



DC Water Approved FY 2022 Budget

Adopted April 1, 2021 (Fiscal year starts on October 1)

Tommy Wells, Board Chairman David L Gadis, Chief Executive Officer and GM Matthew T. Brown, Chief Financial Officer

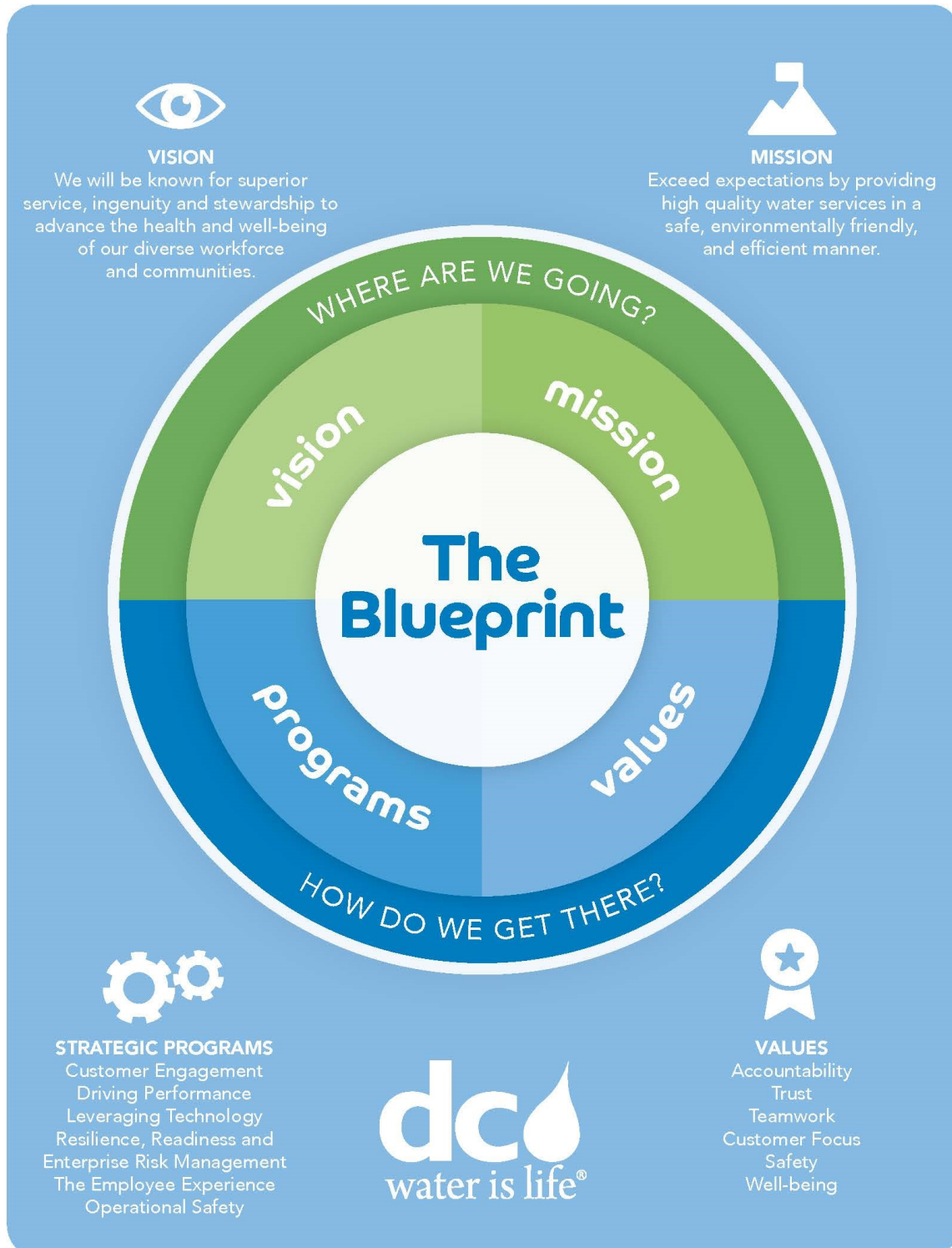


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Strategic Plan - The Blueprint

The Blueprint guides DC Water in setting priorities, focusing energy and resources, and strengthening operations. The strategic plan adopted by the Board on October 4, 2018 ensures employees and stakeholders are working towards common goals and aiming to accomplish the vision of DC Water.



VALUES

At DC Water, our values guide our actions, behaviors and decision making.

