy of ad valorem taxes, annually, against all the assessable property within the Washington Suburban Sanitary District (WSSD) by the County Councils of Montgomery and Prince George's Counties, sufficient to pay principal and interest when due and payable. WSSC Water has never needed to invoke this underlying pledge and does not expect to do so. Thus, these financial instruments provide strong advantages in both safety of repayment and investment return for certain categories of investors.

DEBT SERVICE AND OBLIGATION PURPOSE

Debt Service Budget

The approved debt service expense is based upon paying the FY 2023 principal and interest payments on current outstanding debt as of June 30, 2021, budgeted new debt issues approved for FY 2022 and the proposed issuance of \$359.4 million in new debt for FY 2023 (\$155.6 million for water; \$203.2 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 Adopted Capital Improvements Program (CIP) for FYs 2023-2028, as well as the Information Only projects included in the CIP document. The FY 2023 Approved Budget for debt service expenses is \$328.5 million, an increase of \$11.7 million or 3.7% more than the FY 2022 Approved Budget of \$316.8 million. The increase is due in part to an estimated ramp-up in expenditures associated with the Potomac Water Filtration Plant Consent Decree, eight new WSSC Water-built projects and the ramp-up of the Blue Plains' projects. The FY 2023 Approved 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 AND OBLIGATION PURPOSE (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 2023 CIP, the following projects will be financed with Green bonds: 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.

DEBT SERVICE AND OBLIGATION PURPOSE (Continued)

Rating Agency Reviews (Continued)

While Fitch Ratings, Inc. maintained a AAA credit rating on WSSC Water's latest bond issuance, it did revise the rating outlook from stable to negative. In making this revision, Fitch Ratings, Inc. cited "a sharp weakening in fiscal 2020 financial performance that is expected to be followed by a relatively slow and uncertain near-term recovery...driven primarily by pandemic-related pressures and additional debt to address capital needs." WSSC Water is committed to maintaining its AAA credit rating and the associated low cost of debt to its customers. In support of this commitment, WSSC Water proposed a 9.0% average rate increase during the Spending Affordability Guidelines (SAG) process with the dual goals of delivering a same service level budget and addressing the concerns raised by Fitch Ratings, Inc. in its outlook revision. The two County Councils ultimately recommended a 6.5% average rate increase as part of the SAG process. The FY 2023 Proposed Budget was based on a 7.0% average rate increase. To address the outlook concerns raised by Fitch Ratings, Inc. at the 7.0% average rate increase, reductions of \$23.1 million in the operating budget and \$110.5 million in CIP were incorporated into the FY 2023 Proposed Operating Budget. The FY 2023 Approved Operating Budget is based on the 6.5% average water and sewer rate increase after additional reductions of \$3.9 million to the operating budget. Customers will feel the impacts of these reductions.

OUTSTANDING DEBT

Debt Principal and Interest Obligations

Debt Principal and Interest Obligations (\$ in millions)			
Year	Principal	Interest	Total
2022	\$ 171.9	\$ 132.2	\$ 304.1
2023	174.1	124.2	298.3
2024	175.5	117.1	292.6
2025	177.0	112.7	289.7
2026	171.5	105.9	277.4
2027	169.7	99.5	269.2
2028	169.4	93.0	262.4
2029	163.2	86.5	249.8
2030	157.0	80.4	237.4
2031	149.7	74.5	224.2
2032	138.5	69.0	207.5
2033	122.2	64.0	186.1
2034	123.4	59.5	182.9
2035	114.6	55.4	170.0
2036	113.3	51.2	164.5
2037	111.6	47.2	158.8
2038	110.4	43.3	153.8
2039	113.2	39.2	152.5
2040	117.2	35.1	152.3
2041	121.3	30.9	152.2
2042	125.5	26.5	152.0
2043	129.9	21.9	151.9
2044	134.4	17.3	151.7
2045	119.9	12.5	132.5
2046	101.6	8.3	109.9
2047	73.3	4.8	78.1
2048	48.5	2.3	50.8
2049	27.0	0.8	27.8
2050	15.6	0.1	15.7
Total	\$ 3,640.3	\$ 1,615.5	\$ 5,255.7

¹ The debt summary and schedule includes Bonds and General Notes. For additional information on WSSC Water's debt service, as well as detailed schedules, please refer to our Bond & Note Information Book published annually and listed on our website. You can also refer to the latest publication on our website at <https://www.wsscwater.com/investor>

OUTSTANDING DEBT (Continued)

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 \$3.6 billion as of June 30, 2021, a 6.3% increase over the June 30, 2020 figure of \$3.4 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 06/30/20	% of Total	Outstanding 06/30/21	% of Total
Water Supply Bonds ¹	\$ 1,373,814,919	42.3%	\$ 1,514,416,402	43.8%
Sewage Disposal Bonds	1,484,786,080	45.8%	1,535,457,682	44.3%
General Construction Bonds	130,874,001	4.0%	126,375,916	3.6%
Maryland Water Quality Bonds ²	255,869,091	7.9%	286,212,656	8.3%
Total Bonds	\$ 3,245,344,091	100.0%	\$ 3,462,462,656	100.0%
Water, Sewer and General Notes	177,800,000		177,800,000	
Total Principal Debt Outstanding	\$ 3,423,144,091		\$ 3,640,262,656	

¹Includes \$101,425,000 in Green Bonds.

²Maryland Water Quality Bonds are issued for Water, Sewer and General Construction projects.

FY 2023 Estimated Debt Outstanding

The estimated principal debt outstanding at the end of FY 2023 is built upon a base of the existing outstanding debt from past issues (as of June 30, 2021), the approved debt issues for FY 2022 and the approved debt issues in FY 2023, along with the estimated principal payments in FY 2022 and FY 2023. The table that follows shows that the existing outstanding debt of \$3.6 billion as of June 30, 2021 is projected to grow to a total of \$4.0 billion as of June 30, 2023, an increase of 11.0%.

Total Principal Debt Outstanding, June 30, 2021	\$ 3,640,262,656
Less: Estimated Principal Payments	
FY 2022 for All Outstanding Bonds and Notes as of June 30, 2021	(171,907,442)
FY 2023 for All Outstanding Bonds and Notes as of June 30, 2021	(174,052,054)
Total (As of June 30, 2023)	\$ 3,294,303,160
Plus:	
FY 2022 Budgeted New Debt Issues:	
Water Supply Bonds	208,478,000
Sewage Disposal Bonds	201,226,000
General Construction Bonds	600,000
FY 2023 Approved New Debt Issues:	
Water Supply Bonds	155,676,000
Sewage Disposal Bonds	203,164,000
General Construction Bonds	600,000
Less: Estimated Principal Payments:	
FY 2022 for Budgeted New Issues as of June 30, 2022	(7,316,216)
FY 2023 for Budgeted and Approved New Issues as of June 30, 2023	(14,018,142)
Total Estimated Debt Outstanding (As of June 30, 2023)	\$ 4,042,712,802

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	\$ 161,442,274
3.8% of Total Assessable Tax Base of All Real Property	12,238,025,061
Total Debt Limit (As of June 30, 2021)	\$ 12,399,467,335
Less: Total Estimated Debt Outstanding (As of June 30, 2023)	\$ (4,042,712,802)
Legal Debt Margin	\$ 8,356,754,533

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, 2021 the total outstanding debt of \$3.6 billion represented 29.4% 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
2021	\$ 324,359,609	\$ 12,399,467	\$ 3,640,263	29.4%
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%

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.

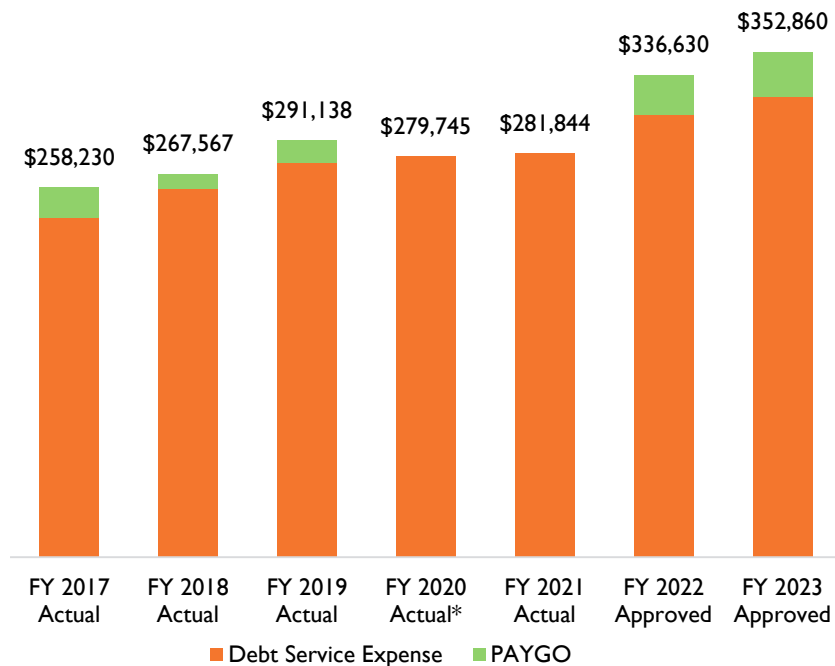
DEBT SERVICE TRENDS

Water and Sewer Debt Service (Including PAYGO)

The water and sewer debt service expenses (\$321.8 million in FY 2023) are funded by WSSC Water ratepayers through water consumption and sewer use charges and the IIF. WSSC Water programs 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 2017-2023. WSSC Water's requirements for water and sewer debt service have been increasing, from a total of \$258.2 million in debt service and PAYGO in FY 2017 to an estimated \$352.9 million in FY 2023. 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)

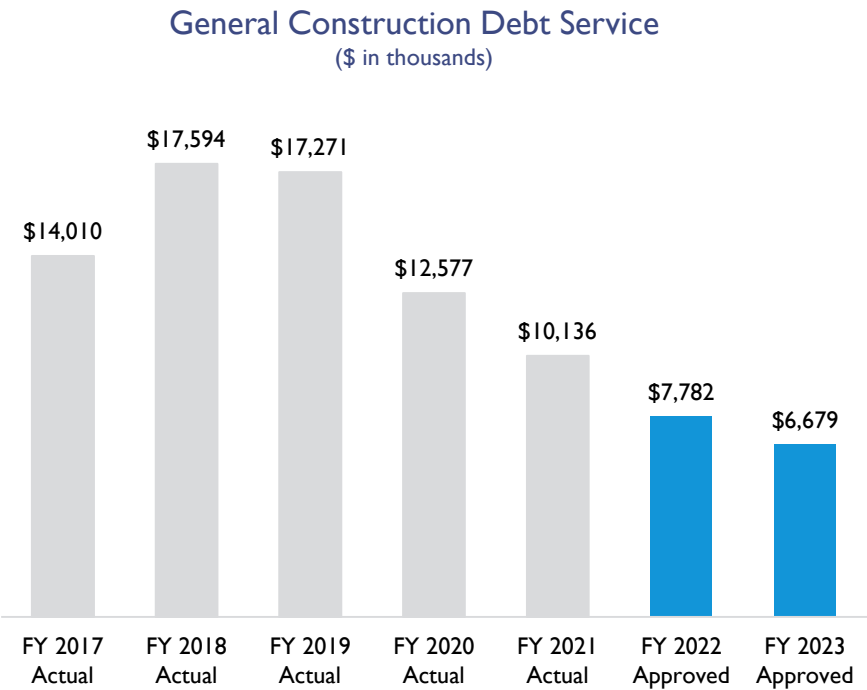


*In FY 2020 and FY 2021, PAYGO was reduced to zero as part of the COVID-19 savings plan.

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 \$14.0 million in FY 2017 to an estimated \$6.7 million in FY 2023, a decrease of 52.3%. Principal and interest expenses on General Construction bonds are paid through FFBC and other revenues.



Note: Debt service expense is net of interfund transfers.

SECTION 10
WATER QUALITY AND REGULATIONS

WATER QUALITY AND REGULATIONS

Water and sewer utilities are heavily impacted by both current and emerging regulations. WSSC Water is committed to protecting the natural environment of Prince George's and Montgomery Counties as it carries out its mandate to provide drinking water and sanitary sewer 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 designated 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 approximately \$146.3 million included in the Fiscal Year (FY) 2023 Approved 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	Approved FY 2023 (\$ in thousands)
Sewer Reconstruction Program	Ongoing	\$ 50,540
Blue Plains WWTP: Pipelines & Appurtenances	Ongoing	13,714
Trunk Sewer Reconstruction Program	Ongoing	56,891
Potomac WFP Consent Decree Program	Design	25,200
Total Water Quality Projects		\$ 146,345

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

Elevated lead levels in water 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 pipes 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:

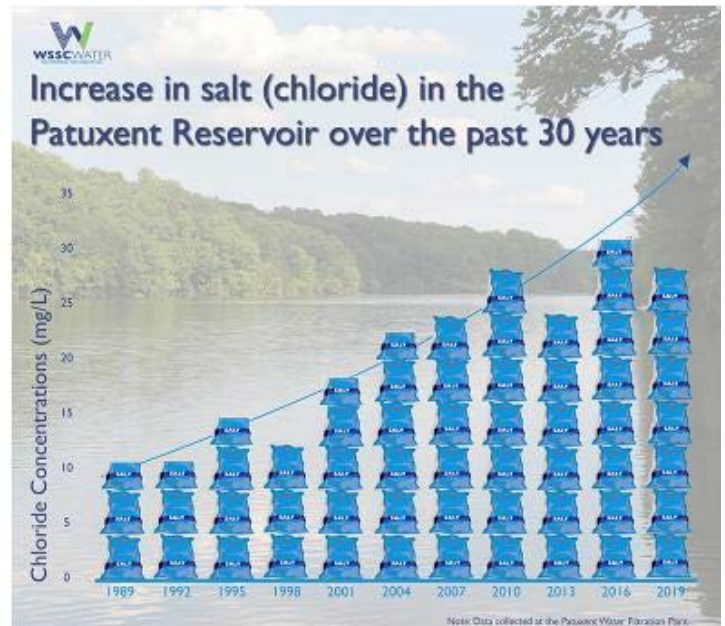
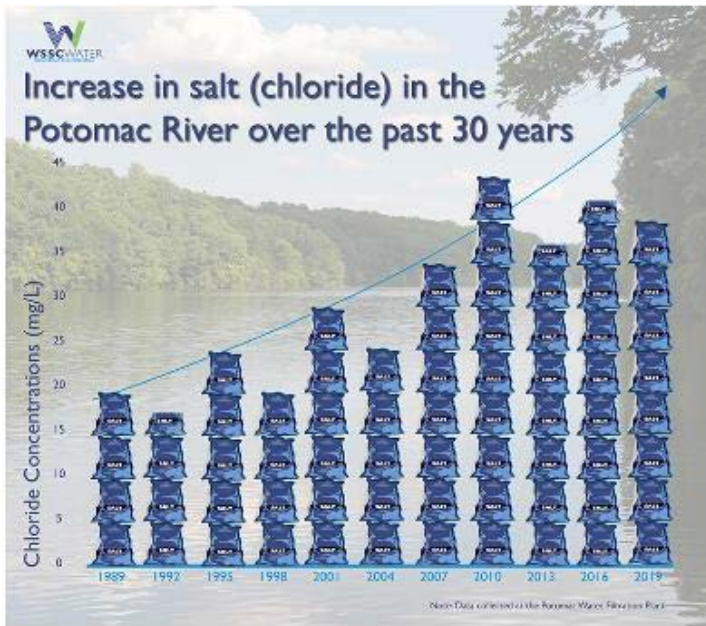
- Run water to flush out any potential lead content: if water has not been used for several hours, run water for 30 seconds to two minutes or until it becomes cold or reaches a steady temperature before using it for drinking or cooking
- Use cold water for drinking, cooking and preparing baby formula
- Periodically remove debris from faucet strainers – recommend 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 note 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 which 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.

How to Dispose of Cooking Oil and Grease



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 several 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

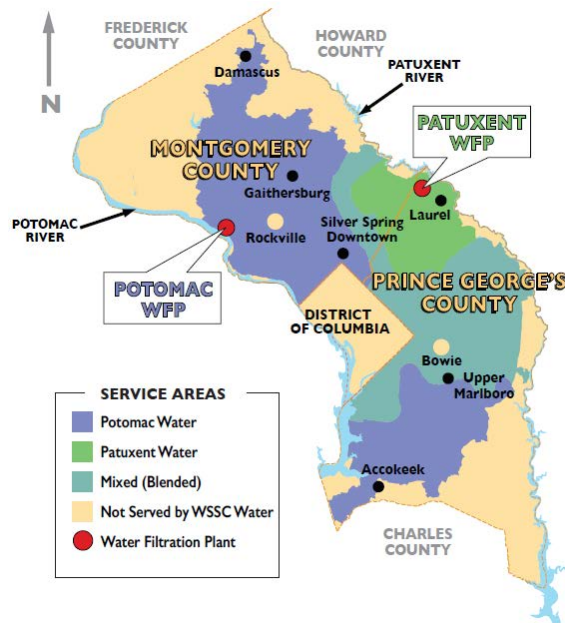
WSSC Water adopted the U.S. Food and Drug Administration recommendations to not dispose of unused or expired pharmaceutical drugs into the sanitary sewer system. Any pharmaceutical flushed down the toilet or discharged to the sanitary sewer could potentially make its way into drinking water sources. WRRFs do not treat for many pharmaceuticals. Proper disposal of these items helps prevent future contamination of 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 <https://www.wsscwater.com/waterquality> or by visiting <https://www.fda.gov> and searching for “disposal by flushing”.

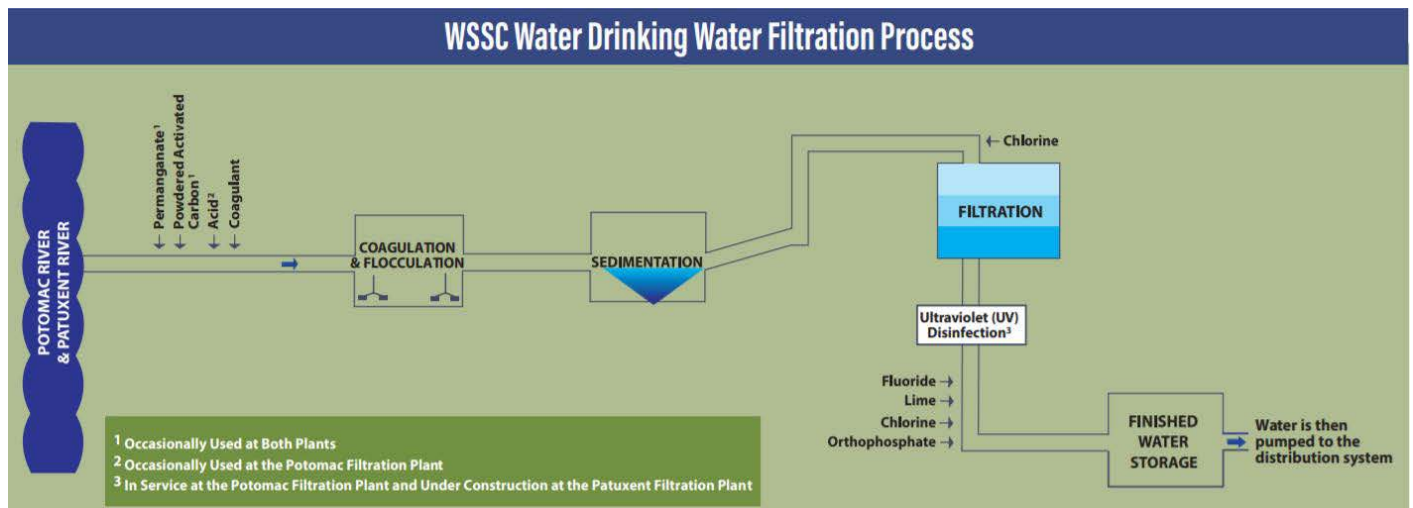
As for other hazardous wastes such as household cleaners, pesticides, paints, motor oil and prescription drugs: never pour them down the drain, in the toilet, on the ground or in storm drains. The best place to take these hazardous substances is to a recycling center. Please contact your County’s solid 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. WSSC Water operates and maintains two water filtration plants located in Prince George's and Montgomery Counties. 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 filtration process passes all regulatory requirements to ensure the customers receive the best quality water. 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.

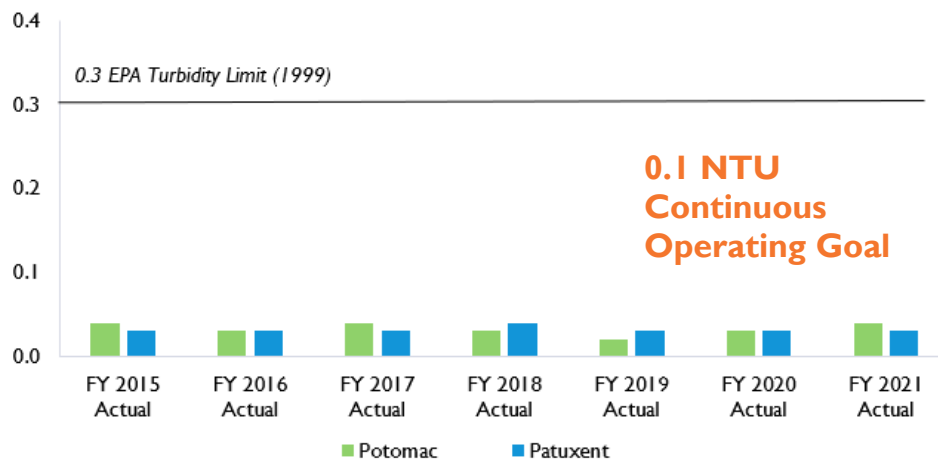
In addition to traditional approaches to ensuring drinking water quality, WSSC Water continues to place particular emphasis on addressing low-level contaminants, such as disinfection by-products, and maintaining low levels of turbidity (suspended sediment) to ensure public health protection. The agency 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)

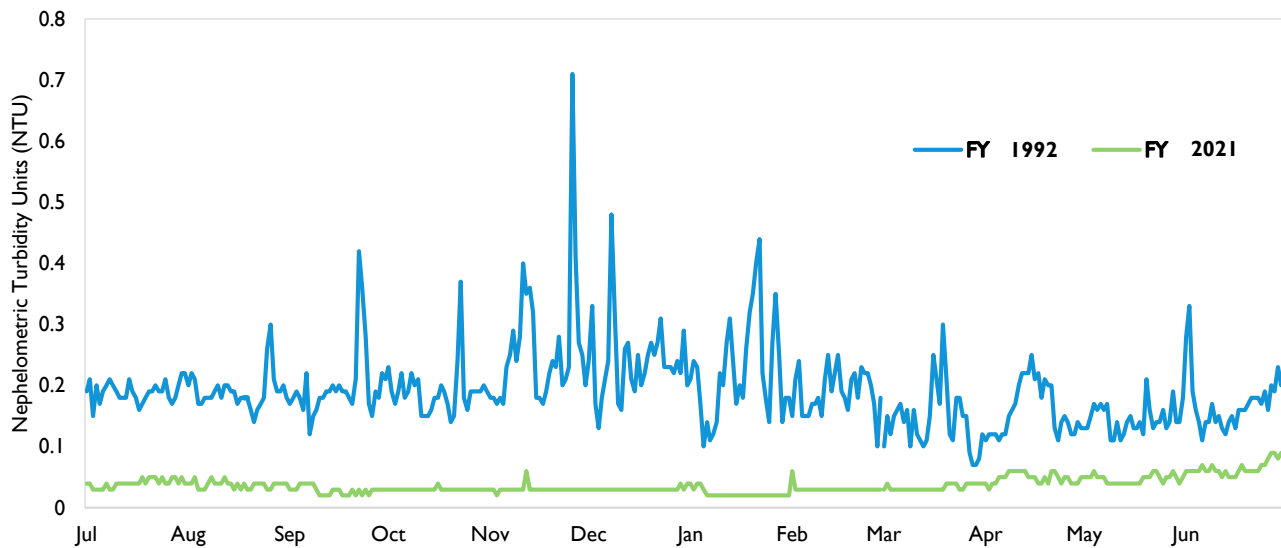
WSSC Water's continued participation in the Partnership for Safe Water Program is indicative of our commitment to protecting our drinking water. A primary goal of this program is to maintain filtered water turbidity well below EPA established limits to effectively guard against *Cryptosporidium*. *Cryptosporidium* 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 2015-2021. 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.

**Annual Average Filtered Water Turbidity
for Potomac and Patuxent WFPs
in Nephelometric Turbidity Units (NTU)**



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*.

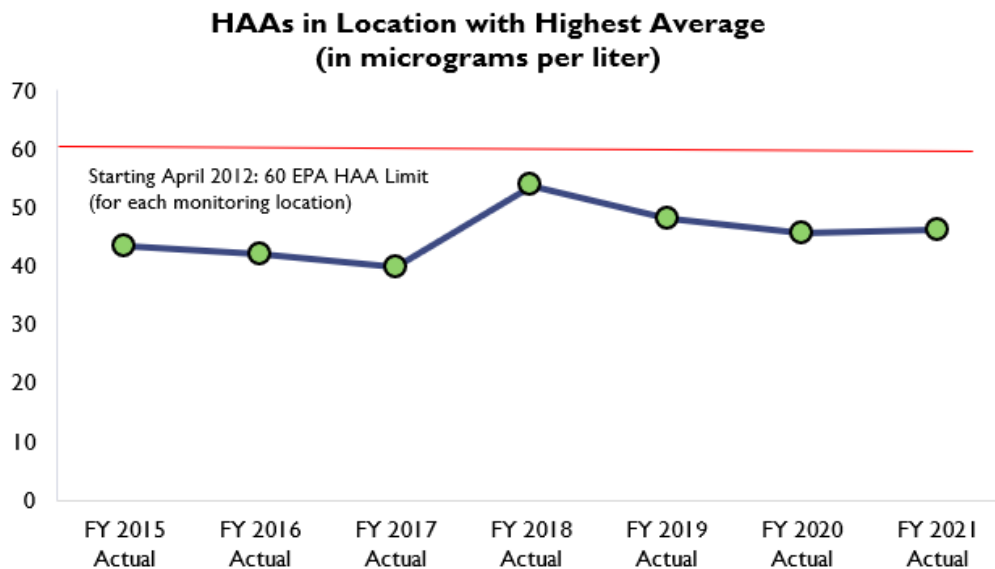
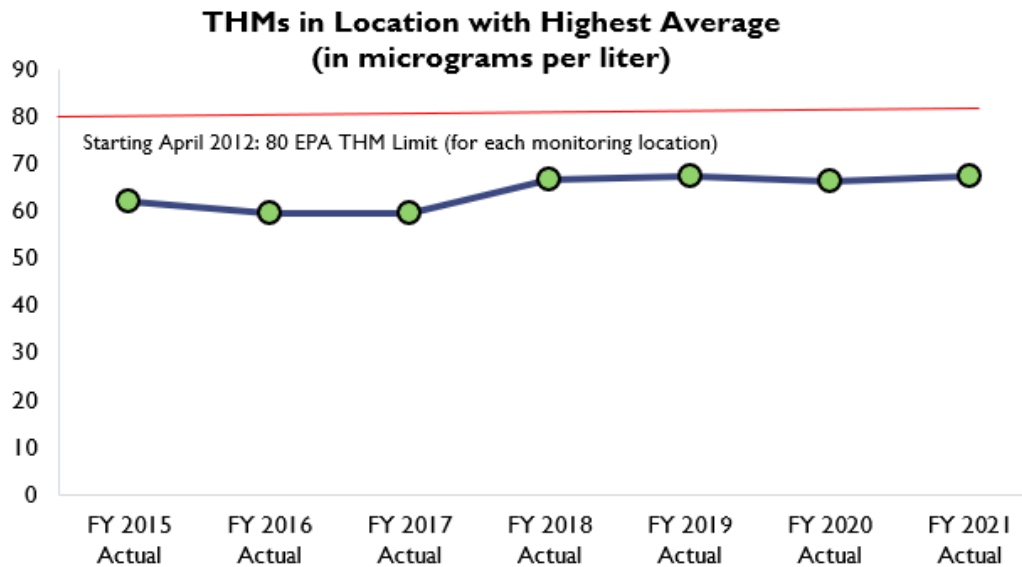
Daily Average Filtered Water Turbidity for Potomac WFP



PERFORMANCE OF KEY SERVICES (Continued)

Water Filtration and Treatment – Trihalomethanes and Haloacetic

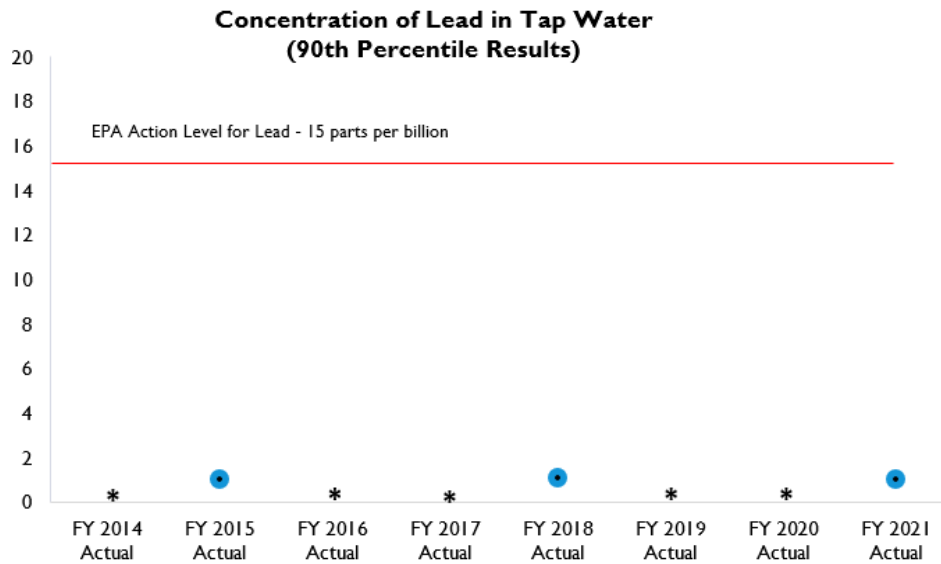
WSSC Water has also been aggressively pursuing enhanced coagulation (optimization of coagulant doses and pH levels to improve total organic carbon removal) to enhance disinfection by-product precursor removal, thereby lessening the formation of potential carcinogens in the finished water. Effective January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



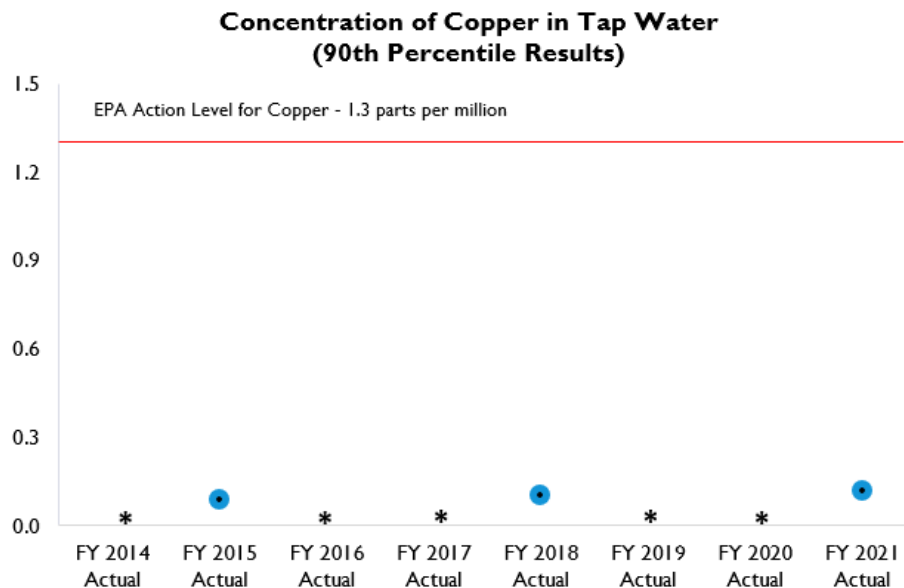
PERFORMANCE OF KEY SERVICES (Continued)

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 of Maryland confirmed 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.

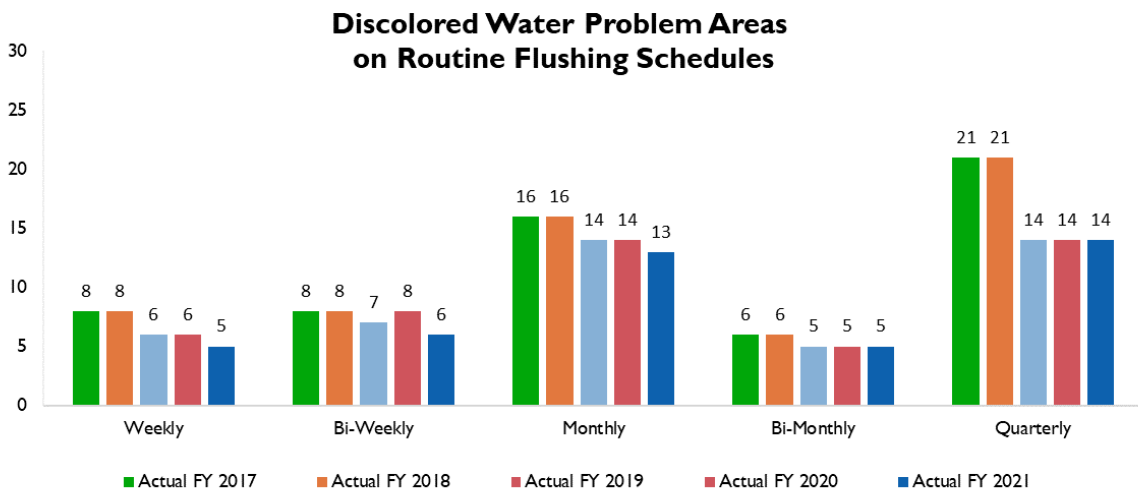
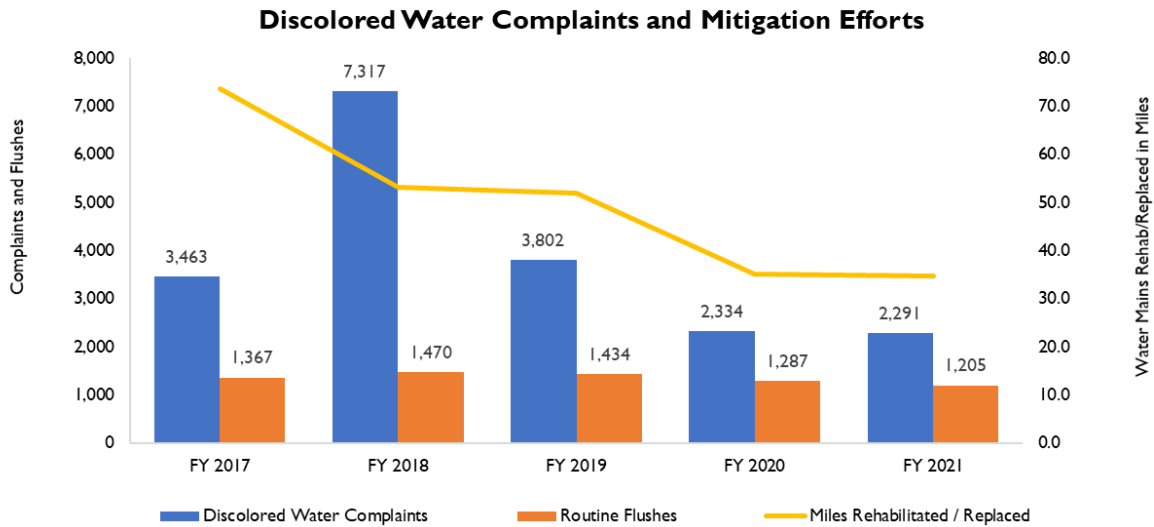


*No sampling required in these years.

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 2021 the agency replaced nearly 30 miles of distribution mains and 5 miles of transmission mains. In addition, total discolored water events decreased from 2,333 to 2,310. The total routine flushing of water mains has decreased from an average of 1,442 from FY 2015 through FY 2020 to just over 1,200 in FY 2021.

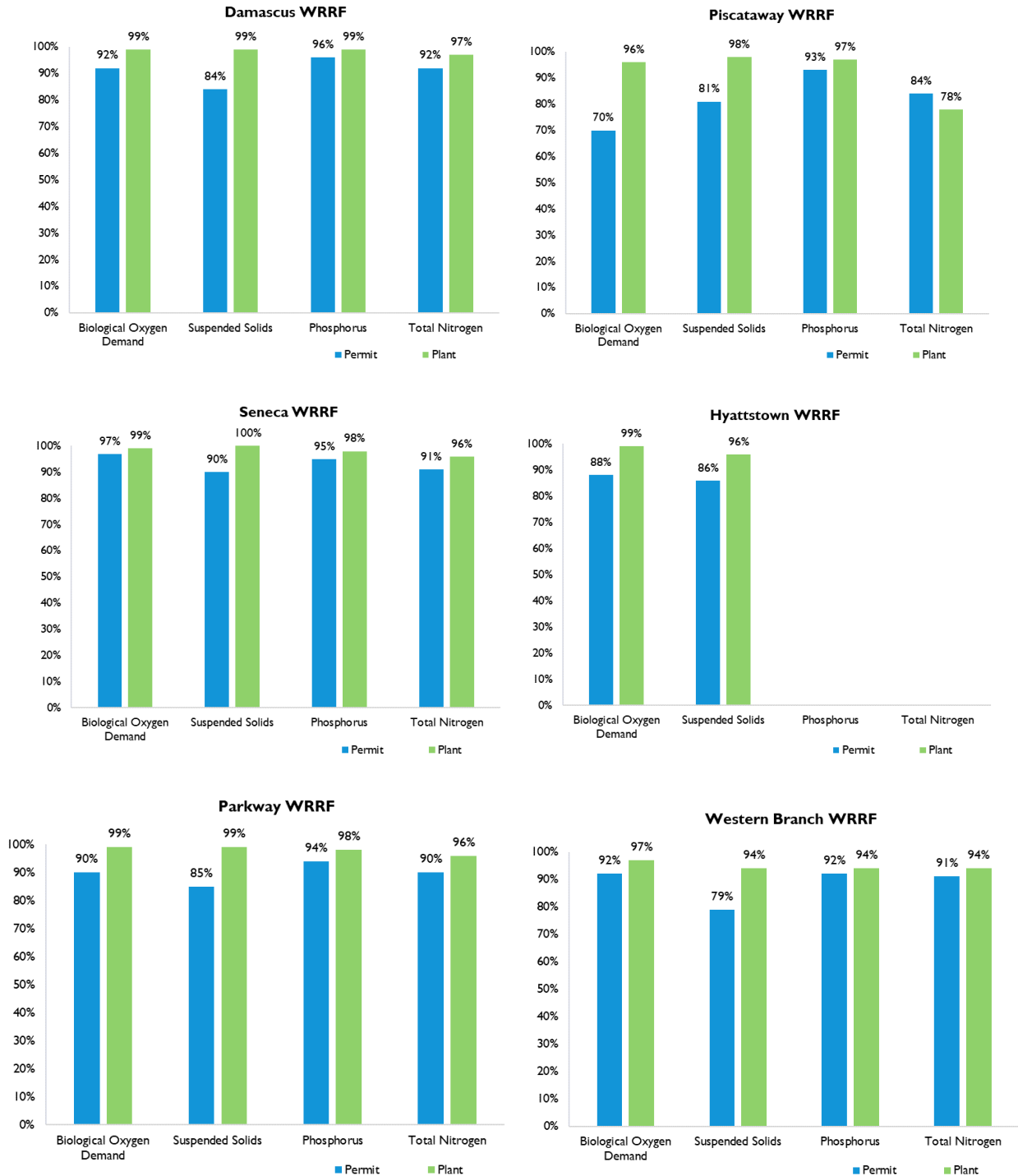


The graph above shows the number of chronic problem areas requiring regular flushing on a weekly, bi-weekly, monthly, bi-monthly, quarterly, or semi-annual basis since FY 2017. FY 2021 flushing reductions are attributable to both the impact of the water main replacement programs and reduced water main breaks, resulting in reduced customer complaints.

PERFORMANCE OF KEY SERVICES (Continued)

FY 2021 Percentage Removal of Substances Regulated by Discharge Permits

The following graphs present actual FY 2021 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 2023, the Production Department will continue to pursue its goal of meeting or surpassing the permit requirements for each plant.

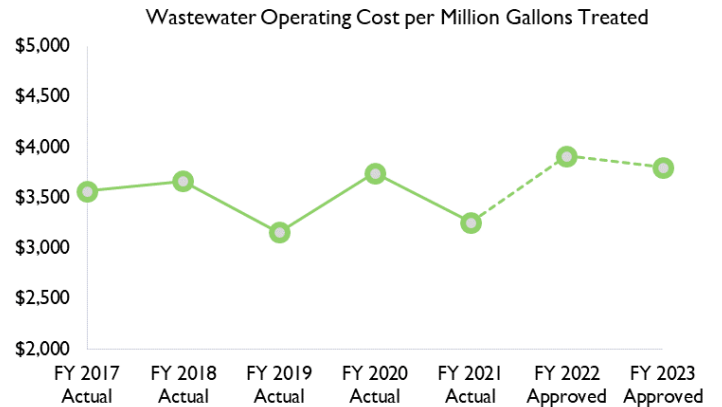
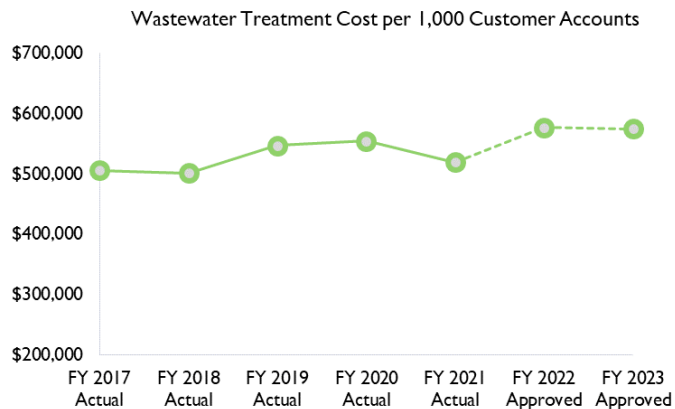
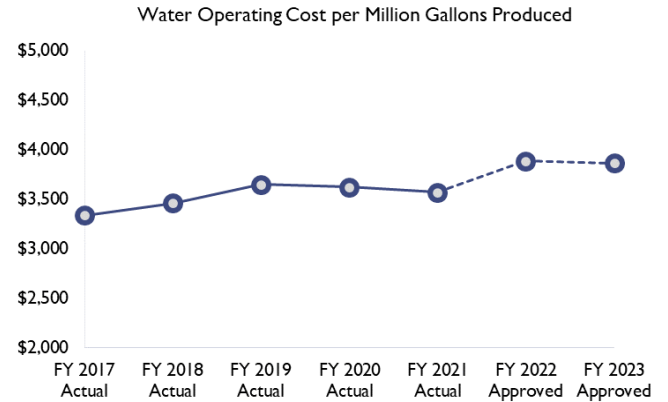
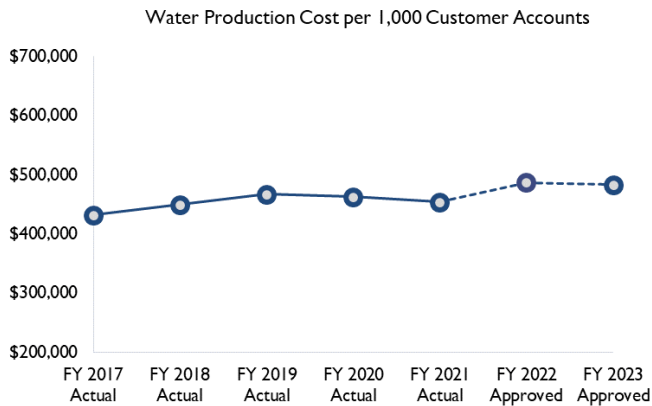


Note: Permit should be less than Plant.