Accountability: We conduct ourselves in a manner that surpasses ordinary standards and take responsibility for our actions and their collective outcomes to our workplace, community and environment at all times.

Trust: We strive to achieve the highest standards of professionalism and ethical behavior by always seeking to be open, honest, fair and respectful.

Teamwork: We approach all we do in a collaborative way, delivering superior service and outcomes through enthusiasm, helpfulness, positivity, skills, knowledge and a collective commitment to excellence.

Customer Focus: We see every engagement with our customers as an opportunity to deliver an exceptional customer experience that improves customer satisfaction and the overall perception of DC Water among the communities we serve.

Safety: We are uncompromising in our commitment to the health and safety of our employees, customers, and community. We require individual accountability, expecting all employees to strictly adhere to our safety standards, and actively participate in and support the advancement of our safety practices.

Well-being: We recognize DC Water's number one resource is our people. We are committed to seeing that our team thrives physically, mentally and emotionally by endeavoring to create a culture that increases awareness, inspires individual responsibility, promotes healthy choices and encourages work/life balance.

STRATEGIC PROGRAMS

There are six strategic programs with executive sponsors for each who are responsible for finding resources and selecting the approach to achieving the identified initiatives under each program.

Customer Engagement: To deliver an exceptional customer experience and communications plan that enhances the value of our services by listening to and engaging with our customers.

Driving Performance: To operate a high-performing utility that delivers exceptional service to our customers.

Leveraging Technology: To develop an integrated set of solutions that leverages people, process and technology to improve reliability, increase efficiency, reduce cost, drive innovation and improve the customer experience.

Resilience, Readiness and Enterprise Risk Management: To protect and maintain the resources, systems and operations necessary to deliver safe and reliable services to our customers.

Employee Experience: To support and engage a workforce that is aligned with our vision to provide superior service to our customers.

Operational Safety: To ensure a safe workplace that supports the continuity of operations and services to our customers.

BOARD OF DIRECTORS

PRINCIPAL MEMBERS

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David Franco, District of Columbia
Fariba Kassiri, Montgomery County, MD
Adam Ortiz, Montgomery County, MD
Floyd Holt, Prince George's County, MD
Tara Jackson, Prince George's County, MD

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Ivan Frishberg, District of Columbia
Anthony R. Giancola, District of Columbia
Howard Gibbs, District of Columbia
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Jared McCarthy, Prince George's County, MD
Sarah Mostch, Fairfax County, VA

EXECUTIVE MANAGEMENT TEAM

EXECUTIVE STAFF

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Keith J. Lindsey, Chief of Staff
Kishia L. Powell, Executive Vice President and Chief Operating Officer
Matthew T. Brown, Executive Vice President and Chief Financial Officer, Finance & Procurement
Marc K. Battle Esq., Chief Legal Officer and Executive Vice President, Legal Affairs
Wayne Griffith, Chief Strategy and Performance Officer and Executive Vice President, Performance
Kirsten Williams, Chief Communications & Stakeholders Engagement Officer and Executive Vice President
Lisa Stone SPHR, SHRM-SCP, Chief People and Inclusion Officer and Executive Vice President, People and Talent
Armon Curd, Executive Vice President, Customer Experience
Biju George, Executive Vice President, Operations & Engineering
Thomas Kuczynski, Interim President, Blue Drop
Maureen Holman, Executive Vice President, Administration

SENIOR MANAGEMENT TEAM

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Linda R. Manley, Board Secretary

ADMINISTRATION

Ivelisse Cassas, Director, Security
Brent Christ, Director, Facilities Management
Tim Fitzgerald, Director, Fleet Management
Dusti Lowndes, Director, Emergency Management
George Porter, Director, Occupational Safety & Health

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Dan Bae, Vice President, Procurement & Compliance
Gail Alexander-Reeves, Special Advisor to the Chief Financial Officer
Val Blinkoff, Manager, Financial Systems and Controls
Ivan Boykin, Director, Finance
Rudy Gonzalez, Director, Procurement, Capital Programs
Korey Gray, Director, Compliance and Business Development
Joel Grosser, Director, Procurement, Goods and Services