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 Wastewater Treatment Cost per 1,000 Customer Accounts, the FY 2021 cost is lower than in FY 2020 due to reduced professional and contractual services costs and lower administrative cost along with the increased number of customer accounts in FY 2021. Similarly, the Wastewater Operating Cost per Million Gallons of Sewage Treated graph also shows the FY 2021 result significantly lower than in FY 2020. The decrease is mainly due to reduced professional and contractual services costs and lower administrative costs along with the increased sewage treatment volume in FY 2021.



SECTION II
ORGANIZATIONAL BUDGETS AND MEASURES

ORGANIZATIONAL BUDGETS AND MEASURES

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

COMPARATIVE EXPENSES BY ORGANIZATIONAL UNIT ALL OPERATING AND CAPITAL FUNDS

Organization	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Change	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Governance & General Manager's Office								
Commissioners'/Corporate Secretary's Office*	1.3	\$ 336,736	2.0	\$ 410,432	2.0	\$ 477,706	-	\$ 67,274
Office of the Inspector General*	9.1	1,583,404	10.0	1,628,871	10.0	1,605,603	-	(23,268)
General Manager's Office	8.0	1,468,198	8.0	1,480,154	9.0	1,595,403	1.0	115,249
General Counsel's Office	26.0	11,629,036	28.0	10,481,323	29.0	10,562,152	1.0	80,829
Strategy & Partnerships								
Intergovernmental Relations Office	4.0	618,550	4.0	778,837	4.0	753,368	-	(25,469)
Strategy & Innovation Office	16.4	3,132,386	19.0	5,830,574	14.0	3,029,434	(5.0)	(2,801,140)
Communications & Community Relations Office	15.7	2,209,678	19.0	2,957,801	16.0	2,506,802	(3.0)	(450,999)
Human Resources Office	33.6	6,261,856	36.0	8,049,422	39.0	8,008,350	3.0	(41,072)
Equal Employment Opportunity Office	0.3	91,728	1.0	237,823	-	-	(1.0)	(237,823)
Customer Service Department	110.3	13,707,446	94.0	14,197,482	94.0	16,721,325	-	2,523,843
Operations								
Asset Management Division	5.2	1,716,700	6.0	1,794,247	7.0	2,636,714	1.0	842,467
Police & Homeland Security Office	34.3	4,723,371	40.0	5,951,878	40.0	5,336,375	-	(615,503)
Engineering & Construction Department	350.1	418,369,911	376.0	685,173,258	375.0	598,225,774	(1.0)	(86,947,484)
Production Department	315.1	142,937,207	332.0	152,791,839	340.0	159,986,489	8.0	7,194,650
Utility Services Department	478.8	89,645,813	512.0	122,030,861	511.0	103,934,530	(1.0)	(18,096,331)
Administration								
Office of Supplier Diversity & Inclusion	9.0	1,156,168	9.0	1,292,695	10.0	1,220,583	1.0	(72,112)
Procurement Office	21.6	2,176,338	27.0	2,717,721	31.0	3,181,169	4.0	463,448
General Services Department	85.6	34,832,371	96.0	41,149,538	98.0	38,834,334	2.0	(2,315,204)
Finance Department	62.4	7,881,473	64.0	8,271,660	64.0	8,221,268	-	(50,392)
Information Technology Department	91.7	56,111,013	103.0	61,389,484	103.0	56,299,284	-	(5,090,200)
Other								
Human Resources Non-Departmental	-	29,393,327	-	31,665,326	-	33,781,806	-	2,116,480
Finance Non-Departmental								
Debt Service	-	291,979,579	-	316,827,000	-	328,523,374	-	11,696,374
PAYGO	-	-	-	27,585,000	-	31,016,000	-	3,431,000
Other (Social Security, Retirement, etc.)	-	53,560,633	-	51,914,428	-	54,603,458	-	2,689,030
Retirement Trust Chargeback	-	-	-	(769,300)	-	(1,673,547)	-	(904,247)
Total	1,678.5	\$1,175,522,922	1,786.0	\$1,555,838,354	1,796.0	\$1,469,387,754	10.0	\$ (86,450,600)

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

Note: Explanations of workyear and budget variances are included in the department details of Section II

ORGANIZATIONAL UNIT AND FUND MATRIX – ALL OPERATING AND CAPITAL FUNDS

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

Budget: Fund Type:	Operating			Capital		
	Water Operating	Sewer Operating	General Bond Debt Service	Water Supply	Sewage Disposal	General Construction
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 Office	X	X	X	X	X	X
Human Resources Office	X	X	X	X	X	X
Customer Service Department	X	X				
Operations						
Asset Management Division	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 Chargeback	X	X				

WORKFORCE AND COMPENSATION

The workforce and compensation assumptions approved for Fiscal Year (FY) 2023 incorporate the policy and guideline recommendations discussed in the Sections 4 and 6.

Salaries & Wages Summary

	<u>FY 2023 Approved</u>	
	Work Years	Amount
Base Positions Funded Full Year	1,796	\$ 159,099,212
Overtime		7,600,400
Subtotal		166,699,612
Lapse on Base Positions*		(11,660,146)
Subtotal		155,039,466
Salary Enhancements		6,889,869
Salary - 6 Commissioners		78,500
Total	1,796	\$162,007,835

*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 2023 Approved 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 2023. The employer rates are 6.2% for Social Security and 1.45% for Medicare.

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

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

Retirement System – WSSC Water maintains a retirement system for its employees which is intended to provide income during their retirement years. Annual employer contributions to the Employees' Retirement Plan are actuarially-determined and set at a level percentage of pay. This ratio is currently 16.9% of pay and has remained consistent over a number of 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. Employer contributions to the Trust are actuarially-determined and set at a level dollar amount above the annual retiree claims expense. This amount, \$5.4 million in recent years, has been contributed to the Trust in addition to the payments made to directly cover the costs of annual retiree claims. Over time, funding would be sufficient to pay for future retiree health benefits, as well as any accrued interest on the unfunded liability.

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

GOVERNANCE & GENERAL MANAGER'S OFFICE

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

Budget Summary

Governance & General Manager's Office	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Commissioners'/Corporate Secretary's Office*	1.3	\$ 336,736	2.0	\$ 410,432	2.0	\$ 477,706	-	\$ 67,274
Office of the Inspector General*	9.1	1,583,404	10.0	1,628,871	10.0	1,605,603	-	(23,268)
General Manager's Office (**)	8.0	1,468,198	8.0	1,480,154	9.0	1,595,403	1.0	115,249
General Counsel's Office (**)	26.0	11,629,036	28.0	10,481,323	29.0	10,562,152	1.0	80,829
Total	44.4	\$ 15,017,374	48.0	\$ 14,000,780	50.0	\$ 14,240,864	2.0	\$ 240,084

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

(**) Interdivisional workyears transfers were made to address operational needs.

COMMISSIONERS'/CORPORATE SECRETARY'S OFFICE

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

The Commission provides oversight of WSSC Water and establishes policies for the operation of the agency within the legal framework of Division II of the Public Utilities Article of the Annotated Code of Maryland. Three Commissioners are appointed by the Prince George's County Executive and three by the Montgomery County Executive, subject to approval by the two respective County Councils.

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

Mission Statement

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

Core Activities

Public Oversight and Corporate Functions – The Commission provides public oversight of WSSC Water, conducts the corporate business of the agency, such as adopting rates and fees, reviewing management reports and approving contracts. The Commissioners collectively sit as the Audit Committee to monitor WSSC Water's audit processes, financial reporting processes, system of internal controls, and compliance with laws, regulations, and the WSSC Code of Ethics. The Corporate Secretary assists the Commissioners in conducting the corporate business, serves as WSSC Water's registered agent, serves as parliamentarian at the meetings of the Commission and prepares official meeting minutes for public inspection.

OFFICE OF THE INSPECTOR GENERAL

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

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

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

Mission Statement

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

Core Activities

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

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

Attestation Engagements – This activity can cover a broad range of financial or nonfinancial objectives about the subject matter or assertion depending on the users' needs. In an attestation engagement, the subject matter or an assertion by a party other than the auditors is measured or evaluated in accordance with suitable criteria. The work the auditors perform and the level of assurance associated with the report vary based on the type of attestation engagement.

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

Fraud, Waste and Abuse Hotline – This activity provides a centralized reporting vehicle for WSSC Water's employees, customers, contractors and other stakeholders of the agency to report suspected occurrences of fraud, waste and abuse anonymously, without fear of retaliation. The OIG staff includes Certified Fraud Examiners which serves as investigators of occurrences reported through the Fraud, Waste and Abuse Hotline.

GENERAL MANAGER'S OFFICE

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



Mission Statement

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

Core Activities

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

GENERAL COUNSEL'S OFFICE

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

Mission Statement

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

Core Activities

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

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

GENERAL COUNSEL'S OFFICE (Continued)

Core Activities (Continued)

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

Ethics Office Administration – The Ethics Officer administers the Code of Ethics and provides support to the Board of Ethics. Responsibilities include maintaining the Financial Disclosure Forms, managing the Lobbyist Registration Awareness Program and associated registration forms and preparing quarterly and annual reports for the Montgomery and Prince George's County Councils. The Ethics Officer handles ethics inquiries, provides ethics training and is responsible for monitoring WSSC Water's standards, policies and procedures to ensure compliance.

STRATEGY & PARTNERSHIPS

Strategy & Partnerships oversees the people and partnerships of the agency. The Deputy General Manager for Strategy & Partnerships provides leadership and guidance on building strategic collaboration with customers, legislators, businesses and other key stakeholders. These partnerships are essential to ensuring the General Manager's vision for enhancing customer experience. The Deputy General Manager also oversees internal functions critical to employees, including human resources and fair practices. Strategy & Partnerships is comprised of the offices and departments listed below.

Budget Summary

Strategy & Partnerships	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Intergovernmental Relations Office	4.0	\$ 618,550	4.0	\$ 778,837	4.0	\$ 753,368	-	\$ (25,469)
Strategy & Innovation Office*	16.4	3,132,386	19.0	5,830,574	14.0	3,029,434	(5.0)	(2,801,140)
Communications & Community Relations Office**	15.7	2,209,678	19.0	2,957,801	16.0	2,506,802	(3.0)	(450,999)
Human Resources Office	33.6	6,261,856	36.0	8,049,422	39.0	8,008,350	3.0	(41,072)
Equal Employment Opportunity Office***	0.3	91,728	1.0	237,823	-	-	(1.0)	(237,823)
Customer Service Department	110.3	13,707,446	94.0	14,197,482	94.0	16,721,325	-	2,523,843
Total	180.3	\$ 26,021,644	173.0	\$ 32,051,939	167.0	\$ 31,019,279	(6.0)	\$ (1,032,660)

(*) Five workyears were transferred from the Strategy & Innovation Office to the Procurement Office.

(**) Communications transferred two workyears to the Human Resources Office and one to the Customer Service Department.

(***) Beginning FY 2023, one workyear was transferred from Equity, Engagement & Inclusion, formerly known as Equal Employment Opportunity, to the Human Resources Office.

INTERGOVERNMENTAL RELATIONS OFFICE

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

Mission Statement

To analyze the impact of state and federal legislation on WSSC Water and act as the agency's representative before legislative bodies. The office cultivates and maintains key stakeholder relationships with elected, government, community, industry and business stakeholders to champion WSSC Water's policy interests and obtain resources necessary to fulfill our mission of providing safe and reliable water, life's most precious resource, and returning clean water to our environment, all in an ethical, sustainable and financially responsible manner.

Core Activities

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

STRATEGY & INNOVATION OFFICE

The Strategy & Innovation Office looks across the entire organization to identify where we can work smarter, collaborate and use data to make informed decisions. Led by the Chief Strategy & Innovation Officer, the office is comprised of the divisions in the following chart.

Organizational Structure



Mission Statement

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

Budget Summary

Strategy & Innovation Office	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Strategy & Innovation Officer	1.6	\$ 229,989	2.0	\$ 379,228	2.0	\$ 395,573	-	\$ 16,345
Strategic Performance Division	9.0	1,646,652	11.0	1,424,440	6.0	867,227	(5.0)	(557,213)
Innovation & Research Division	5.8	1,255,745	6.0	1,392,306	6.0	1,404,934	-	12,628
Organizational Development Division*	-	-	-	2,634,600	-	361,700	-	(2,272,900)
Total	16.4	\$ 3,132,386	19.0	\$ 5,830,574	14.0	\$ 3,029,434	(5.0)	\$ (2,801,140)

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

Explanation of Major Variances

The FY 2023 Approved Budget for the office reflects a decrease of approximately 48.0% from the FY 2022 Approved Budget. The decrease is primarily due to the 5 workyears which moved to the Procurement Office and a budget reduction to Organizational Development Division due to budget constraints.

Highlights

- Supporting achievement of WSSC Water's Strategic Plan by engaging employees, customers and Commissioners in the Strategic Plan update for FY 2023 - FY 2025
- Developing WSSC Water's Digital Strategy with IT, beginning with a high-level inventory of systems and data
- Facilitates organizational development to optimize Customer-to-Meter (C2M) billing system and processes

STRATEGY & INNOVATION OFFICE (Continued)

Highlights (Continued)

- Began a pilot of sewer maintenance prediction technology to optimize sewer maintenance by using artificial intelligence to recommend when cleaning is needed even before sewer levels reach an alarm state. The pilot is expected to improve sewer maintenance activities by reducing cost, increasing pipe life expectancy, and reducing the occurrence of SSOs
- Began a pilot for pressure transient monitoring. Pressure transients are a potential source of pipe stress that can weaken pipes, reduce pipe life expectancy and increase break rates

Accomplishments

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

Racial Equity and Social Justice

- Strategic Performance is promoting and supporting the use of equity in data analysis. In FY 2022, we have supported Customer Service in adding demographic data to our C2M performance dashboard and will partner with IT to add census tract and equity focus areas to WSSC Water GIS database for use by all WSSC Water analysts.
- On September 29, 2021 we facilitated two guest speakers from Montgomery County Government Planning Department to present to the WSSC Water Data Community members on equity focus areas, data utilization as it relates to the Montgomery County Racial Equity and Social Justice Act.

OFFICE OF THE CHIEF STRATEGY & INNOVATION OFFICER

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

Core Activities

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

STRATEGIC PERFORMANCE DIVISION

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

Core Activities

Strategic Planning – This activity supports the leadership team and Commissioners in charting WSSC Water's future. Key functions include strategic plan workshops, tracking plan achievement, Leaders on the Same Page meetings and employee outreach efforts.

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

Strategic Analytics – This activity identifies, collects and analyzes data to educate and inform business decisions. Key products include: WSSC Water's Digital Strategy, the Commission Performance Report, WSSC Water's Data Community, internal dashboards and American Water Works Association utility benchmarking.

INNOVATION & RESEARCH DIVISION

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

Core Activities

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

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

ORGANIZATIONAL DEVELOPMENT DIVISION

Organizational Development (OD) is focused on increasing organizational effectiveness through changes in processes and systems. OD supports WSSC Water in adapting to change by facilitating cross-organizational teams to achieve anticipated business outcomes for transformational projects. The Organizational Division supports the Customer Service, Utility Services and Finance Departments in adapting to the C2M billing system.

Core Activities

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

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

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

COMMUNICATIONS & COMMUNITY RELATIONS OFFICE

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

Mission Statement

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

Core Activities

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

Publications – This activity includes efforts related to the preparation and/or distribution of annual reports, brochures, booklets, newsletters, customer bill inserts and the transition of printed information to the agency's website.

Community Outreach – This activity includes informing customers and stakeholders in a variety of ways including attending community events, assisting with engineering and construction project meetings and organizing In Your Neighborhood meetings and STEAM education programs. We host our own programs while also supporting community fairs and large events organized by other agencies. The community outreach teams works with our Customer Service department to support the Customer Feedback Community and disseminate information related to Protecting Our Pipes and Fats, Oils and Grease (FOG), customer assistance programs, and tips for reducing water usage to customers across our service area.

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

Internal Communications and Events – This activity informs WSSC Water employees about company news, events, policies and benefits, and coordinates special events, service awards ceremonies and giving campaigns. This activity also communicates WSSC Water's strategic priorities and values to the agency's staff.

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

COMMUNICATIONS & COMMUNITY RELATIONS OFFICE (Continued)

Core Activities (Continued)

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

HUMAN RESOURCES OFFICE

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

Mission Statement

The Human Resources Office will be a trusted business partner delivering best-in-class services and workforce development solutions that contribute to the success of WSSC Water through the attraction, retention and engagement of a talented and diverse workforce.

Core Activities

Talent Development – This activity involves the development, planning and administration of corporate employee development including succession management and tuition assistance programs; career development and counseling; leadership, management and supervisory development; knowledge capture and transfer methodologies; computer skills training; and assisting operating units with externally provided technical training.

Benefits Administration – This activity involves the development, administration and communication of all employee and retiree benefit plans, leave programs and deferred compensation plan to ensure they meet all regulatory requirements and interfaces with GCO, payroll and other financial systems. This activity also provides for the employee wellbeing program, which incorporates opportunities for employees to become engaged to make healthier behavioral and lifestyles choices.

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

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

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

HUMAN RESOURCES OFFICE (Continued)

Core Activities (Continued)

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

Equity, Engagement and Inclusion – This activity directs the application of WSSC Water's equal employment principles and goals, and outlines the responsibilities of management, supervisory and non-supervisory personnel in fostering a spirit of equal employment opportunity. Also included in the activity are investigations of discrimination claims in accordance with the agency's policy and procedures.

CUSTOMER SERVICE DEPARTMENT

The Customer Service Department is responsible for providing residential and commercial customers with timely, accurate, and responsive account services and customer financial assistance solutions to help pay their water and sewer bills. The Department helps customers understand the rates for water and sewer services, initiates start and stop services, and educates customers about topics ranging from water consumption to finding household plumbing leaks. Key priorities for the Customer Service Department include improving the overall customer experience and streamlining operations to improve customer satisfaction. Specific initiatives include continued stabilization and optimization of the customer-to-meter billing system, development and expansion of customer financial assistance programming, and customer self-service enhancements. Specific initiatives include continued stabilization and optimization of the customer-to-meter billing system, development and expansion of customer financial assistance programming, and customer self-service enhancements. The Department consists of four primary divisions: Billing and Revenue Protection, Customer Care, Customer Engagement and Advocacy, and Center of Excellence.

Organizational Structure



Mission Statement

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

Budget Summary

Customer Service Department	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, Customer Service	5.0	\$ 709,271	4.0	\$ 728,803	4.0	\$ 3,654,405	-	\$ 2,925,602
Customer Care Division	56.8	6,133,105	54.0	6,671,421	54.0	6,076,209	-	(595,212)
Center of Excellence Division	6.0	608,780	5.0	724,674	5.0	735,372	-	10,698
Customer Engagement & Advocacy Division	6.0	855,422	6.0	752,998	6.0	829,950	-	76,952
Billing & Revenue Protection Division	36.5	5,400,868	25.0	5,319,586	25.0	5,425,389	-	105,803
Total	110.3	\$ 13,707,446	94.0	\$ 14,197,482	94.0	\$ 16,721,325	-	\$ 2,523,843

Explanation of Major Variances

The FY 2023 Approved Budget for the department reflects an increase of approximately 17.8% increase from the FY 2022 Approved Budget. This increase is primarily due to the planned implementation of a new third party call center.

CUSTOMER SERVICE DEPARTMENT (Continued)

Highlights

- Stabilization of departmental operations and business performance following replacement of the Customer Service Information System with the C2M billing system
- Customer service optimization to improve performance in the Customer Call Center
- Continued funding for enhancements to financial assistance programs that will provide conservation kits, plumbing inspections for qualified customers and high bill leak adjustment assistance to qualified customers
- Continued development of customer financial assistance programming

Accomplishments

- Maintained billing timeliness by billing 99.8% of customer accounts in a timely manner
- Successfully transitioned and managed remote customer service operations
- The number of customers enrolled in Customer Assistance Program (CAP) grew by 15.0% from FY 2021
- Planned and initiated customer financial assistance program enhancements including permanent waiver of late fees for CAP customers and waiver of late fees for successful completion of payment plans for all customers
- Expanded customer outreach and engagement including distribution of over 40,000 customer financial assistance flyers, development and distribution of past due account heat map profiles

Racial Equity and Social Justice

- WSSC Water recognized the devastating impact of the pandemic on our community and suspended late fees and water service turnoffs from March 2020 to August 2021. In FY 2023, we will continue robust customer engagement to connect with customers about financial assistance options. We will continue developing new customer financial assistance programs and implementing enhancements to further support vulnerable and hard-to-reach customers. Focus will be on reducing the barriers that prevent customers from accessing these programs.

OFFICE OF THE DIRECTOR, CUSTOMER SERVICE

Specific initiatives include continued stabilization and optimization of the customer-to-meter billing system, development and expansion of customer financial assistance programming, and customer self-service enhancements.

Core Activities

Management and Administration – This activity involves the management and supervision of the Customer Care, Center of Excellence, Customer Engagement & Advocacy and Billing & Revenue Protection divisions.

CUSTOMER CARE DIVISION

The Customer Care Division serves as the voice of WSSC Water for customer oriented services and is comprised of the Customer Service Center and Research & Communications Section. The division responds to general and complex customer requests, such as customer assistance with billing matters, research and analysis and assisting our walk-in customers.

Core Activities

Customer Correspondence – This activity addresses written correspondence received from WSSC Water customers. Inquiries and communications received via letter, fax or electronic mail are entered into the C2M database to accurately reflect the customer's account history.

Dispute Resolution/Refund Hearings – This activity focuses on all aspects of the dispute resolution and/or refund hearing process and the administrative functions necessary to track, evaluate and prepare information associated with the hearings.