Syed Khalil, Director, Rates & Revenues

Genes Malasy, Controller

Lola Oyeyemi, Director, Budget

OPERATIONS & ENGINEERING

Leonard R. Benson, Senior Vice President, CIP Project Delivery
Salil Kharkar, Senior Vice President, Operations & Engineering
Craig Fricke, Director, Engineering and Technical Services
Paul Guttridge, Director, CIP Infrastructure Management
David Parker, Director, Wastewater Engineering
Carlton Ray, Vice President, Clean Rivers
Brian McDermott, Director, Permit Operations
Aklile Tesfaye, Vice President, Wastewater Operations
Haydee De Clippeleir, Acting Director, Clean Water Quality and Technology
Nicholas Passarelli, Director, Process Engineering
Elkin Hernandez, Director, Maintenance Services
Chris Peot, Director, Resource Recovery

Kenrick St. Louis, Vice President, Pumping & Sewer Operations

Jason Hughes, Vice President, Water Operations

Maureen Schmelling, Director, Water Quality

PERFORMANCE & STRATEGIC PLANNING

Francis Cooper, Director, Enterprise Program Management Office

Yvette Judge, Director, Business Performance Management Director

Matt Ries, Director, Sustainability and Watershed Management

CUSTOMER EXPERIENCE

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Hari Kurup, Director, Enterprise Applications

Vacant, Director, Customer Care

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Jonathan Carpenter, Vice President, Industry Relations

PEOPLE & TALENT

Chad Carter, Director, Total Rewards

Nina Love, CDP, PHR, Director, HR Business Partners and Inclusion

George Spears, Director, Labor Relations

Patricia Taylor-Lytle, Director, Talent Management

ACKNOWLEDGEMENTS

The Office of the Chief Financial Officer would like to extend our appreciation to the Executive Team and Senior Management Staff for their strategic guidance and leadership.

In addition, we would like to acknowledge the following staff members from the departments of Finance, CIP Infrastructure Management and the Office of Marketing & Communications for their hard work and dedication geared towards the publication of this document.

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District of Columbia Water & Sewer Authority

District of Columbia

For the Fiscal Year Beginning

October 1, 2020

Christopher P. Morill

Executive Director



Approved FY 2022 Budgets

Section I: Executive Budget Summary



DC Water headquarters

dc

Executive Budget Summary

Approved FY 2022 • Adopted April 1, 2021
(Fiscal year starting October 1)

Tommy Wells, Chairman of the Board

David Gadis, Chief Executive Officer

Matthew T. Brown, Chief Financial Officer and
Executive Vice-President, Finance and Procurement

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY



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The executive budget summary is a standalone document and is intended for our diverse stakeholders. Additional information on the operating and capital budgets can be found in the detailed budget book, and is also available online at dcwater.com.

DC Water provides clean drinking water to residents of the District of Columbia, and wastewater treatment services to both residents of the District of Columbia and wholesale customers in Maryland and Virginia.

DC Water’s Board of Directors and the Executive Management team continue to work and improve the Authority’s operations and processes to be a world class utility. In this effort, a new strategic plan “The Blueprint” was adopted by the Board of Directors in October 2018. DC Water is currently undertaking a refresh of “The Blueprint” and management anticipates delivering “The Blueprint 2.0” to the Board of Directors during 2021. The revisions to the strategic plan will help ensure that DC Water continues to focus on the priorities, trends and opportunities that will drive operational excellence.



Vision

We will be known for superior service, ingenuity and stewardship to advance the health and well-being of our diverse workforce and communities.

Mission

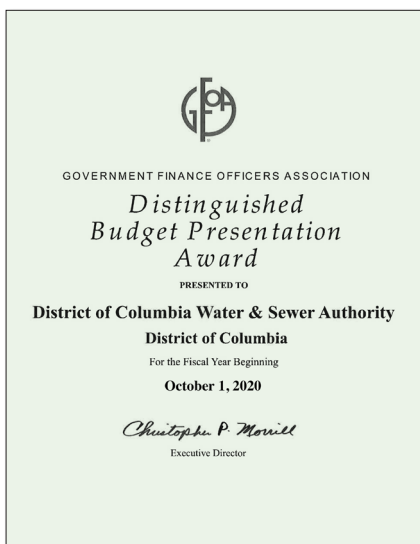
Exceed expectations by providing high quality water services in a safe, environmentally friendly and efficient manner.

Our Focus

- Staff driven
- Customer Affordability
- Strategic programs
- Invest in Aging Infrastructures while identifying cost savings
- Staying fiscally sound by sustaining debt coverage ratios, reserve requirements and other financial metrics

Inside

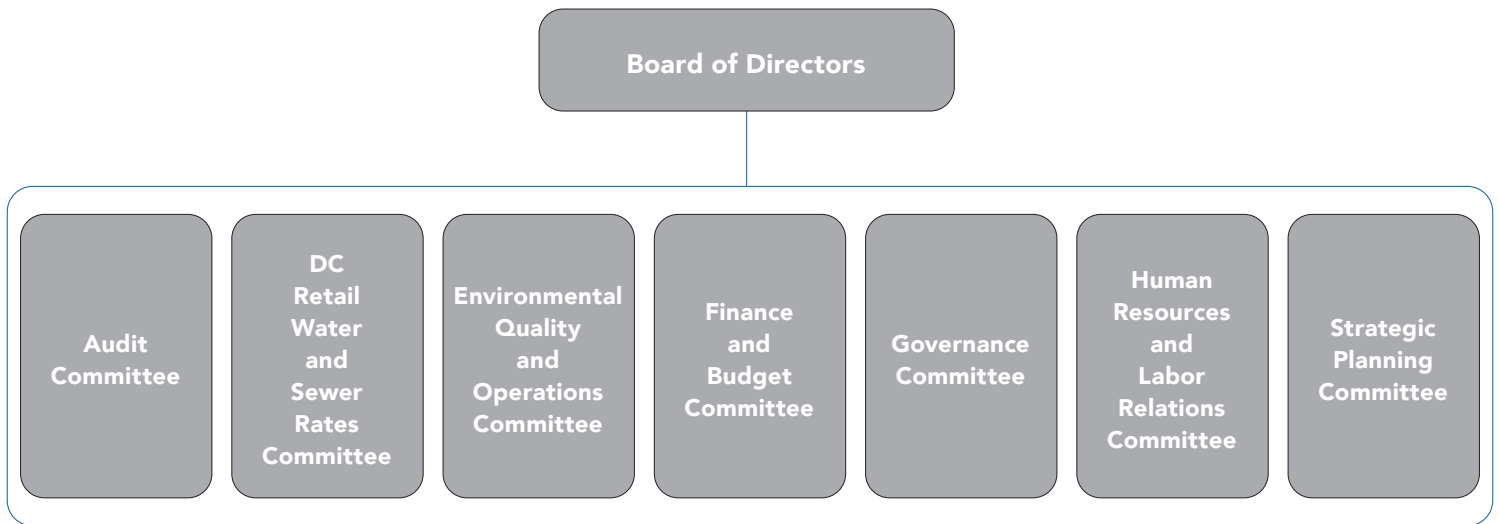
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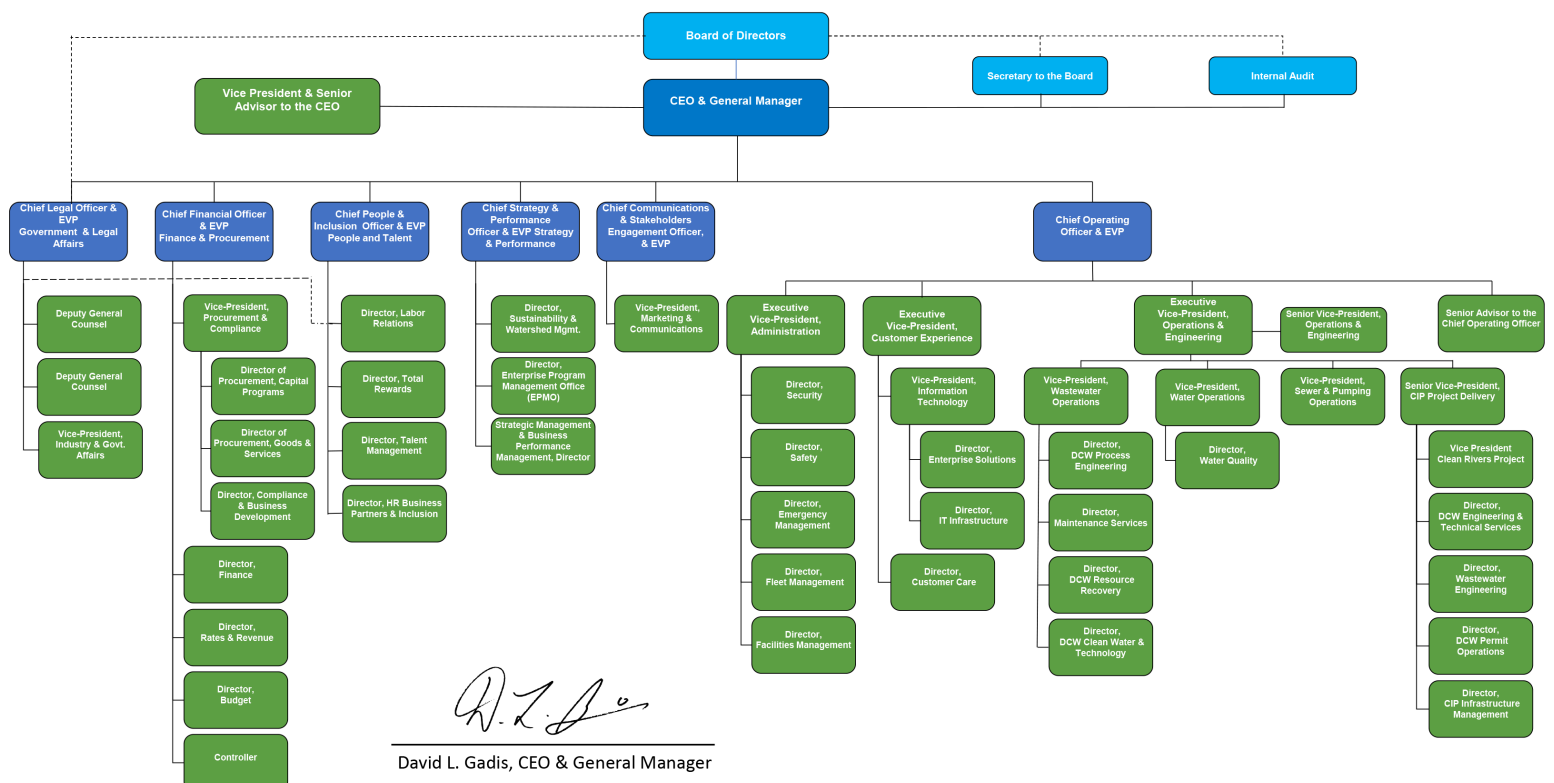
Organizational Governance and Structure