Customer Account Inquiry (Non-Emergency) – This activity addresses customers' billing issues stemming from telephone conversations and walk-in inquiries. Specifically, this activity includes analyzing account records regarding household customer water use habits; generating work orders; scheduling and evaluating field service activities in the C2M database such as inspections, field investigations and restoration of service; and educating customers on such topics as sources of water loss, water conservation and customer assistance programs.



Goals, Objectives and Outcome Measures

Goal: Provide a quick response to customer problems or system emergencies. Strategic Priority: Enhance customer experience

Objectives	Outcome Measure	FY 2020 Actual / Target	FY 2021 Actual / Target	FY 2022 Target	FY 2023 Target
Provide timely response to customer queries	Percentage of calls answered (non-emergency calls)	85.9% / 95.0%	80.0% / 87.0% *	87.0%	90.0%
Reliable, consistent and timely billing	Accounts billed on-time	99.4% / 98.0%	99.8% / 99.5%	99.8%	99.9%

(*) The decrease in the target from 95.0% in FY 2020 to 87.0% in FY 2021 reflects revised performance expectations due to continued stabilization and system enhancement efforts associated with the roll-out of the new C2M billing system.

CENTER OF EXCELLENCE DIVISION

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

Core Activities

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

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

CUSTOMER ENGAGEMENT & ADVOCACY DIVISION

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

Core Activities

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

BILLING & REVENUE PROTECTION DIVISION

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

Core Activities

Billing and Revenue Protection – This activity ensures effective and efficient billing, accounts receivable collection functions and fraud management. Additionally, the division assesses and authorizes requests for billing adjustments, manages delinquent accounts and reconciles billing.

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

Customer Account Maintenance – This activity is associated with processing bill adjustments granted to customers who meet the adjustment policy criteria, updating adjustments to customer accounts in the C2M database and investigating refund requests, which may result in customer account modifications.

Monthly Bill Customer Account Inquiry – This activity determines appropriate actions to ensure that customers are billed accurately, particularly large users. The activity also ensures that malfunctioning meters which inaccurately measure consumption are properly identified, investigated and either repaired or replaced.

OPERATIONS

Operations refers to the departments critical to the planning, design, construction, operation and maintenance of the agency's water and sewer services. The Deputy General Manager for Operations provides leadership, oversight and guidance regarding facility planning, construction, maintenance and operations, as well as maintenance and repair of the agency's vast water distribution and sewer collection systems, ensuring continuous delivery of life's most precious resource. The offices and departments that fall under Operations are listed in the table below.

Budget Summary

Operations	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Asset Management Division*	5.2	\$ 1,716,700	6.0	\$ 1,794,247	7.0	\$ 2,636,714	1.0	\$ 842,467
Police & Homeland Security Office	34.3	4,723,371	40.0	5,951,878	40.0	5,336,375	-	(615,503)
Engineering & Construction Department	350.1	418,369,911	376.0	685,173,258	375.0	598,225,774	(1.0)	(86,947,484)
Production Department	315.1	142,937,207	332.0	152,791,839	340.0	159,986,489	8.0	7,194,650
Utility Services Department	478.8	89,645,813	512.0	122,030,861	511.0	103,934,530	(1.0)	(18,096,331)
Total	1,183.5	\$ 657,393,002	1,266.0	\$ 967,742,083	1,273.0	\$ 870,119,882	7.0	\$ (97,622,201)

(*) One workyear was transferred from Engineering & Construction to the Asset Management Division for the business cases studies.

Note: Workyear variance explanations for Engineering & Construction, Production and Utility Services are available in the respective department details.

ASSET MANAGEMENT DIVISION

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

Mission Statement

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

Core Activities

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

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

POLICE & HOMELAND SECURITY OFFICE

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

Mission Statement

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

Core Activities

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

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

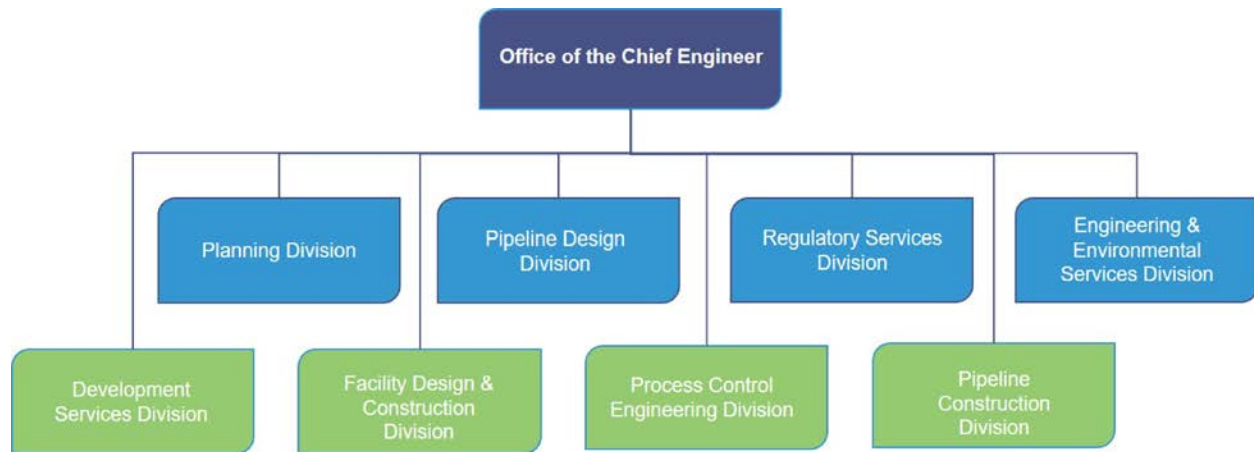
Emergency Management – This activity includes coordination of the entire preparedness cycle - planning, training and exercising, for emergency situations and disasters. This activity is also responsible for assisting in the agency-wide coordination of response to large-scale emergency incidents and disasters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

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

ENGINEERING & CONSTRUCTION DEPARTMENT

The Engineering & Construction (E&C) Department manages the planning, design and construction of the water and sewer systems throughout the Washington Suburban Sanitary District (WSSD), and serves as the water and sewer regulatory body that protects the system and the public. The department emphasizes continuous improvement through the development and management of its people, the efficient use of existing and emerging technologies and the use of scientific, engineering and business knowledge to proactively solve practical problems. Led by the Chief Engineer, the department is comprised of the eight divisions shown in the chart below.

Organizational Structure



Mission Statement

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

Budget Summary

Engineering & Construction Department	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Engineer	2.0	\$ 278,598	2.0	\$ 7,235,257	2.0	\$ 11,109,747	-	\$ 3,874,490
Development Services Division	50.2	5,304,674	51.0	5,900,338	50.0	5,723,377	(1.0)	(176,961)
Planning Division	13.5	68,014,856	15.0	69,351,070	14.0	81,122,525	(1.0)	11,771,455
Facility Design & Construction Division	28.2	143,442,473	33.0	217,786,942	31.0	192,333,080	(2.0)	(25,453,862)
Pipeline Design Division	32.5	15,538,193	39.0	33,506,835	41.0	32,539,744	2.0	(967,091)
Process Control Engineering Division	12.6	3,054,880	14.0	2,728,070	14.0	2,715,341	-	(12,729)
Regulatory Services Division	76.1	7,313,138	77.0	7,285,613	78.0	7,493,947	1.0	208,334
Pipeline Construction Division	76.6	164,883,889	83.0	328,923,725	83.0	251,766,991	-	(77,156,734)
Engineering & Environmental Services Division	58.4	10,539,210	62.0	12,455,408	62.0	13,421,022	-	965,614
Total	350.1	\$ 418,369,911	376.0	\$ 685,173,258	375.0	\$ 598,225,774	(1.0)	\$ (86,947,484)

ENGINEERING & CONSTRUCTION DEPARTMENT (Continued)

Explanation of Major Variances

The FY 2023 Approved Budget for the E&C Department reflects an overall decrease of 12.7% from the FY 2022 Approved Budget. The decrease is almost entirely attributable to the operating and capital reductions required due to budgeting constraints. The operating budget for the department declined by \$4.8 million, a decrease of 8.2%. More than 80% of the operating budget decrease is associated with the reductions to sewer rehabilitation work to reduce infiltration & inflow issues. The department's capital budget declined by \$82.2 million, a decrease of 13.1%. Out of the 15 capital projects that experienced cuts in the FY 2023 Proposed Budget, the reductions to 14 of those projects impacted the E&C Department budget.

One new inspector was added to Regulatory Services for performing necessary plumbing inspections. One new GIS Technician was added to Engineering & Environmental Services to support the revised federal Lead and Copper Rule. Interdivisional workyear transfers were made to address the Department's operational needs.

Highlights

- WSSC Water continues to comply with all aspects of the Sanitary Sewer Overflow (SSO) Consent Decree
- WSSC Water Potomac Consent Decree improvements are in design and construction during FY 2022 and FY 2023 as follows. The Potomac Solids Handling Building Expansion is in construction in FY 2022 and will finish in FY 2023. The Potomac Gravity Thickener Expansion is being bid in and will start construction in FY 2022 with construction continuing in FY 2023. The Potomac Sediment Basin Backwash Improvements is being bid in FY 2022 and will start construction with construction continuing in FY 2023
- The Piscataway Bioenergy project started construction in FY 2020 and will continue in FY 2023

Accomplishments

- The distribution and transmission main replacement programs completed 31.2 miles of rehabilitation in FY 2021
- The final phase (close out) of the Broad Creek WWPS Augmentation project will be completed in FY 2022

Racial Equity and Social Justice

- The E&C Department implements projects and strives to minimize contract spending disparities in support of the Office of Supplier Diversity and Inclusion (OSDI).

OFFICE OF THE CHIEF ENGINEER

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

Mission Statement

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

Core Activities

Management and Administration – This activity involves the management and supervision of the E&C Department. The Chief Engineer is responsible for leading capital project delivery, regulatory compliance processes, process controls for water and wastewater treatment facilities, and environmental initiatives.

OFFICE OF THE CHIEF ENGINEER (Continued)

Core Activities (Continued)

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

DEVELOPMENT SERVICES DIVISION

The Development Services Division is responsible for the integrity of WSSC Water's water and sewer system through oversight of the planning, design and construction of developer-built water and sewer extensions, WWPS and relocations. The division also reviews all plumbing, gas-fitting and house connection applications; issues permits; collects related fees and charges; administers the System Development Charge (SDC) reimbursement process; and reviews and processes site utility plans, service connection submittals and applicant built construction packages.

Core Activities

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

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

PLANNING DIVISION

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

Core Activities

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

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

PLANNING DIVISION (Continued)

Core Activities (Continued)

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

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

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

Replacement Planning – This activity pertains to all planning work associated with the water main, wastewater pump station, force main, large valve and meter valve replacement and facility replacement programs.

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

FACILITY DESIGN & CONSTRUCTION DIVISION

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

Core Activities

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

Facility Construction – This activity funds and manages facility construction projects, including ensuring contract terms, general conditions and specifications are fulfilled; reviewing submittals; processing contractor requests for information; reviewing and processing monthly and final payment requests; administering and negotiating change orders; and evaluating claims.



PIPELINE DESIGN DIVISION

The Pipeline Design Division is responsible for managing pipeline designs in the CIP and water and sewer main reconstruction programs; pipeline designs for water and sewer relocations associated with road improvement projects for the state, Counties and municipalities; and reviewing water and sewer relocations to ensure compliance with WSSC Water guidelines.

Core Activities

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

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

Goals, Objectives and Outcome Measures

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

Strategic Priority: Optimize Infrastructure

Objectives	Outcome Measure	FY 2020 Actual / Target	FY 2021 Actual / Target	FY 2022 Target	FY 2023 Target
Design the number of miles for the Water Reconstruction Program as planned	Miles of water mains designed	25.6 / 25.0	27.9 / 25.0	25.0	10.0 **
Design the number of miles for the Sewer Reconstruction Program as planned	Miles of sewer mains designed	25.2 / 25.0	29.4 / 25.0 *	33.0	33.0

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

(**) In FY 2023, the miles of water mains designed were reduced to 10.0 miles due to the CIP budget reductions.

PROCESS CONTROL ENGINEERING DIVISION

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

Core Activities

Corrective Maintenance – This activity provides corrective maintenance of all process control systems at WSSC Water facilities.

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

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

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

REGULATORY SERVICES DIVISION

The Regulatory Services Division is responsible for the federally mandated pretreatment (industrial discharge control) program; the Fats, Oils and Grease (FOG) Program; and the implementation and enforcement of the Plumbing and Gas-Fitting Regulations. The division regulates discharges into the sewer system; samples discharges from industrial users; inspects food service facilities; conducts investigations; responds to spills of hazardous materials entering the sewer system; monitors and inspects cross connections to prevent backflow contamination; maintains the Plumbing and Fuel Gas Code; maintains engineering design and meter design standards; reviews and approves plumbing and gas-fitting engineering designs; and inspects the installation of commercial and residential plumbing and gas-fitting systems, plumbing and gas fixtures/appliances and grease abatement systems.

Core Activities

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

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

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

Industrial Discharge Control Program – This activity monitors and controls industrial/non-domestic and hauled waste discharged into WSSC Water's sanitary sewer systems in compliance with all government regulations and investigates, samples, permits and reviews industry reports to confirm industry regulation compliance.

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

PIPELINE CONSTRUCTION DIVISION

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



PIPELINE CONSTRUCTION DIVISION (Continued)

Core Activities

Construction Management – This activity provides for management and inspection for all pipeline construction projects, including new house connections, pipeline relocations, site utilities and rehabilitations. Rehabilitation contracts include water and sewer replacement, water main cleaning and lining, large water meter replacement, cathodic protection, house connection renewals and sewer main lining. It also includes inspection of work performed by others, such as developers and relocations by state, County, and municipal agencies.

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

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

Goals, Objectives and Outcome Measures

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

Strategic Priority: Optimize Infrastructure

Objectives	Outcome Measure	FY 2020 Actual / Target	FY 2021 Actual / Target	FY 2022 Target	FY 2023 Target
Replace the number of miles for the Water Reconstruction Program as planned	Miles of water mains replaced	28.1 / 23.0	26.3 / 23.0	29.0	23.0 **
Rehabilitate the number of miles of sewer mains and lateral lines for the Sewer and Trunk Sewer Reconstruction Programs as planned	Miles of sewer mains and lateral lines rehabilitated	10.1 / 38.0	24.5 / 38.0 *	42.0	42.0

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

(**) In FY 2023, the miles of water mains replaced were reduced to 23.0 miles due to the CIP budget reductions.

ENGINEERING & ENVIRONMENTAL SERVICES DIVISION

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

Core Activities

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

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

Electrical and Mechanical Support – This activity provides electrical and mechanical support including: asset management, ongoing project engineering and construction projects, research and evaluation of associated materials and methods and emerging technologies and traditional practices. The activity includes facility master plans, standardization, in-house engineering and technical support.

ENGINEERING & ENVIRONMENTAL SERVICES DIVISION (Continued)

Core Activities (Continued)

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

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

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

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

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

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

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

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

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

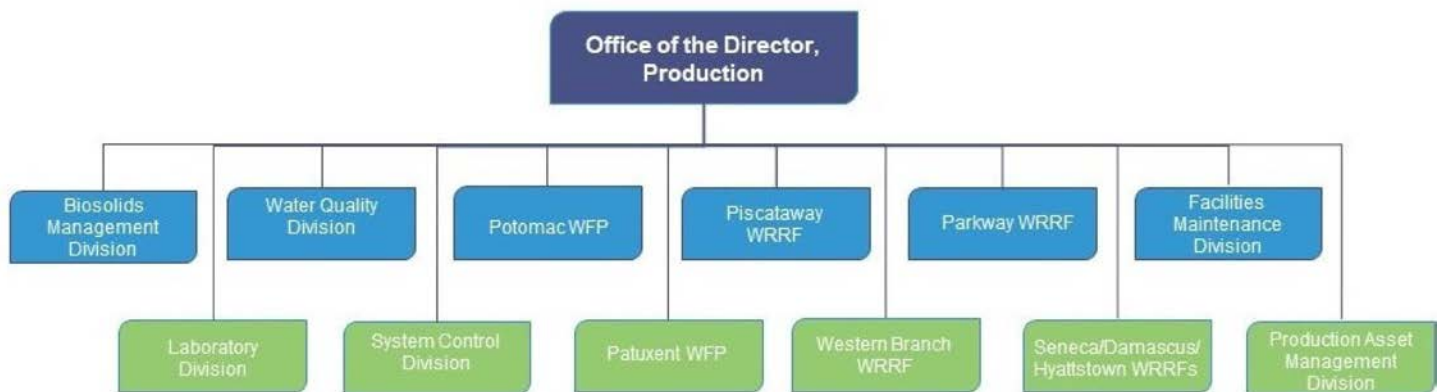
Electronic As-Built Prep – This activity prepares pipeline rehabilitation as-built contracts using AutoCad, including integrating the Global Positioning System (GPS) units to transmit digital appurtenance locations to AutoCad. The AutoCad results are then transmitted to EGIS.

PRODUCTION DEPARTMENT

The Production Department is committed to meeting two primary objectives: to provide our customers with a safe and reliable supply of drinking water that meets or exceeds all Federal and State standards and regulations; and protect public health and the environment by returning a clean wastewater effluent back to the environment. WSSC Water's yearly recognition by the Partnership for Safe Water and Peak Performance Award Programs is indicative of our commitment to provide our customers with the best water and wastewater services possible. Led by the Production Director, the department is comprised of the twelve divisions shown in the Organizational Structure chart.



Organizational Structure



Mission Statement

To provide a safe and reliable supply of drinking water, and to produce a high quality wastewater effluent that provide high quality, cost-effective operation and maintenance of the agency's water supply, dams and reservoirs, water filtration plants, water distribution facilities, wastewater collection facilities, wastewater resource recovery facilities, biosolids management programs and laboratories.

PRODUCTION DEPARTMENT (Continued)

Budget Summary

Production Department	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, Production	4.4	\$ 669,256	2.0	\$ 349,974	3.0	\$ 524,117	1.0	\$ 174,143
Biosolids Management Division	-	-	5.0	499,681	17.0	5,480,840	12.0	4,981,159
Laboratory Division	27.8	4,433,732	29.0	4,318,259	29.0	4,244,295	-	(73,964)
Water Quality Division	7.9	983,922	8.0	1,709,593	10.0	2,045,666	2.0	336,073
Systems Control Division	32.4	4,809,855	32.0	9,284,912	32.0	8,883,683	-	(401,229)
Potomac Division	33.7	9,309,690	35.0	9,627,597	35.0	9,186,003	-	(441,594)
Patuxent Division	24.3	5,249,120	26.0	4,670,399	25.0	5,046,458	(1.0)	376,059
Piscataway Division	24.9	8,673,945	26.0	10,783,722	25.0	9,275,674	(1.0)	(1,508,048)
Western Branch Division	31.7	13,293,018	32.0	9,614,181	29.0	13,537,594	(3.0)	3,923,413
Parkway Division	21.0	3,614,898	22.0	3,819,528	22.0	3,642,888	-	(176,640)
Seneca/Damascus/Hyattstown Division	31.0	6,694,668	32.0	6,052,612	32.0	6,531,621	-	479,009
Facilities Maintenance Division	61.9	16,411,126	68.0	20,363,828	68.0	20,128,848	-	(234,980)
Production Asset Management Division*	14.1	68,793,977	15.0	71,697,553	13.0	71,458,802	(2.0)	(238,751)
Total	315.1	\$ 142,937,207	332.0	\$ 152,791,839	340.0	\$ 159,986,489	8.0	\$ 7,194,650

(*) Beginning FY 2022, Production Support Division was renamed to Production Asset Management Division.

Explanation of Major Variances

The FY 2023 Approved Budget reflects an increase of approximately 4.7% over the FY 2022 Approved Budget. The increase is primarily due to the need to fund the new Biosolids Management Division; increased hauling costs at Western Branch WRRF, Seneca/Damascus/Hyattstown WRRFs and Patuxent WFP; and increased funding for the new Lead and Copper Rule Compliance project. The increase is partially offset by decreased materials costs at several other facilities.

Overall, the Production Department increased by eight workyears. This comprised of six new workyears to support the Biosolids Management Program, one new workyear was added to the Water Quality Division to support the revised federal Lead and Copper Rule and one workyear was transferred from the Utility Services Learning & Development Division to the Biosolids Management Division. Interdivisional workyear transfers were made to address the Department's operational needs.

Highlights

- Establish budget for the new Biosolids Management Division
- Funding to support Phase III of the Biosolids Master Plan
- Six new workyears are included for the new Biosolids Management Division and one new workyear for the Water Quality Division to begin compliant operations under the revised federal Lead and Copper Rule
- Water tank rehabilitation is underway for three elevated tanks near the City of Bowie, Prince George's County
- Design for the dredging of Little Seneca Reservoir will begin in FY 2023 to remove sediment collected in the forebays

Accomplishments

- FY 2021 marked our 103rd year without a drinking water violation
- Both Potomac and Patuxent WFPs earned the prestigious Partnership for Safe Water Presidents Award, the only two water filtration plants in Maryland to win the award
- Five WRRFs earned National Association of Clean Water Agency Peak Performance Awards in 2021

OFFICE OF THE DIRECTOR, PRODUCTION

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

Core Activities

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

BIOSOLIDS MANAGEMENT DIVISION

The primary focus of this division is on receiving the biosolids from all WSSC Water's WRRFs and producing an exceptional quality Class A product suitable for beneficial reuse while producing renewable energy.



Core Activities

Biosolids Management Program – The program plans, organizes and directs the activities of WSSC Water's Anaerobic Digestion and Combined Heat and Power facility, consisting of thermal hydrolysis pre-treatment, mesophilic anaerobic digestion, cake receiving, dewatering operations, side stream treatment and combined heat and power processes and equipment. The program also manages all the contractual and regulatory issues related to biosolids and residuals.

LABORATORY DIVISION

This division is responsible for the operation and maintenance of WSSC Water's laboratory facilities and for providing high quality analytical data to the agency and other organizations for the benefit of public health and environmental quality.

Core Activities

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

WATER QUALITY DIVISION

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

Core Activities

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

SYSTEMS CONTROL DIVISION

This division is responsible for the operation and maintenance of the water distribution system's pumping stations, water storage tanks, throttling valves, specialty valves, electrically operated valves and associated instrumentation. The division operates and maintains SCADA systems through the Control Center, monitoring remote water and wastewater facilities to ensure reliable service and minimizing environmental damage. The ultimate goal of the division is to provide reliable and safe water throughout the distribution system. The division also operates and maintains three dams and the raw water reservoirs impounded behind them. Operations on the Patuxent River dams to include notifications with emergency management personnel during flooding events.

Core Activities

Operations – This activity involves the operation and maintenance of the water distribution system's pumping stations, water storage tank throttling valves, specialty valves, electrically operated valves, associated instrumentation and three dams and their impounded raw water.

Maintenance – This activity maintains and operates the agency's Patuxent reservoirs to protect water quality. This activity also performs maintenance required by the dam regulatory offices and the maintenance of the watershed recreational areas. In addition, this activity provides support to the Communications & Community Relations Office for its community outreach events. During drought years and during the current Brighton Dam rehabilitation project, this unit has removed silt from the upper reservoir reaches to regain reservoir storage.

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

POTOMAC AND PATUXENT WFPs

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

POTOMAC AND PATUXENT WFPs (Continued)

Core Activities

Operations – This activity is associated with monitoring, controlling and enhancing process systems associated with water treatment to meet or exceed rigorous federal water quality standards under the Safe Drinking Water Act as well as monitoring and reporting of the plant discharge pursuant to the requirements of the federal Clean Water Act. This activity also monitors and controls the chlorine residual levels entering the water system to maintain water safety to the customer tap as well as conducts annual enhanced coagulation to reduce chlorine by-product formation in the water system.

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

Activity Indicators

Workload Data	FY 2020 Actual	FY 2021 Actual	FY 2022 Approved	FY 2023 Approved
Average daily filtered water to the distribution system (MGD)	162.6	162.8	163.0	163.0

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

These WRRFs are responsible for the operation and maintenance of their respective facilities, providing high quality, cost effective maintenance and continual operation of the agency's wastewater collection facilities and WRRFs. The facilities produce effluent that meets all requirements for discharging into waters of the State of Maryland; utilize the biosolids generated in an environmentally beneficial manner; and operate and maintain wastewater pumping stations to convey wastewater without overflows.

Core Activities

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

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

Activity Indicators

Workload Data	Wastewater Treated Flow (MGD)			
	FY 2020 Actual	FY 2021 Actual	FY 2022 Approved	FY 2023 Approved
Piscataway WRRF	26.3	28.4	26.8	27.7
Western Branch WRRF	22.6	26.1	23.1	24.0
Parkway WRRF	6.4	6.8	6.5	6.6
Seneca/Damascus/Hyattstown WRRFs	17.4	17.8	17.8	17.4

FACILITIES MAINTENANCE DIVISION

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

Core Activities

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

PRODUCTION ASSET MANAGEMENT DIVISION

The primary focus of this division is on asset management, centralized purchasing efforts such as chemical contract management, competitive action efforts, safety, training and security.

Core Activities

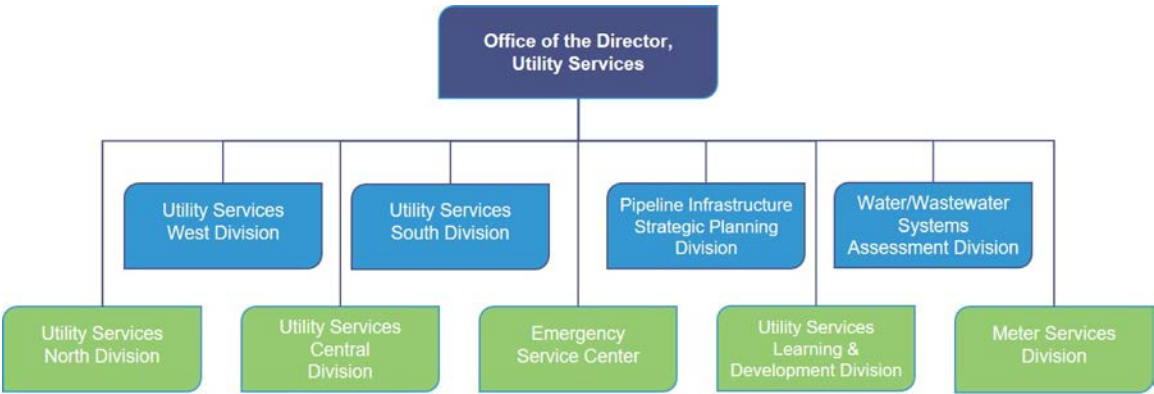
Production Support – This activity includes facility support through asset management, contract management, and training. It also includes management of the shared operation and maintenance costs for utilities in other jurisdictions, and shared costs to support coordination of regional water supply issues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

UTILITY SERVICES DEPARTMENT

The Utility Services Department is directly responsible for maintaining the distribution and collection systems including all of WSSC Water’s water and sewer mains, thus ensuring the consistent flow of water and outflow of wastewater within the WSSD and preserving the infrastructure in order to provide quality service for customers. Led by the Utility Services Director, this department is comprised of the nine divisions shown in the Organizational Structure chart.



Organizational Structure



Mission Statement

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

UTILITY SERVICES DEPARTMENT (Continued)

Budget Summary

Utility Services Department	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, Utility Services	11.4	\$ 6,992,052	11.0	\$ 20,941,960	10.0	\$ 9,212,824	(1.0)	\$ (11,729,136)
Utility Services North Division	58.7	8,376,953	59.0	9,212,169	59.0	6,985,308	-	(2,226,861)
Utility Services West Division	54.3	7,944,361	60.0	10,472,693	60.0	8,089,880	-	(2,382,813)
Utility Services Central Division	64.3	8,329,565	62.0	11,653,777	62.0	9,039,482	-	(2,614,295)
Utility Services South Division	54.5	13,328,940	58.0	10,459,891	58.0	8,619,775	-	(1,840,116)
Emergency Service Center	21.7	1,637,549	18.0	1,621,074	19.0	1,786,804	1.0	165,730
Pipeline Infrastructure Strategic Planning Division	23.0	3,658,133	37.0	6,075,801	37.0	11,890,086	-	5,814,285
Utility Services Learning & Development Division	7.0	758,629	8.0	888,623	7.0	847,395	(1.0)	(41,228)
Water/Wastewater Systems Assessment Division	78.0	28,414,897	83.0	38,346,375	83.0	36,848,034	-	(1,498,341)
Meter Services Division	105.9	10,204,734	116.0	12,358,498	116.0	10,614,942	-	(1,743,556)
Total	478.8	\$ 89,645,813	512.0	\$ 122,030,861	511.0	\$ 103,934,530	(1.0)	\$ (18,096,331)

Explanation of Major Variances

The FY 2023 Approved Budget is approximately 14.8% less than the FY 2022 Approved Budget. The changes include transfers between divisions while the primary decreases include reductions made due to budgetary constraints and one workyear transfer from the Utility Services Learning & Development Division to the Biosolids Management Division in the Production Department.

Highlights

- Continuing focus on large meter testing, repair and replacement
- Performing inspections on metallic water mains using new and emerging technologies
- Implementing new work and asset management software to replace legacy maintenance management information system, to provide both asset and work management capabilities for the Utility Services Department to manage WSSC Water's linear infrastructure. The new application solution will meet business needs and allow for expansion, refinement and growth, while incorporating critical business processes
- Renovating the Emergency Service Center to address outdated infrastructure, modernize the dispatch console and maximize space efficiency

Accomplishments

- Implemented an unidirectional flushing program to address distribution network water quality
- Completed the third 5-year cycle of Consent Decree trunk sewer inspections. During the most recent 5-year cycle, 745 miles of 15" and larger sized sewer assets evaluated
- Developed H2O alert map to notify WSSC Water customers of all water outages in Prince George's and Montgomery Counties

OFFICE OF THE DIRECTOR, UTILITY SERVICES

The Utility Services Director is directly responsible for the operation, maintenance and repair of the water and sewer mains throughout the WSSD.

Core Activities

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



UTILITY SERVICES NORTH, WEST, CENTRAL AND SOUTH DIVISIONS

These divisions maintain WSSC Water's distribution and collection systems, including all of the agency's water and sewer mains and water meters, thus ensuring the consistent flow of water and outflow of wastewater within their geographical regions and preserving the infrastructure to provide quality service for the agency's customers.

Core Activities

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

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

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

Core Activities (Continued)

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

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

Goals, Objectives and Outcome Measures

Goal: Accurately account for water produced in the distribution system **Strategic Priority:** Optimize Infrastructure

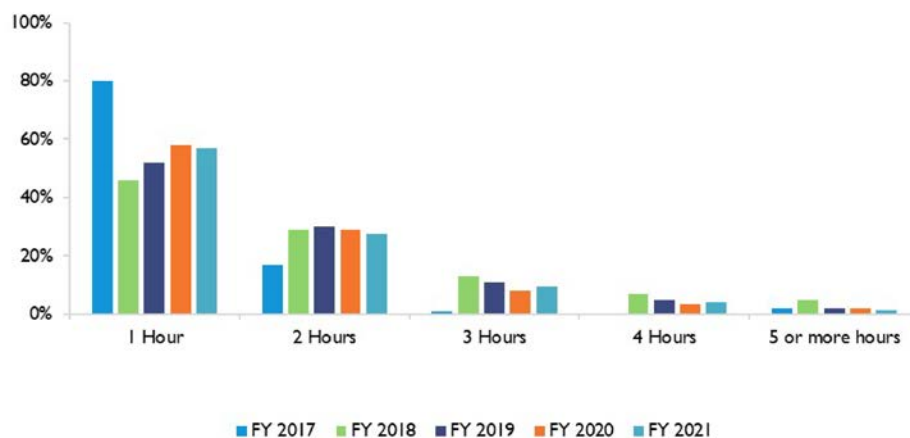
Objectives	Outcome Measure	FY 2020 Actual / Target*	FY 2021 Actual / Target*	FY 2022 Target*	FY 2023 Target
Reduce service interruptions due to water main breaks	Number of breaks per 100 miles of water main	27 / 34	33 / 34	34	34

(*) FY 2018 through FY 2020 targets assumed breaks only

Emergency Response

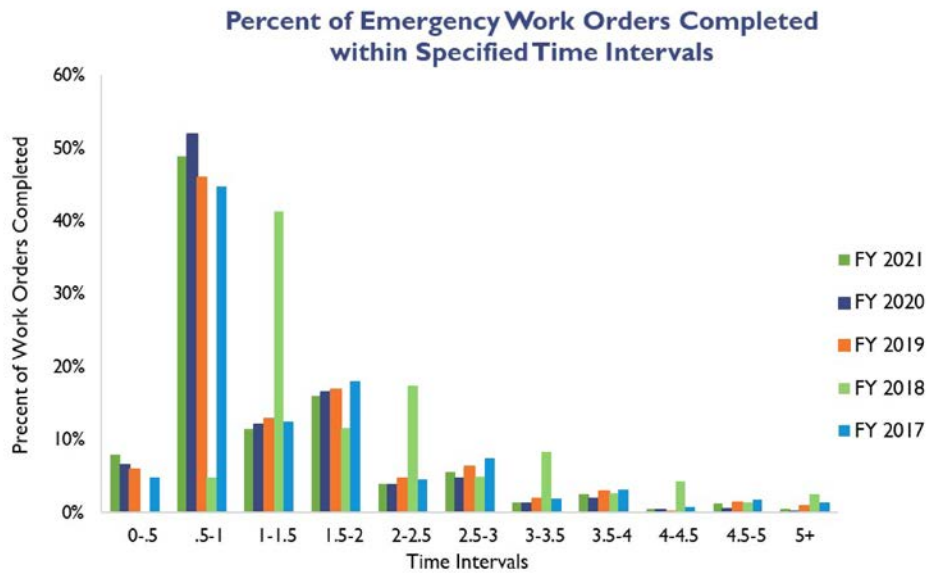
During FY 2021, 25,217 emergency work orders were initiated in response to customer or system emergencies, a 0.1% decrease from FY 2020. WSSC Water's objective is to provide a first response to these emergencies in less than 2 hours, a reasonable and necessary response time based upon feedback from customers. As illustrated in the next graph, WSSC Water responded to approximately 58% of emergency calls in less than 1 hour and to 79% in less than 2 hours with an average response time of 1.2 hours.

Percentage of Emergency Responses within Specified Times



The following graph shows the distribution of emergency work order completion times in FY 2021. Most emergency work orders required less than 2-hours to complete.

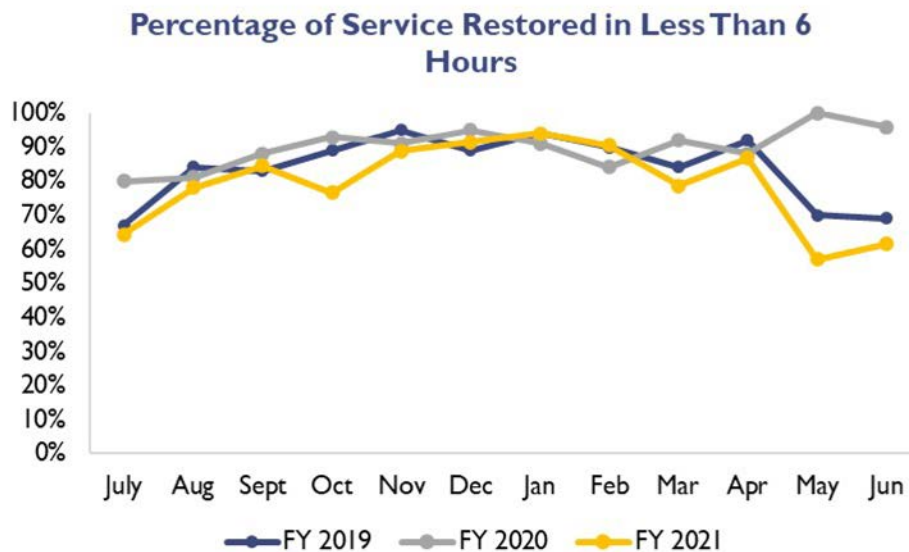
UTILITY SERVICES NORTH, WEST, CENTRAL AND SOUTH DIVISIONS (Continued)



Restoration of Water Service

WSSC Water's objective is to restore normal service to our customers within 24 hours from the time the agency is notified of an emergency, and to limit the actual time a customer is without water service to less than 6 hours. During FY 2021, more than 16,324 customers, or approximately 3.5% of WSSC Water's customers, experienced a temporary suspension in water service while a water main was shut down following a water main break or other emergency. The following graph indicates the percentage of affected customers whose water service was restored in less than 6 hours after a water main was shut down and returned to service. For FY 2021, the average time customers were without water service was 4 hours, with 85% having water service restored within the targeted 6 hour goal.

FY 2023 response times may be impacted due to budget reductions.



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

Sewer Line Blockage

The goal of the line blockage analysis program is to prevent a customer who experiences a sewer backup due to a problem in the WSSC Water's sanitary sewer system from suffering a second backup. When a customer reports a sewer backup, a maintenance crew responds to confirm the backup and determine the cause. Once confirmed, a crew is dispatched to address the problem, generally within 2 hours. The customer is notified the following business day that a follow-up line blockage investigation has been initiated. The sewer main is immediately recleaned to avoid another backup during the investigation process, and a closed-circuit television inspection of the sewer line is performed within 5 days of the backup to evaluate the structural integrity. All pertinent data is then reviewed and analyzed to determine what action is necessary to prevent a recurrence of the backup. After a decision is made, the customer is notified of any planned action, and the appropriate preventive maintenance or rehabilitation action is scheduled and subsequently implemented.

The overall program objective is to prevent a second backup in 95.0% of the cases processed. For FY 2021, the agency was successful in preventing a second backup in 92.9% of these cases. The Proactive Maintenance Program, along with preventive maintenance optimization and the use of new technologies such as smart covers, has enabled WSSC Water to pursue its objective more diligently.

Sewer House Connection Renewal

The sewer house connection renewal program replaces sewer house connections when structural problems have caused customer backups. Damaged or deteriorated sewer house connections are replaced as necessary to ensure that customers do not suffer repeated sewer backups into their homes. The program objective is to prevent a second backup after WSSC Water has confirmed there is a problem with the service. During FY 2021, more than 705 house connections met the criteria for sewer renewal.



EMERGENCY SERVICE CENTER

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



Core Activities

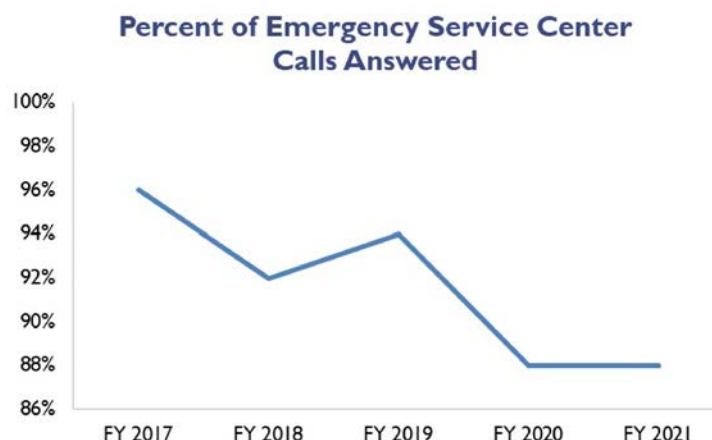
Radio Dispatching – This activity communicates with field inspectors and WSSC Water crews to investigate reports of emergencies and receive updates on field maintenance activities 24/7; updates maintenance records and arranges for resolution of problems; and operates base radio station equipment, dispatch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

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

Customer Calls to the Emergency Service Center

During FY 2021, WSSC Water answered 88.0% of customer calls for emergency maintenance assistance, as shown in the graph below, which is the same as FY 2020. Transition from desktops to laptops, desk phones to AvayaOneX and telework during the pandemic contributed to a decrease in calls answered. The agency's goal continues to be a 95.0% response rate.

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



The Center uses the Customer Notification System for mass notifications to customers, internal and external representatives.

PIPELINE INFRASTRUCTURE STRATEGIC PLANNING DIVISION

This division collects quality data to assist managing and administering predictive and preventive maintenance activities impacting WSSC Water's pipeline infrastructure. The data is utilized to plan and schedule maintenance activities, develop water and wastewater asset management plans and improve business workflows within the Utility Services Department.

Core Activities

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

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

Goals, Objectives and Outcome Measures

Goal: Complete planned water main replacement miles

Strategic Priority: Optimize Infrastructure

Objectives	Outcome Measure	FY 2020 Actual / Target	FY 2021 Actual / Target	FY 2022 Target	FY 2023 Target
Replace the number of miles of water main by in-house staff as planned	Miles of water main replaced by inhouse crews vs. planned	2.5 / 2.0	3.6 / 2.0	2.0	2.0

UTILITY SERVICES LEARNING & DEVELOPMENT DIVISION

This division trains Utility Services employees and ensures the department's current work practices are operationally effective. This division searches for best practices and/or technology that will provide greater efficiencies and increase productivity in the various divisions of the Utility Services Department.

Core Activities

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

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

WATER/WASTEWATER SYSTEMS ASSESSMENT DIVISION

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

WATER/WASTEWATER SYSTEMS ASSESSMENT DIVISION (Continued)



Core Activities

Planning – This activity provides the necessary management and administration related to compliance with the requirements of the federal SSO Consent Decree, and execution of the Line Blockage Analysis Program, which provides for review of sewer lines and service stoppage data, and recommendations for preventive maintenance sewer cleaning and other measures to eliminate repetitive backups and overflows.

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

Condition Assessment – This activity provides condition assessment of the agency's water distribution and transmission systems, as well as the wastewater collection and disposal systems. Condition assessment of the water systems (PCCP and non-PCCP mains) includes leak detection, acoustic testing and other related techniques to determine pipeline deficiencies and condition ratings. Condition assessment of the wastewater and collections systems involves the investigation of problem sewer basins and development of flow monitoring projects to evaluate the magnitude of the problem(s); physical surveys, smoke testing, dye testing and internal inspection to identify specific defects; SSES of selected basins for the purpose of identifying and eliminating extraneous flows; inspecting and documenting the condition of manholes, trunk sewer lines and creek crossings to identify and correct problems having the potential for causing sewer overflows; and managing and operating the flow surveillance components of WSSC Water's comprehensive sewer model.

Large Valve Assessment, Repair and Replacement – This activity provides inspection of the water transmission systems' large valves. This activity systematically inspects, exercises, repairs and replaces (when necessary) large diameter valves located throughout the system. Based upon results of valve condition assessments, annual valve rehabilitations are projected to be approximately 85 repairs and 2 replacements.

WATER/WASTEWATER SYSTEMS ASSESSMENT DIVISION (Continued)

Goals, Objectives and Outcome Measures

Goal: Identify deteriorating infrastructure through inspection, testing and monitoring

Strategic Priority: Optimize Infrastructure

Objectives	Outcome Measure	FY 2020 Actual / Target	FY 2021 Actual / Target	FY 2022 Target	FY 2023 Target
Inspect the number of PCCP miles as planned	Miles of PCCP inspection performed vs. planned	18.0 / 18.0	13.0 / 18.0	18.0	17.4
Install acoustical fiber optic line to monitor PCCP water transmission mains as planned	Miles of AFO line installed vs. planned	0.0 / 3.5	6.9 / 10.0	10.0	10.0

Activity Indicators

Workload Data	FY 2020 Actual / Target	FY 2021 Actual / Target	FY 2022 Approved	FY 2023 Approved
Miles of sewer mains cleaned for preventive maintenance	649 / 650	646 / 650	650	650
Miles of mainline sewer televised for preventative maintenance program (WSSC Crews)	51 / 60	46.9 / 60	60	60
Miles of mainline sewer televised for proactive maintenance program (by contract)	193 / 225	131 / 200	200	200
Manholes inspected (by contract)	946 / 6,000	791 / 5,500*	5,500	5,500

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

METER SERVICES DIVISION

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

Core Activities

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

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

Small and Large Meter Testing, Repair and Flow Test – This activity involves routine inspection of the water distribution system and performing fire flow tests for outside agencies.

Small and Large Meter Testing, Repair and Replacement – This activity involves testing, repairing, and replacing small and large meters to ensure billing accuracy. Meters tested and repaired on a routine preventive maintenance basis are more likely to operate at optimum levels with fewer instances of inaccurate registration. Some meters lose accuracy over time and it may become necessary to replace them to ensure accurate registration for WSSC Water's customers.

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

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

ADMINISTRATION

Administration refers to the departments and offices providing centralized advisory and support services to WSSC Water. The Deputy General Manager for Administration is responsible for ensuring core activities align with and are in support of the General Manager's strategic vision, goals and objectives. Administration is comprised of the departments and offices listed below.

Budget Summary

Administration	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of Supplier Diversity & Inclusion*	9.0	\$ 1,156,168	9.0	\$ 1,292,695	10.0	\$ 1,220,583	1.0	\$ (72,112)
Procurement Office**	21.6	2,176,338	27.0	2,717,721	31.0	3,181,169	4.0	463,448
General Services Department	85.6	34,832,371	96.0	41,149,538	98.0	38,834,334	2.0	(2,315,204)
Finance Department	62.4	7,881,473	64.0	8,271,660	64.0	8,221,268	-	(50,392)
Information Technology Department	91.7	56,111,013	103.0	61,389,484	103.0	56,299,284	-	(5,090,200)
Total	270.3	\$ 102,157,363	299.0	\$ 114,821,098	306.0	\$ 107,756,638	7.0	\$ (7,064,460)

(*) One additional workyear is authorized after reduction to the budget for temporary services. Overall budget did not increase as a result of adding this position.

(**) Five workyears were transferred from the Strategy & Innovation Office to the Procurement Office.

Note: Detailed workyears variance explanation for the departments were available in the department's write-up.

OFFICE OF SUPPLIER DIVERSITY & INCLUSION

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

Mission Statement

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

Core Activities

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

PROCUREMENT OFFICE

The Procurement Office, led by the Chief Procurement Officer, is responsible for acquiring all necessary commodities, supplies, and services, including professional services, necessary to support WSSC Water's operations and functions and to oversee the bid and award process for all construction contracts.

Mission Statement

To provide unified Supply Chain Management functions that ensure integrity and fairness, with centralized responsibility for oversight of solicitation, vendor selection, negotiation, award, contract administration, and reporting.

PROCUREMENT OFFICE (Continued)

Core Activities

Procurement Services – This activity involves purchasing all commodities, supplies, equipment, and services necessary to support WSSC Water’s operations, maintenance, and staff functions at the lowest possible price through public competitive bidding. This is accomplished through competitive solicitation processes which result in the award of contracts that are effectuated by purchase orders using master and blanket purchase orders, requests for proposals, invitations for bids, multi-year contracts, and procurement cards for small dollar items purchases. Also included in this activity are all contracting functions, from request to advertise through notice to proceed and maintenance of a complete contract file for all contracts regardless of contracting method.

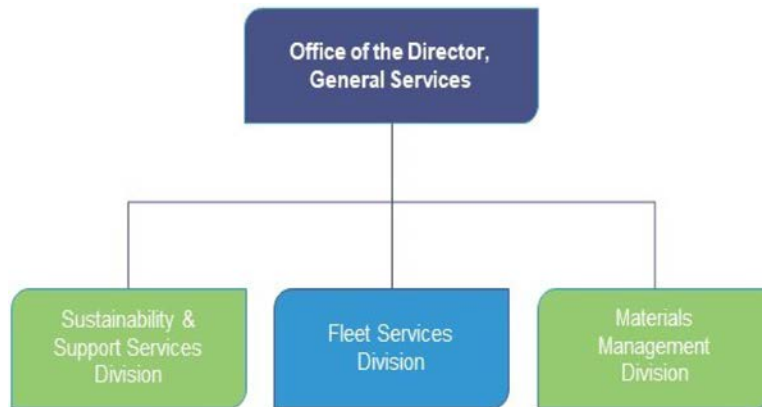
Operations and Administration – This activity involves implementing, maintaining, and administering programs for the agency’s supplier portal, training, policies and procedures, procurement card program management, and verification of vendor bonding and insurance. This activity also involves risk management and operations analysis; monitoring and reporting of suppliers’ participation on contracts; and through participation in outreach events with OSDI, providing information to prospective suppliers.

Strategic Sourcing – This activity involves managing the total cost of operation for WSSC Water by using a fact-based, data-driven process focused on cost savings, process improvements, supplier innovation, and category management.

GENERAL SERVICES DEPARTMENT

The General Services Department is responsible for fleet and fuel services; acquisition, warehousing and distribution of materials and supplies; office services; records management; sustainability services including energy management; property development; and space planning and management. Led by the Office of the Director, the department is comprised of the three divisions shown in the following chart.

Organizational Structure



Mission Statement

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

Budget Summary

General Services Department	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Director, General Services	1.5	\$ 321,221	3.0	\$ 574,968	3.0	\$ 584,713	-	\$ 9,745
Sustainability & Support Services Division	14.6	22,150,938	20.0	27,094,303	22.0	24,753,642	2.0	(2,340,661)
Fleet Services Division	41.8	8,647,957	46.0	10,448,748	46.0	10,431,499	-	(17,249)
Materials Management Division	27.7	3,712,255	27.0	3,031,519	27.0	3,064,480	-	32,961
Total	85.6	\$ 34,832,371	96.0	\$ 41,149,538	98.0	\$ 38,834,334	2.0	\$ (2,315,204)

Explanation of Major Variances

The FY 2023 Approved Budget reflects a decrease of approximately 5.6% over the FY 2022 Approved Budget. The decrease is primarily attributed to the deferred renovation of Anacostia Depot and other support services facilities as well as the reduced office space rental cost. The decrease is partially offset by two workyears transferred from Facility Design & Construction Division to Sustainability & Support Services Division, the projected increase of the energy cost and the records archive services cost.

Highlights

- Will purchase solar, wind and hydro-electric energy that will help WSSC Water meet its greenhouse gas reduction goals
- Will conduct a study to determine the feasibility of installing a microgrid to provide back-up power for the Potomac WFP

GENERAL SERVICES DEPARTMENT (Continued)

Highlights (Continued)

- Implementing an easy to use pool car management software and customer kiosks to improve the availability and convenience of using pool cars at the depots
- Deploying an electronic driver vehicle inspection report system
- In the process of incorporating electric vehicles into WSSC Water's fleet
- Supporting the WSSC Water pandemic response by issuing personal protective equipment and supplies to employees and contractors
- Supporting material orders during unprecedented time of worldwide supply chain disruptions and price increases

Accomplishments

- Secured a contract for wholesale electricity that results in annual savings
- Secured a contract for wholesale natural gas that results in annual savings
- Negotiated a wind power contract to cover 33% of annual electrical consumption
- Deployed new more efficient multifunctional copiers at all facilities
- Developed and advertised a request for proposal to replace the existing Lyttonsville Depot
- Conducted a feasibility study to relocate the Gaithersburg Depot to the Seneca WRRF
- Completed development of Anacostia Depot Master Plan
- Conducted a study to determine the potential to use wastewater thermal energy to heat and cool facilities in the WSSC Water service area
- Implemented a new fleet management software application
- Updated Fleet Services Division's manual of standard procedures

OFFICE OF THE DIRECTOR, GENERAL SERVICES

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

Core Activities

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

General and Administrative – This activity has a broad scope, ranging from supervising a fleet of vehicles and equipment (parts and supplies) to warehousing and inventorying, providing materials to support the maintenance, repair and operations of WSSC Water's infrastructure systems and facilities, providing printing, mailing, vending and cafeteria services, records archiving and document management, as well as real estate management, management and support services for facility planning, design and construction.

SUSTAINABILITY & SUPPORT SERVICES DIVISION

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

Core Activities

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

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

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

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

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



FLEET SERVICES DIVISION

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



Core Activities

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

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

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

Activity Indicators

Workload Data	FY 2020 Actual	FY 2021 Actual	FY 2022 Approved	FY 2023 Approved
Equipment fleet managed (pieces of equipment)	714	692	715	685
Vehicle fleet managed (number of vehicles)	942	951	925	930
Scheduled preventative maintenance completed on vehicles and equipment	3,360	3,318	3,350	3,400
Other (non-preventative maintenance) vehicle and equipment repairs	6,600	6,197	6,600	6,500

MATERIALS MANAGEMENT DIVISION

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

Core Activities

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

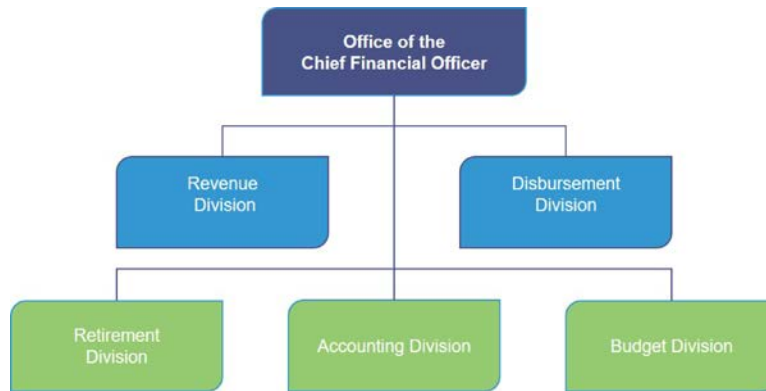
Materials Management – This activity involves the acquisition and management of materials stocked at WSSC Water's warehouses, and used by employees and contractors in the maintenance and repair of the distribution and collection systems. This includes receiving, storing and issuing materials; inspecting, testing and evaluating materials; developing new material specifications; and certifying the manufacturing processes, materials and plants.



FINANCE DEPARTMENT

The Finance Department maintains the fiscal integrity of WSSC Water and helps ensure available resources are efficiently allocated and productively used to provide value to agency customers at the lowest possible price. Led by the Chief Financial Officer, the department is comprised of the divisions listed below.

Organizational Structure



Mission Statement

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

Budget Summary

Finance Department	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Financial Officer	2.3	\$ 715,258	5.0	\$ 1,329,152	5.0	\$ 1,140,370	-	\$ (188,782)
Retirement & Investments Division	6.0	1,005,057	6.0	935,178	6.0	1,022,544	-	87,366
Revenue Division	14.0	1,492,872	14.0	1,506,731	14.0	1,526,463	-	19,732
Accounting Division	17.4	1,930,804	16.0	1,681,937	16.0	1,713,562	-	31,625
Disbursements Division	14.0	1,335,401	14.0	1,362,267	14.0	1,391,992	-	29,725
Budget Division	8.7	1,402,081	9.0	1,456,395	9.0	1,426,337	-	(30,058)
Total	62.4	\$ 7,881,473	64.0	\$ 8,271,660	64.0	\$ 8,221,268	-	\$ (50,392)

Explanation of Major Variances

The FY 2023 Approved Budget did not materially shift from the FY 2022 Approved Budget.

Accomplishments

- WSSC Water successfully retained its AAA bond rating from all major credit rating agencies in the fall of 2021
- Bonds sold in September 2021 had a 2.25% interest rate and included \$23 million of Green bonds
- Pension and OPEB funds weathered investment market volatility throughout the COVID-19 pandemic and remained well-funded
- WSSC Water was awarded the Government Financial Officers Association Distinguished Budget Presentation award for the 27th consecutive year

OFFICE OF THE CHIEF FINANCIAL OFFICER

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

Core Activities

Grants Administration and Capital Funding – This activity administers Maryland Water Quality loans and grant monies received from the EPA and the MDE. The office is also responsible for all efforts associated with bond and note operations, and Maryland Water Quality loan administration.

RETIREMENT & INVESTMENTS DIVISION

The Retirement & Investments Division is responsible for administering WSSC Water's Employees' Retirement Plan (Plan) for employees and retirees in accordance with the Plan and Internal Revenue Service regulations. The division also supports the Retirement and OPEB Plan's Board of Trustees in managing and investing Plan assets. The division is also responsible for investing WSSC Water's available funds in accordance with the agency's Investment Policy and applicable State laws.

Core Activities

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

Investment Operations – This activity invests WSSC Water's funds in accordance with Maryland law.

REVENUE DIVISION

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



REVENUE DIVISION (Continued)

Core Activities

Revenue Operations – This activity includes processing, depositing and recording all revenue received by WSSC Water, including payments for water and sewer bills, billed work invoices, grants, permits, and other miscellaneous revenue.

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

ACCOUNTING DIVISION

The Accounting Division is responsible for maintaining the financial books and records of WSSC Water and preparing financial statements that fairly present the fiscal position of the agency.

Core Activities

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

Research, Special Handling and Special Studies – This activity performs special analyses and studies on both regular and as-needed bases to support management initiatives and rate calculations ensuring that agency decisions and policies are based on accurate data and reliable financial information. In addition, it tests, implements and enhances information technology initiatives.

Capital Assets – This activity maintains, monitors, tracks, analyzes and reports on water and sewer lines, water distribution, wastewater collection, multi-purpose facilities, capital equipment and WSSC Water's vehicle fleet.

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

DISBURSEMENTS DIVISION

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

Core Activities

Accounts Payable – This activity processes supplier and procurement card invoices, customer refunds and claims, travel advances, and employee reimbursements; generates disbursement checks; makes electronic payments; and makes note, bond principal and interest expense payments. This activity includes verification of payment request and procurement card policy compliance, travel regulations and 1099-Miscellaneous reporting.

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

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

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

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

BUDGET DIVISION

The Budget Division is responsible for formulating, preparing, justifying and administering WSSC Water's operating and capital budgets, and the six-year CIP, in accordance with Maryland state law. The division forecasts the impacts of budget and CIP decisions, provides staff support to the County Spending Affordability Groups and prepares the agency's budget performance Monthly Status Report.

Core Activities

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

Financial Planning and Studies – This activity prepares long-range financial policies, conducts special studies and analyses including those driven by government mandates, prepares the agency's Monthly Status Report and provides support to the Spending Affordability Groups.

Goals, Objectives and Outcome Measures

Goal: Produce a sound, affordable capital spending program

Strategic Priority: Spend Customer Dollars Wisely

Objectives	Outcome Measure	FY 2020 Actual / Target	FY 2021 Actual / Target	FY 2022 Target	FY 2023 Target
Maintain the amount of rate supported water and sewer debt below 40% of total water and sewer operating expenditures	Ratio of water and sewer debt service to total water and sewer operating expenditures	37.2% / 38.2%	38.3% / 37.3%	36.7%	37.5%

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

Strategic Priority: Spend Customer Dollars Wisely

Objectives	Outcome Measure	FY 2020 Actual / Target	FY 2021 Actual / Target	FY 2022 Target	FY 2023 Target
Maintain a debt service coverage ratio greater than 1.10	Ratio of debt service coverage	1.04 / 1.00	.98 / 1.01	1.04	1.11

Goal: Minimize borrowing costs

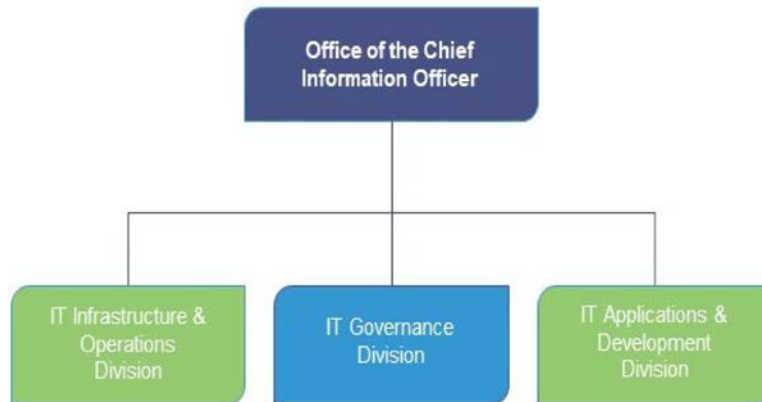
Strategic Priority: Spend Customer Dollars Wisely

Objectives	Outcome Measure	FY 2020 Actual / Target	FY 2021 Actual / Target	FY 2022 Target	FY 2023 Target
Maintain Fitch Ratings, Moody's Investor Service, and/or S&P Global Ratings bond ratings of AAA/Aaa/AAA	Bond ratings: (Fitch Ratings / Moody's Investor Service / S&P Global Ratings)	AAA/Aaa/AAA / AAA/Aaa/AAA	AAA/Aaa/AAA / AAA/Aaa/AAA	AAA/Aaa/AAA	AAA/Aaa/AAA
Maintain a leverage ratio less than 10.0	Net Adjusted Debt / Adjusted Funds Available for Debt Service	11.1 / < 10.0	10.6 / < 10.0	< 10.0	< 10.0

INFORMATION TECHNOLOGY DEPARTMENT

The Information Technology (IT) Department provides information technology support services and resources (hardware, software and communications) to enhance customer service, to improve operational efficiencies and to reduce overall operating costs. The IT Department, led by the Chief Information Officer, is comprised of the divisions shown in the following chart.

Organizational Structure



Mission Statement

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

Budget Summary

Information Technology Department	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Office of the Chief Information Officer	9.4	\$ 4,006,157	10.0	\$ 5,503,563	10.0	\$ 4,991,902	-	\$ (511,661)
IT Infrastructure & Operations Division	33.9	14,918,064	35.0	18,499,463	35.0	18,783,457	-	283,994
IT Governance Division	15.3	16,730,640	18.0	10,479,651	19.0	8,414,459	1.0	(2,065,192)
IT Applications & Development Division	33.1	20,456,152	40.0	26,906,807	39.0	24,109,466	(1.0)	(2,797,341)
Total	91.7	\$ 56,111,013	103.0	\$ 61,389,484	103.0	\$ 56,299,284	-	\$ (5,090,200)

Explanation of Major Variances

The FY 2023 Approved Budget reflects a decrease of approximately 8.3% below the FY 2022 Approved Budget. The decrease is primarily due to the budget reductions to the C2M Billing System. This decrease is partially offset by an increase to migrate Oracle applications to a newer hardware, cybersecurity enhancements, replacing of the aging Maintenance Management Information System with a new Asset and Work Management software, and Oracle software and hardware maintenance licenses.

Interdivisional transfers were made to address the Department's operational needs.

INFORMATION TECHNOLOGY DEPARTMENT (Continued)

Highlights

- Improve security education and training awareness through multi-channel outreach and phishing simulation campaigns and promote National Cyber Security Alliance and the U.S. Department of Homeland Security National Cyber Security Month
- Implement Print Management Services to ensure that WSSC Water has the ability to print anywhere, integrate printers with OneDrive, and ID Badge print release
- Installation of new Motorola radio dispatch console
- Retirement Payroll/Pension Replacement – Phase 2 to replace the existing 40-year-old WSSC Water legacy retiree payroll and pension applications with a new application
- Launching Adopt-A-Hydrant, water quality management system, agency project coordination will augment WSSC Water's ongoing customer education and customer relations efforts
- Implemented robotic process automation to automate manual and repeatable process for C2M billing system

Accomplishments

- Implemented new tools that provide continuous monitoring and detection that better defend against attackers to our network and mitigate cybersecurity risks to the agency
- Analyzed and improved application development security strategy to make WSSC Water applications less vulnerable
- Improved governance, risk and compliance for security frameworks and matured the security controls for information systems and organizations
- Improved identity and access management processes through privileged account management and multi-factor authentication for connecting to the network
- Implemented new electronic signature technology and educated workforce in the use of DocuSign
- Stood up the vaccination status disclosure and implemented the integrated workplace management system
- Completed the technical and applications upgrade of Oracle E-Business Suite (EBS) to ensure continued support beyond December 2021, make EBS applications available at the modular data center and deliver new features to meet business requirements
- Delivered potable water discharge reporting which tracks, and monitors planned and unplanned potable water discharge

Racial Equity and Social Justice

- The IT department diligently focuses on performing all its mission elements within the parameters of the approved budget, contributing to cost containment to assure economical access to WSSC Water's essential services at the most reasonable costs to all populations
- Our contracting approach assures a high level of participation by small, local and minority business enterprises contributing to development of small and disadvantaged business entities within and around our service areas

OFFICE OF THE CHIEF INFORMATION OFFICER

The Office of the Chief Information Officer develops, maintains and supports the IT Strategic Plan while assessing technology solutions and implementation priorities to meet WSSC Water's long-term business needs. The office is also responsible for IT security and risk management functions and for managing the IT budget and the procurement of IT products and services.

Core Activities

IT Security – This activity involves managing and developing the strategic direction for WSSC Water's enterprise information technology security framework and activities. It encompasses all IT projects or initiatives directly supporting the agency's cyber security programs.

IT Finance and Contract Administration – This activity provides accurate, timely and meaningful budget and financial information to support decision-making and effective and efficient management of resources for the successful operation of the IT applications and services provided to WSSC Water and its stakeholders and supports the procurement of goods and services in order to provide readily accessible IT services to the agency.

Goals, Objectives and Outcome Measures

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

Strategic Priority: Spend Customer Dollars Wisely

Objectives	Outcome Measure	FY 2020 Actual / Target	FY 2021 Actual / Target	FY 2022 Target	FY 2023 Target
IT invoices approved within IT to support net 30 payments	Percentage of IT invoices approved within 15 calendar days	80.0% / 85.0%	94.0% / 90.0%	95.0%	97.0%

IT INFRASTRUCTURE & OPERATIONS DIVISION

The IT Infrastructure & Operations Division is responsible for the day-to-day leadership and direction for all operational work efforts. This includes data center operations; voice, data, video networks; operating system hardware and software; computer infrastructure; and customer service and help desk operations. In addition, this division is responsible for planning, managing and operating complex IT systems to ensure system function, availability and performance.

Core Activities

IT Customer Support Operations – This activity supports WSSC Water's information technology users through the IT solution center and platform technologies. The IT solution center is responsible for monitoring, maintaining and supporting all agency desktop, laptop and mobile workforce initiatives and operations. Platform technologies are primarily responsible for the agency's server and storage infrastructure. This includes assessing, implementing and maintaining server and storage technologies; and developing an IT strategic plan to ensure the stability and availability of these foundational elements.

Network Operations Center – This activity provides day-to-day oversight and management of WSSC Water's data centers, mainframe operations, data network and telecommunications infrastructure. This includes management of a mission-critical data center and infrastructure operation; and oversight of related infrastructure activities throughout the entire product lifecycle, from requirements gathering through implementation, and to all subsequent ongoing production and on-call support.

IT Architecture – This activity is responsible for collaborating with other IT teams on the design and planning of WSSC Water IT infrastructure. The IT Architect is also instrumental in disaster recovery planning, reviewing and testing of WSSC Water's IT infrastructure.

Platform Technologies – This activity includes assessing, implementing and maintaining WSSC Water's server, storage, and backup infrastructure. This activity is also responsible for authentication and directory services along with Microsoft 365 support to include email, Microsoft Teams and other Microsoft technologies.

IT INFRASTRUCTURE & OPERATIONS DIVISION (Continued)

Core Activities (Continued)

Voice and Data Networks – This activity is responsible for WSSC Water’s voice and data network infrastructure. This includes maintenance and support of routing and switching, firewalls, internet connections, Wi-Fi, Avaya private branch exchange, interactive voice response system, virtual private network, and contact center applications.

Telecommunications – This activity manages WSSC Water’s SCADA point-to-point microwave communications infrastructure. This activity is also responsible for maintenance and management support of uninterrupted power supply, telephone and network cabling, two-way radio communication and cellular tower leasing.

Goals, Objectives and Outcome Measures

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

Objectives	Outcome Measure	FY 2020 Actual / Target	FY 2021 Actual / Target	FY 2022 Target	FY 2023 Target
Ensure high availability of critical business systems	Percentage of time that the critical systems are available	99.9% / 97.0%	99.9% / 97.0%	97.0%	97.0%
Ensure high availability of the network	Percentage of time that the network is available across all WSSC Water sites	99.9% / 97.0%	99.9% / 97.0%	97.0%	97.0%

IT GOVERNANCE DIVISION

The IT Governance Division is responsible for developing and operationalizing processes, plans, policies and performance metrics that aid IT in delivering efficient, cost-effective and reliable services that support WSSC Water’s strategic priorities. This responsibility includes project governance (IT project management and enterprise project management), business analysis, technical writing and quality assurance.

Core Activities

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

Portfolio Management – The enterprise program management office assists the senior leadership team in the prioritization of project proposals which strongly support the realization of WSSC Water’s strategic priorities.

Business Analysis – This activity includes analyzing and documenting current business processes and workflows in as-is diagrams, outlining process improvements, making recommendations to streamline business processes and workflows and documents the proposed future state in to-be diagrams. The core activities of business analysis include elicitation, facilitation, requirements development, business process analysis and business process re-engineering.

Technical Writing – This activity includes gathering, developing and publishing clear, high-quality documentation for business partners across WSSC Water. The team creates templates, maintains and updates documentation, edits material, formats content and sets standards for conciseness, clarity and consistency.

IT Quality Assurance – This activity concentrates on the software testing and software quality assurance processes across the software development lifecycle. Working in conjunction with various development teams to set objectives, scope and strategies for IT quality assurance at the agency, critical success factors are identified and various processes and strategies are developed to mitigate those risks through developing, testing and benchmarking of a toolkit and methodology.

IT GOVERNANCE DIVISION (Continued)

Core Activities (Continued)

IT Asset Management – The IT asset management group manages the cost, risk and compliance associated with IT hardware and software assets by creating and promoting processes and procedures in line with IT asset management best practices.

IT Hardware Compliance – This activity includes working with IT stakeholders to define, implement and validate processes for efficiently managing IT hardware assets throughout the lifecycle in alignment with IT asset management best practices and internal policies.

IT Software Compliance – This activity includes validating that software is being used in accordance with the license terms and conditions. The team works with application owners to identify compliance issues for proactive remediation as well as providing support during a software audit to ensure the best outcome for WSSC Water.

IT APPLICATIONS & DEVELOPMENT DIVISION

The IT Applications & Development Division is responsible for refining and implementing WSSC Water's strategic technical vision and leading significant aspects of the agency's IT development by fostering innovation, prioritizing technology initiatives and coordinating the evaluation, deployment and management of current and future technology systems across the agency.

Core Activities

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

Innovation and Advanced Analytics – This activity supports the implementation of the agency-wide IT strategic plan for reporting and advanced analytics. This activity is responsible for the research, facilitation and promotion of IT innovations and advanced analytics; business intelligence and enterprise reporting function; back-end data warehousing; and analytical support to business users to enable strategic use of information across WSSC Water.

Application and Database Services – This activity supports application and database services, including web application development, and internet and intranet site support. Developers design, update and maintain web solutions for WSSC Water use, by development of strategies for middle tier and portal architecture, eCommerce, legacy to web migration, system requirements analysis, system design, programming, testing, implementation and system maintenance.

Geographic Information Systems – This activity manages WSSC Water's map-based enterprise technology solutions. This activity leads projects and initiatives related to GIS application development, custom tools, geodatabase design and implementation, maintenance and update of map databases, coordination of data acquisitions and development and updates of standards. The GIS Support Section works with external teams and collaborates with local, state and federal resources to strategize WSSC Water's overall GIS approach; supports initiatives to consolidate and centralize data repositories; and researches, initiates and supports all GIS-related projects.

Procurement and Logistics – This activity maintains all the Oracle EBS procure-to-pay modules, retirement systems and several other applications used throughout WSSC Water. The Oracle EBS Procure-to-Pay application encompasses several modules including but not limited to purchasing, iProcurement, accounts payable and inventory along with several interfaces between these modules and other applications. In addition, this team holds responsibility for e-Permitting, Project Dox, P6, RIVA and Questica applications.

Human Resource Management System – This activity supports the general ledger, human resources, payroll, time and labor, advanced benefits and self-service systems. WSSC Water's business units access these systems through the intranet network to accomplish agency business functions.

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

IT APPLICATIONS & DEVELOPMENT DIVISION (Continued)

Goals, Objectives and Outcome Measures

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

Strategic Priority: Optimize Infrastructure

Objectives	Outcome Measure	FY 2020 Actual / Target	FY 2021 Actual / Target	FY 2022 Target	FY 2023 Target
Ensure the availability of applications to support the agency	Percentage of time that the critical systems are available	99.9% / 97.0%	99.9% / 97.0%	97.0%	99.0%

OTHER

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

Budget Summary

Other	FY 2021 Actual		FY 2022 Approved		FY 2023 Approved		Increase / (Decrease)	
	Work Years	Amount	Work Years	Amount	Work Years	Amount	Work Years	Amount
Human Resources Non-Departmental	-	\$ 29,393,327	-	\$ 31,665,326	-	\$ 33,781,806	-	\$ 2,116,480
Finance Non-Departmental								
Debt Service	-	291,979,579	-	316,827,000	-	328,523,374	-	11,696,374
PAYGO	-	-	-	27,585,000	-	31,016,000	-	3,431,000
Other (Social Security, Retirement, etc.)	-	53,560,633	-	51,914,428	-	54,603,458	-	2,689,030
Retirement Trust Chargeback	-	-	-	(769,300)	-	(1,673,547)	-	(904,247)
Total	-	\$ 374,933,539	-	\$ 427,222,454	-	\$ 446,251,091	-	\$ 19,028,637

Explanation of Major Variances

The FY 2023 Approved Budget increase for Finance Non-Departmental is primarily (1) Human Resources Non-Departmental's increase in health care expenses, (2) Debt Service increases due to the ramp up of Potomac WFP consent decree projects, eight new WSSC Water built projects, and Blue Plains projects ramping up, and (3) PAYGO returning to normal levels following prior year reductions related to the COVID savings plan, all partially offset by the (4) increase in the Retirement Trust Chargeback. The increase in the Retirement Trust Chargeback was due to the inclusion of overhead expenses incurred to support the retirement trust. These costs will be charged back moving forward.

HUMAN RESOURCES NON-DEPARTMENTAL

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

FINANCE NON-DEPARTMENTAL

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

RETIREMENT TRUST CHARGEBACK

Retirement Trust Chargeback accounts for retirement and investments expenses related to the operations of the retirement trust that will be paid by the trust.

APPENDICES

APPENDIX A
ECONOMIC INDICATORS AND TRENDS

Top 20 Customers - Water and Sewer Usage

Rank	Name of Customer
1	National Institutes of Health
2	Howard County Department of Public Works
3	University of Maryland
4	U.S. Navy
5	General Services Administration (GSA)
6	Leisure World
7	Andrews Air Force Base
8	Advanced Conservation Technologies (ACT)
9	Southern Management Corp
10	Franklin Park Apartments
11	National Institute of Standards and Technology (NIST)
12	Charles County Government Building
13	Coca Cola Bottling Company
14	Prince George's Hospital
15	MGM Resorts
16	Gateway Apartments
17	MedImmune LLC
18	The Enclave Silver Spring Apartments
19	Cinnamon Run at Peppertree Farm Apartments
20	Fort Detrick - Forest Glen Annex

ACTIVE CUSTOMER ACCOUNTS

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

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Customer Accounts Both Counties	459,751	460,072	460,825	463,755	466,884
Percent Change (%)		0.1%	0.2%	0.6%	0.7%

By Type of Customer*					
Residential	439,601	440,164	440,087	442,536	445,503
Percent Change (%)		0.1%	0.0%	0.6%	0.7%
Commerical and Industrial	17,169	16,921	16,852	17,455	17,402
Percent Change (%)		-1.4%	-0.4%	3.6%	-0.3%
Government and Other	2,981	2,987	3,886	3,764	3,979
Percent Change (%)		0.2%	30.1%	-3.1%	5.7%

By Type of Property*					
Single-Family Residence	341,245	341,514	341,093	341,776	343,414
Townhouse	90,355	90,880	91,244	92,883	94,823
General Commercial	17,164	16,915	16,844	17,446	16,050
Garden Apartment	4,070	3,911	3,890	3,861	3,978
Multi-Unit (Individually Metered)	2,625	2,630	2,619	2,615	2,626
High-Rise Apartment	458	442	442	426	468
Other	3,834	3,780	4,693	4,748	5,525
	459,751	460,072	460,825	463,755	466,884

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

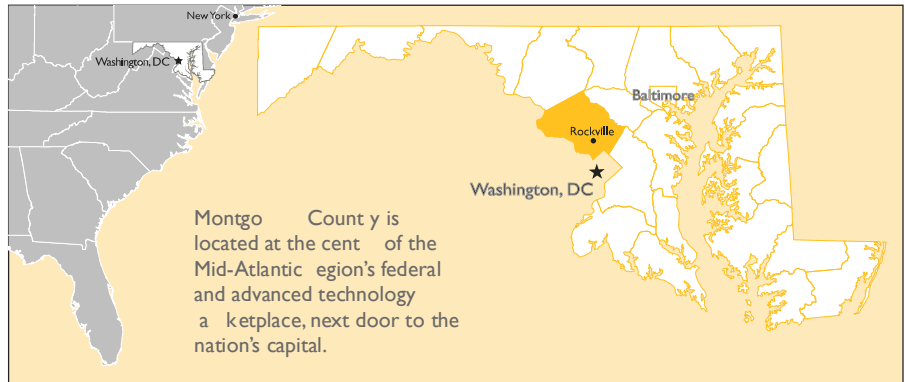
The following pages include economic facts for Montgomery County and Prince George's County, published by the Maryland Department of Commerce.

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 \$76.7 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 completion of a new mixed-use development in the heart of the Wheaton Triangle called the Wheaton Revitalization Project.

LOCATION

Driving distance from Rockville :	Miles	Kilometers
Atlanta, Georgia	624	1005
Baltimore, Maryland	38	61
Boston, Massachusetts	436	702
Chicago, Illinois	670	1078
New York, New York	225	363
Philadelphia, Pennsylvania	136	219
Pittsburg, Pennsylvania	207	333
Richmond, Virginia	118	190
Washington, DC	16	26

CLIMATE AND GEOGRAPHY

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 (ft)	10 to 880

POPULATION^{2,3}

	Montgomery County Households	Montgomery County Population	Maryland part of Washington DC metro*	Maryland
2010	357,075	971,777	2,036,172	5,773,552
2020	368,000	1,051,816	2,226,589	6,055,802
2030**	399,150	1,112,690	2,324,580	6,254,500

*Frederick, Montgomery and Prince George's counties

**Projections

Selected places population (2010): Gaithersburg 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} (2019)

Age	Number	Percent
Under 5	64,618	6.2
5 - 19	200,296	19.1
20 - 44	334,751	31.9
45 - 64	281,979	26.8
65 and over	169,044	16.1
Total	1,050,688	100.0
Median Age		39.7 Years

Brief Economic Facts MONTGOMERY COUNTY, MARYLAND

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

Civilian Labor Force (2019 avg.)	Count	Labor Mkt. Area*
Total civilian labor force	565,866	1,252,364
Employment	549,310	1,204,942
Unemployment	16,556	47,422
Unemployment at	2.93%	3.79%
Residents commuting outside the county to work (2015-2019)	224,212 Number	40.5% Percent
Employment in selected occupations (2015-2019)		
Management, business, science and arts	315,815	56.3%
Service	87,508	15.6%
Sales and office	93,679	16.7%
Production, transp. and material moving	30,852	5.5%

*Montgomery, Frederick and Prince George's counties, MD and Washington, DC.

MAJOR EMPLOYERS^{6,7} (2018-2019)

Employer	Product/Service	Employment
National Institutes of Health*	HQ / medical services	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	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 excluded contractors to the extent possible; bedded contractors may be included

EMPLOYMENT⁴ (2020)

Industry	Establishments	Annual Avg. Empl.	Empl. %	Avg. Wkly. age
Federal government	107	48,721	11.05	\$2,419
State government	12	1,275	0.29	984
Local government	246	41,108	9.32	1,440
Private sector	32,682	349,963	79.34	1,543
Natural resources and mining	60	912	0.21	996
Construction	2,471	23,825	5.40	1,385
Manufacturing	426	12,763	2.89	2,786
Trade, transportation and utilities	3,783	51,816	11.75	1,015
Information	563	9,079	2.06	2,293
Financial activities	3,106	28,087	6.37	2,586
Professional and business services	8,598	101,909	23.11	1,977
Education and health services	4,552	71,516	16.21	1,189
Leisure and hospitality	2,381	31,818	7.21	562
Other services	6,712	18,218	4.13	1,096
Total	33,047	441,068	100.00	1,628

Includes civilian population only

HOURLY WAGE RATES⁴ (2020)

Selected Occupations	Median	Entry	Skilled
Accountants	\$39.01	\$39.01	\$50.71
Aerospace engineers	\$85.29	\$85.29	\$119.21
Biochemist and biophysicists	\$51.44	\$51.44	\$60.24
Biological technicians	\$28.07	\$28.07	\$33.52
Bookkeeping/accounting clerks	\$24.62	\$24.62	\$29.86
Computer hardware engineers	\$62.85	\$62.85	\$71.50
Computer systems analysts	\$48.33	\$48.33	\$61.11
Computer support specialists	\$27.64	\$27.64	\$34.84
Customer service representatives	\$20.11	\$20.11	\$25.47
Electrical engineers	\$59.82	\$59.82	\$76.05
Electronics engineering technicians	\$61.00	\$61.00	\$75.79
Freight, stock and material movers	\$14.61	\$14.61	\$18.17
Industrial truck operators	\$21.75	\$21.75	\$23.95
Information security analyst	\$52.55	\$52.55	\$62.03
Inspectors, testers, sorters	\$25.55	\$25.55	\$32.69
Machinists	\$26.31	\$26.31	\$31.44
Mechanical Engineers	\$55.94	\$55.94	\$71.08
Network support specialists	\$35.12	\$35.12	\$41.86
Packaging/filling machine operators	\$13.53	\$13.53	\$17.16
Packers and packagers hand	\$14.06	\$14.06	\$16.23
Secretaries	\$23.77	\$23.77	\$29.38
Shipping/receiving clerks	\$18.08	\$18.08	\$21.89
Stock clerks and order fillers	\$13.25	\$13.25	\$16.31
Team assemblers	\$18.98	\$18.98	\$24.30
Telemarketer	\$13.48	\$13.48	\$15.23

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 (2015-2019)

High school graduate or higher	90.99%
Bachelor's degree or higher	58.86%

Public Schools

Number: 135 elementary; 40 middle; 25 high
 Enrollment: 160,564
 Cost per pupil: \$15,307
 Students per teacher: 14.5
 High school career / tech enrollment: 15,767
 High school graduates: 11,111

Nonpublic Schools Number: 311

Higher Education (2019)	Enrollment	Degrees
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2-year institution

Montgomery College	20,037	3,066
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Major 4-year institutions

University of Maryland System of Health Sciences	NA	NA
Washington Adventist University	968	257

Universities at Shady Grove - Degree programs offered by University System of Maryland institutions including UMCP, UMB, UB, UMBC, UMES, UMUC, Bowie, Salisbury and Towson.
 Universities at Shady Grove - Degree programs offered by University System of Maryland institutions including UMCP, UMB, UB, UMBC, UMES, UMUC, Bowie, Salisbury and Towson.

TAX RATES⁹

	Montgomery Co.	Maryland
--	----------------	----------

Corporate Income Tax (2020)	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 (2020)	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 21)	\$0.6948	\$0.11
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 Property Tax (FY 21)	\$1.73	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 (2015-2019)

Distribution	Percent Households		
	Montgomery County	Maryland	U.S.
Under \$25,000	9.00%	13.10%	19.20%
\$25,000 - \$49,999	12.20%	17.00%	21.20%
\$50,000 - \$74,999	12.60%	15.30%	17.20%
\$75,000 - \$99,999	12.00%	13.20%	12.70%
\$100,000 - \$149,999	18.70%	19.00%	15.10%
\$150,000 - \$199,999	12.60%	10.50%	6.80%
\$200,000 and over	22.80%	12.70%	7.70%
Median household	\$108,820	\$84,805	\$62,843
Average household	\$149,437	\$111,417	\$88,607
Per Capita	\$54,510	\$42,122	\$34,103
Total income (millions)	\$56,883	\$245,697	\$10,699,831

HOUSING^{3,10}

Occupied Units 2015-2019 370,950 (65.40% owner occupied)

Housing Transactions

Units Sold	13,499
Median Selling Price	\$355,957

*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 scheduled for completion in 2022. VivaWhite Oak - Broke ground in 2018 on a 300-acre mixed use development focusing on advanced technologies, adjacent to the new U.S. FDA HQ campus.

Montgomery College Georgetown 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

Business Incubators

Alexandria LaunchLabs (Gaithersburg); Bethesda Gateway; BioHealth Innovation (Rockville); Georgetown Innovation Center; GovCon (Rockville); Rockville Innovation Center; Silver Spring Innovation Center

Market Profile Data (2019)	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	\$8.00	\$19.81
Flex / R&D / Technology	\$18.60	\$34.50	\$55.00
Class A Office	\$12.72	\$17.41	\$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

David Petr, President and CEO 1801 Rockville Pike, Suite 320 Rockville, Maryland 20852

Telephone: 240.641.6700

Email: connect@thinkmoco.com

thinkmoco.com

Sources:

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

2 Ma land 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 Ma land Department of Commerce

8 Ma land State Department of Education; Ma land Higher Education Commission

9 Ma land State Department of Assessments and Taxation; Comptroller of the Treasury

10 Maryland Association of Realtors

11 Ma land State Archives; Ma land Association of Counties



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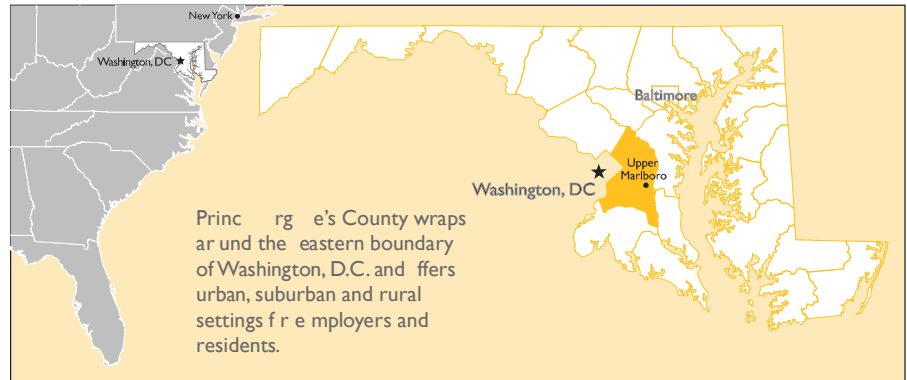
Brief Economic Facts

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 SGA, Inovalon, Verizon, and MM National Harbor; with private sector industries generating \$33.7 billion in economic output. Washington Metropolitan Center and National Harbor are recent, high-quality mixed-use developments, and Westphalia Town Center and Town Square at Suitland Federal Center are currently under development.

Prince George's County has significant federal facilities, such as Joint Base Andrews, NASA's 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	1007
Baltimore, Maryland	37	60
Boston, Massachusetts	433	697
Chicago, Illinois	703	1131
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
Days Below Freezing	92
Land Area (square miles)	487
Water area (square miles)	12.2
Shoreline (miles)	119
Elevation (ft)	sea level to 440

POPULATION^{2,3}

	Prince George's County Households	Prince George's County Population	Maryland part of Washington DC metro*	Maryland
2010	304,050	863,420	2,036,172	5,773,552
2020	316,150	909,612	2,226,589	6,055,802
2030**	332,150	916,770	2,324,580	6,254,500

*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} (2019)

Age	Number	Percent
Under 5yrs	59,374	6.5
5 - 19 yrs	168,641	18.5
20 - 44 yrs	312,869	34.4
45 - 64 yrs	242,190	26.6
65 and over	126,253	13.9
Total	909,327	100.0
Median Age		37.8 Years

Brief Economic Facts PRINCE GEORGE'S COUNTY, MARYLAND

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

Civilian Labor Force (2019 avg.)	County	Labor Mkt. Area*
Total civilian labor force	513,953	1,812,575
Employment	494,665	1,744,769
Unemployment	19,288	67,806
Unemployment rate	3.75%	3.74%
Residents commuting outside the county to work (2015-2019)	Number 284,825	Percent 59.8%
Employment in selected occupations (2015-2019)		
Management, business, science and arts	192,579	39.8
Service	99,677	20.6
Sales and office	96,290	19.9
Production, transp. and material moving	47,419	9.8

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

MAJOR EMPLOYERS^{6,7} (2020-2021)

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 & meals	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	Telecommunication	1,800
U.S. Dept. Of Agriculture**	Agricultural resources	1,725
Melwood	Social services	1,400
National Oceanic and Atmospheric Administration**	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

**Employment counts for federal and military facilities exclude contractors to the extent possible; subcontracted contractors may be included

EMPLOYMENT (2020)

Industry	Establishments	Annual Av. Empl.	Empl. %	Avg. Wkly. Wage
Federal government	114	27,468	9.28	\$2,200
State government	15	21,013	7.10	1,135
Local government	298	39,420	13.31	1,368
Private Sector	16,014	208,174	70.31	1,104
Natural resources and mining	16	94	0.03	1,075
Construction	1,822	27,236	9.20	1,445
Manufacturing	327	7,214	2.44	1,266
Trade, Transportation, and utilities	3,396	55,992	18.91	883
Information	147	2,342	0.79	1,835
Financial activities	1,326	10,414	3.52	1,284
Professional and business services	3,350	37,164	12.55	1,525
Education and health services	2,398	32,161	10.86	1,152
Leisure and hospitality	1,692	27,776	9.38	488
Other Services	1,519	7,762	2.62	886
Total	16,442	296,077	100.00	1,243

Includes civilian employment only

HOURLY WAGE RATES (2020)

Selected Occupations	Median	Entry	Skilled
Accountants	\$30.58	\$19.83	\$38.99
Aerospace engineers	\$21.14	\$16.76	\$24.98
Bookkeeping/accounting clerks	\$20.44	\$14.64	\$24.62
Computer systems analysts	\$26.31	\$15.11	\$33.82
Computer user support specialists	\$19.15	\$12.80	\$24.51
Customer service representatives	\$17.11	\$13.17	\$20.27
Electrical engineers	\$48.24	\$32.05	\$66.19
Fabrication, stock and material movers	\$13.83	\$11.66	\$16.85
Industrial truck operators	\$16.88	\$13.37	\$19.06
Information security analyst	\$43.80	\$22.83	\$53.27
Inspectors, testers, sorters	\$18.11	\$13.22	\$23.04
Machinists	\$26.81	\$20.36	\$30.10
Maintenance workers, machinery	\$20.90	\$16.50	\$24.46
Mechanical Engineers	\$35.05	\$26.64	\$39.89
Network support specialists	\$30.09	\$25.27	\$34.07
Packaging/filling machine operators	\$13.61	\$11.53	\$15.60
Packers and packagers hand	\$15.28	\$11.76	\$18.34
Secretaries	\$18.24	\$13.37	\$21.98
Shipping/receiving clerks	\$16.95	\$13.14	\$19.70
Stock clerks and order fillers	\$12.24	\$11.19	\$14.94
Team assemblers	\$16.56	\$13.52	\$19.05

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 (2015-2019)

High school graduate or higher	86.74%
Bachelor's degree or higher	33.08%

Public Schools

Number: 121 elementary; 37 middle/combine; 24 high; 1 career/tech; 9 charter

Enrollment: 131,657

Cost per pupil: \$14,570

Students per teacher: 14.5

High school career/tech enrollment: 10,888

High school graduates: 7,856

Nonpublic Schools Number: 128

Higher Education (2019)

	Enrollment	Degrees
2-year institution		
Prince George's Community College	11,358	1,064
4-year institutions		
Bowling Green State University	6,250	1,085
Capitol Technology University	754	189
University of Maryland, College Park	40,709	11,186
University of Maryland Global Campus	59,679	12,567

Undergraduate and graduate courses are offered at the Laurier 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 County	Maryland
Corporate Income Tax (2020)	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 (2020)	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 21)	\$1.0000	\$0.1120
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 21)	\$2.50	none
Rate per \$100 of depreciated value		
Exempt – manufacturing and R&D machinery, equipment, materials and supplies; manufacturing, R&D and warehouse using inventory in an incorporated area, a municipal rate may also apply; municipal exemptions may be available		

Major Tax Credits Available

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

INCOME³ (2015-2019)

Distribution	Percent Households		
	Prince George's Co.	Maryland	U.S.
Under \$25,000	10.70%	13.10%	19.20%
\$25,000 - \$49,999	15.80%	17.00%	21.20%
\$50,000 - \$74,999	17.40%	15.30%	17.20%
\$75,000 - \$99,999	15%	13.20%	12.70%
\$100,000 - \$149,999	20.20%	19.00%	15.10%
\$150,000 - \$199,999	11%	10.50%	6.80%
\$200,000 and over	9.90%	12.70%	7.70%
Median household	\$84,920	\$84,805	\$62,843
Average household	\$102,593	\$111,417	\$88,607
Per Capita	\$37,191	\$42,122	\$34,103
Total income (millions)	\$33,794	\$245,697	\$10,699,831

HOUSING^{3,10}

Occupied Units (2015-2019) 311,343 (62.10% owner occupied)

Housing Transactions

Units Sold	11,283
Median Selling Price	\$355,957

*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 Free 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 Program, Univ. of MD at College Park

Market Profile Data (2019)	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 Metropolitan Area Transit Authority) provides 70 bus routes and rail service; 15 stations on the Blue, Orange and Silver 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; nearly only four ports on the East Coast able to accommodate New-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 Ricks 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

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

GOVERNMENT

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. Alsbrink, County Executive 301.952.4131

Calvin S. Hawkins II, Chair, County Council 301.952.3700

Website: www.princegeorgescountymd.gov

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

Prince George's County Economic Development Corporation

David Iannucci, President and CEO

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Sources:

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

2 Maryland Department of Planning

3 U.S. Bureau of the Census

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

5 U.S. Bureau of Labor Statistics

6 Prince George's County Economic Development Corporation

7 Maryland Department of Commerce

8 Maryland State Department of Education; Maryland Higher Education Commission

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

10 Maryland Association of Realtors

11 Maryland State Archives; Maryland Association of Counties



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APPENDIX B - GLOSSARY

Account Maintenance Fees	(Also referred to as AMF) A charge on customer water and sewer bills designed to recover the fixed cost of servicing a customer account independent of the amount of water used or sewage generated. The Account Maintenance Fee includes the cost of purchasing and reading meters; processing meter readings and generating, mailing, and collecting bills; and providing customer services. Prior to 1992, these costs were included in the water and sewer rate structure rather than identified and billed as a separate fee.
Accrual	The recognition of revenue or expenses at the time they are earned or incurred, regardless of when the money is received or paid out.
Accumulated Net Revenue	See Fund Balance.
Ad Valorem Tax	A property tax based “according to the value” of the property. Such taxes are levied on real and personal property according to the property’s assessed valuation and the tax rate.
Advanced Metering Infrastructure	(Also referred to as AMI) An automated system that communicates remotely with metering devices to measure, collect and analyze consumption data. The system includes both hardware and software and can provide comprehensive real-time information to both the consumer and the utility.
American Water Works Association	(Also referred to as AWWA) An international, nonprofit, scientific and educational organization providing water management solutions.
Applicant	Any firm, corporation, Municipality, agency, person, or persons who owns or develops property requiring water or sewer service provided by systems, facilities, and/or service connections within the Washington Suburban Sanitary District.
Asset Management Program	(Also referred to as AMP) A multi-year effort to create an organization-wide Asset Management Plan which identifies the infrastructure needs for a 30-year planning period. This information will serve as the basis for future investment decision making and management of water, wastewater, communications, and buildings and grounds infrastructure.
Authorized Workyears	Employee workyears that are funded in the adopted budget and may be filled during the budget year.
Balanced Budget	A financial plan showing estimated or planned revenues equaling expenses.
Biosolids	Solids produced as a 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 62.0% of the wastewater from the Washington Suburban Sanitary District is treated at Blue Plains. WSSC Water's shares in the operating and capital costs of Blue Plains in accordance with the terms of a regional agreement signed by the Maryland and Virginia suburbs and the District of Columbia.
Blue Plains Inter-Municipal Agreement	Provides for the inter-jurisdictional (Washington, D.C., Fairfax County, VA, Montgomery County, MD, Prince George's County, MD, and WSSC Water) allocation of wastewater flow capacity, including operating and capital costs associated with wastewater collection, treatment and biosolids management.
Bond	A written promise to pay a sum of money on a specific date at a specified interest rate.
Capital Budget	The annual request for capital funding for the first year of the Capital Improvements Program including those projects in the Information Only Section, new house connection construction, relocations and major systems contracts, water meter purchases, other engineering contracts, and for the associated administrative and support costs.
Capital Expenditures	An amount spent for the planned purchase of long-term assets (such as filtration/treatment plants and pump stations, storage, joint-use facilities, and equipment upgrades).
Capital Improvements Program	(Also referred to as CIP) The comprehensive presentation of capital project expenditure estimates, funding requirements, capital budget requests, and program data for the construction of all major water and sewerage projects planned by WSSC Water over a six-year period.
Capital Project	A WSSC Water effort involving expenditures and funding for the creation, expansion, renovation, or replacement of major facilities and other assets having relatively long lives. Expenditures within capital projects may include costs of planning, design, land, construction, contract supervision, and associated administrative and support costs.
Commission	A six-member Commission governing WSSC Water, comprised of three Commissioners appointed from each County by the County's Executive, confirmed by their respective County Councils. Each Commissioner serves a four-year term.

APPENDIX B - GLOSSARY

Consumer Price Index	(Also referred to as CPI) A measure that examines the change in the cost of a fixed basket of consumer goods and services, such as housing, utilities, transportation, food and medical care. The CPI is calculated by taking price changes for each item in the predetermined basket of goods and averaging the changes; the goods are weighted according to their importance. The CPI is a commonly accepted indicator of inflation, as changes in CPI are used to assess price changes associated with the cost of living.
Cryptosporidium	A microbial contaminant of raw water that can potentially cause chronic or fatal intestinal disorders. In 1993, 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.
Customer-to-Meter	Oracle Customer-to-Meter (C2M) is a billing system providing a comprehensive billing and customer service platform.
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.

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Enterprise Resource Planning	(Also referred to as ERP) An automated system that integrates all data and processes of a System organization into a unified system. A typical ERP system will use multiple components of computer software and hardware to achieve the integration. A key ingredient of most ERP systems is the use of a unified database to store data for the various system modules. The main benefits of implementing an ERP system are a single base of consistent information, tighter financial controls, ability to automate business processes, consolidation of redundant systems, improved system reliability, and improved long-term asset management.
Expenditure/Expense	Payment for an asset obtained or goods and services received.
Fats, Oils and Grease Program	(Also referred to as FOG) A federally mandated program that advises customers on how to properly manage fats, oils, and grease (FOG); monitors and controls the discharge of FOG from commercial food service establishments; investigates sanitary sewer blockages and overflows caused by FOG discharges; and initiates enforcement action to ensure appropriate corrective measures are taken.
Federal Open Market Committee	(Also referred to as FOMC) A Federal Reserve Board committee that sets monetary policy, including the interest rates that are charged to banks.
Fee	A charge for service to the user or beneficiary of the service. According to State law, charges must be related to the cost of providing the service.
Fiscal Policy	WSSC Water's policies with respect to revenues, spending, and debt management as the policies relate to WSSC Water services, programs, and capital investments. Fiscal policy provides a set of principles for the planning and programming of budgets, uses of revenues, and financial management.
Fiscal Year	(Also referred to as FY) The 12-month period to which the annual operating and capital budgets and their expenditure authorizations apply. WSSC Water's fiscal year starts on July 1 and ends on June 30.
Fixture Unit	(Drainage fixture unit or water supply fixture unit) A measurement of the probable discharge into the drainage system (sewer) or the probable hydraulic demand on the water supply (water) by various types of plumbing fixtures (bathtubs, lavatories, water closets, drinking fountains, etc.). For example, a drinking fountain corresponds to 0.5 drainage fixture units, while a conventional bathtub corresponds to 2.0 drainage fixture units.

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Force Main	(Also referred to as FM) The discharge pipe from a wastewater pumping station through which flow is lifted under pressure to a higher elevation. A pipe of this type is used to overcome changes in topography by conveying flow over a ridge or other high point to a nearby, existing sewer line. This avoids the need to construct a longer conventional gravity line in another direction.
Fringe Benefits	Contributions made by WSSC Water to help underwrite the agency's share of the costs for Social Security and various pension, health, and life insurance plans provided to employees. Fringe benefits are centrally budgeted in non-departmental accounts.
Front Foot Benefit Charge	(Also referred to as 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" in diameter and sewer mains less than 15" in diameter), and all administrative and support facilities. Water meters are also purchased from this fund.

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Geographic Information System	(Also referred to as GIS) A system that integrates hardware, software, and data for capturing, storing, managing, analyzing, and displaying all forms of geographically referenced information. The technology can be used for scientific investigation, resource management, and development planning.
Goal	A long-term, attainable target for an organization – its vision of the future.
Green Bond	Bond instrument whose proceeds are exclusively applied to projects such as green buildings, pollution prevention and control, renewable energy, water quality, and climate change adaptation.
Haloacetic Acids	(Also referred to as HAAs) A group of chemicals that are formed when chlorine or other disinfectants used to control contaminants in drinking water react with naturally occurring organic and inorganic matter in the water. Five haloacetic acids (referred to as HAA5) that are regulated by the EPA: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.
House Connection Charge	(Also referred to as H/C Charge) A fee set annually by WSSC Water to cover the cost of the installation of small diameter pipe between water and sewer mains and the owner's property line. House connections feed water to a dwelling, place of business, or other structure and convey domestic sewage into the main line sewer for transportation to a wastewater 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.

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Level of Service	The services, programs, and facilities provided by WSSC Water to its customers. The level of service may increase, decrease, or remain the same, depending upon needs, alternatives, and available resources.
Maryland Department of the Environment	(Also referred to as MDE) The Maryland Department of the Environment was created in 1987 to protect and preserve the State's air, water and land resources and safeguard the environmental health of Maryland's citizens. MDE's duties also encompass enforcement of environmental laws and regulations, long-term planning and research. MDE provides technical assistance to Maryland industry and communities for pollution and growth issues and environmental emergencies.
Maryland-National Capital Park and Planning Commission	(Also referred to as M-NCPPC) Founded in 1927 and chartered by the State of Maryland, it has geographic authority in the Montgomery and Prince George's County regions, planning and coordinating regional growth and development, including a system of parks and recreational locations.
Memorandum of Understanding	An agreement between parties indicating an intended common line of action.
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.

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Nephelometric Turbidity Units	(Also referred to as NTU) A measure of the clarity of water. Maintaining very low levels of filtered water turbidity is recognized as a means of effectively guarding against Cryptosporidium and other chlorine-resistant pathogens.
Non-Departmental	Expenditure items essential to the operation of WSSC Water which either do not fall within the functional assignment of any office or which provide for expenditures related to more than one office. Examples include fringe benefits and insurance.
Objective	A specific measurable and observable result of an organization's activity which advances the organization toward its goal.
Operating Budget	A comprehensive financial plan by which WSSC Water's operating programs are funded for a single fiscal year.
Other Post-Employment Benefits	(Also referred to as OPEB) Employees in the public sector may be compensated in a variety of forms in exchange for their services. In addition to salary, employees may earn benefits over their years of service that will not be received until their service has been severed due to retirement or other reasons. The most common type of post-employment benefit is a pension. Other post-employment benefits generally take the form of health insurance, dental, prescription drug, or other health care benefits. It may also include life insurance, legal services, or other benefits.
Outcome Measure	A measure of the degree to which an objective has been achieved. For WSSC Water, this usually corresponds to the impact of a service on an organization's key responsibilities, especially the effect on citizens, customers, or other users of the service.
Pay-As-You-GO Financing	(Also referred to as PAYGO) The funding of capital expenditures with operating funds instead of debt.
Plumbing and Inspection Fees	A fee for WSSC Water's inspection of all plumbing and gas fixtures installed in residential and commercial structures to ensure that such installations are in compliance with WSSC Water's Plumbing and 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.

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Project Needs Validation Process	Systematically identifies and validates the water, wastewater and support services needs of WSSC Water, develops potential solutions to the validated needs and recommends a preferred solution.
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.
Quintile	A quintile is a statistical value that divides a dataset into five equal parts, each representing 20% (1/5 th) of the range of a given population. The first quintile represents the lowest 20% of the range (0% to 20%); the second quintile represents the second 20% of the population (20% to 40%); and so on.
Ready-to-Serve Charge	Comprised of the Account Maintenance Fees (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 1983 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.

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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 1993 to pay for growth-related CIP projects. (FY 1994 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" 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.

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.

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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 1996 budget.
Strategic Sourcing	Strategic planning and priority alignment to foster informed decision making using fact-based, data-driven processes.
Supervisory Control and Data Acquisition System	(Also referred to as SCADA) The technological system enabling WSSC Water to use automation to collect data from one or more (remote) facilities and send limited control instructions to those facilities.
Supply Chain Management	The identification, acquisition, access, positioning and management of resources an organization needs or potentially needs in the attainment of its strategic objectives.
System Development Charge	(Also referred to as SDC) A charge levied on new development to pay for the construction of major water and sewerage facilities needed to accommodate growth.
System Extension Permit	(Also referred to as SEP) A WSSC Water-issued permit for extensions to WSSC Water's system. This permit is required for the Applicant to build water and sewer systems that WSSC Water will, upon satisfactory completion, take over for maintenance and operations.
System Extension Process	Addresses projects undertaken by applicants to support future growth, serve one new residence or provide relief from a residential health hazard.

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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” 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.
U.S. Environmental Protection Agency	(Also referred to as EPA) U.S. Federal agency charged with overseeing waterways and water sources, decreasing water pollution and protecting drinking water from known and emerging contaminants that endanger public health.
Washington Suburban Sanitary Commission	(Also referred to as WSSC Water or agency) A Bi-County agency established by an act of the Maryland General Assembly responsible for planning, designing, constructing, operating, and maintaining water and sewerage systems in Prince George’s and Montgomery Counties.
Washington Suburban Sanitary District	(Also referred to as WSSD) The area served by WSSC Water, strict as specified by State law. The District includes nearly all of Prince George’s and Montgomery Counties, with the exception of the Municipalities of Bowie, Rockville, and Poolesville, and rural areas in northeastern Montgomery County and southeastern Prince George’s County.
Wastewater	Water that originates from a combination of domestic, industrial, commercial or agricultural activities and, due to sewer inflow or infiltration, may also include surface runoff or stormwater.
Water Consumption Charge	Revenue derived from the sale of water by applying an increasing rate schedule per 1,000 gallons of use. The rate charged for each account is based upon the average daily consumption during each billing period.

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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" 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

AFO	Acoustic Fiber Optic	IIF	Infrastructure Investment Fee
AMF	Account Maintenance Fee	IT	Information Technology
AMI	Advanced Metering Infrastructure	MBE	Minority Business Enterprise
C2M	Customer-to-Meter	MDE	Maryland Department of the Environment
CAP	Customer Assistance Program	MGD	Million Gallons per Day
CEO	Chief Executive Officer	M-NCPPC	Maryland-National Capital Park and Planning Commission
CLF	Consolidated Lab Facility	MVR	Meter, Vertical Turbine
CIP	Capital Improvements Program	MWCOG	Metropolitan Washington Council of Governments
CIU	Categorical Industrial User	NTU	Nephelometric Turbidity Units
COOP	Continuity of Operations Plans	OHEP	Maryland Office of Home Energy Programs
CPI-W	Consumer Price Index for Urban Wage Earners & Clerical Workers	OIG	Office of the Inspector General
DC Water	District of Columbia Water and Sewer Authority	OPEB	Other Post-Employment Benefits
DSCR	Debt Service Coverage Ratio	OSDI	Office of Supplier Diversity & Inclusion
E&C	Engineering & Construction Department	PAYGO	“Pay-As-You-GO” Financing
EBS	E-Business Suite	PCCP	Pre-stressed Concrete Cylinder Pipe
EGIS	Enterprise Geographic Information System	REDO	Reconstruction Debt Service Offset
EPA	Environmental Protection Agency	RESJ	Racial Equity and Social Justice
FEMA	Federal Emergency Management Agency	SAG	Spending Affordability Guidelines
FFBC	Front Foot Benefit Charge	SCADA	Supervisory Control and Data Acquisition
FICA	Social Security & Medicare	SDC	System Development Charge
FM	Force Main	SEP	System Extension Permit
FOG	Fats, Oils, and Grease	SIU	Significant Industrial User
FOMC	Federal Open Market Committee	SLBE	Small, Local Business Enterprise
FSE	Food Service Establishment	SSES	Sewer System Evaluation Survey
FTE	Full Time Equivalent = Workyear	SSO	Sanitary Sewer Overflow
FY	Fiscal Year	THM	Trihalomethanes
GAAP	Generally Accepted Accounting Principles	WFP	Water Filtration Plant
GFOA	Government Finance Officers Association	WRRF	Water Resource Recovery Facilities
GIS	Geographic Information System	WSSC	Washington Suburban Sanitary Commission
GPD	Gallons per Day	WSSD	Washington Suburban Sanitary District
GPS	Global Positioning System	WWPS	Wastewater Pumping Station
HAA	Haloacetic Acid	WWTP	Wastewater Treatment Plant
H/C	House Connection		
ICPRB	Interstate Commission on the Potomac River Basin		



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