DC Water is an independent authority of the District of Columbia, established under District of Columbia and Federal law and is governed by 11 principals and 11 alternate members of the Board of Directors. The members of the Board of Directors also serve on various committees.

DC Water Board Committees



DC Water Organizational Leadership (as of March 2021)





The past year has challenged the way we do business and the way we relate to each other. At DC Water, like everywhere else, the pandemic altered the lens through which we see the world around us. As it became clear that COVID-19 would force immediate action, I prioritized our employees, our

customers, and our ability to deliver critical services. While doing this, DC Water managed its finances in a way that avoided the need for layoffs or furloughs - adding stability and structure to a very stressful time for many of our workers.

Resilience and Readiness

Ensuring the safety of our customers and employees was foremost in our minds, and we applied guidance from the CDC and health departments to develop policies that advanced the safety and health of our employees and the customers we serve. Early on, we recognized the severity of the pandemic and were the first utility in the District to pause service disconnections so that everyone retained water and sewer service, something critical in fighting the outbreak. We also reconnected those customers who had recently been shut off and those who requested service restoration.

I activated our Incident Management Team and its systems that enable rapid cross-functional communication and collaboration. As the region faced lockdown, furloughs and job loss, our staff sought creative ways to assist customers in paying their water and sewer bills. We partnered with the District to establish emergency funding and even created a unique program for tenants in eligible multifamily dwellings. This program is cutting-edge as it is one of a few in the nation designed to aid customers who do not pay their water and sewer bills directly. This year's budget continues funding these emergency programs demonstrating our commitment to affordability and providing for the underserved.

Lead Free DC Program

While battling the pandemic, we never lost sight of our long-term commitments and priorities. We unified our suite of lead pipe replacement programs under one umbrella and put a team in place to develop policies and strategy to reach an ambitious goal. Through Lead Free DC, we plan to eliminate lead service lines in the District by 2030. Doing so will require partnerships and alternative funding strategies with the District and other partners.

Engaging our Local Community

This budget supports our partnership with the business community. We are committed to working towards our long-term goals in a strategic and sustainable way and to address the needs of our diverse business community. We continue to expand programs to attract and engage diverse suppliers in the economic activities of DC Water and to ensure these businesses know about opportunities and understand the requirements.

We continue to invest in our Capital Improvement Program (CIP) to provide critical infrastructure services to the nation's capital and the region. This CIP will provide business and job opportunities for our local economy. We are on schedule and on budget to meet the consent decree requirements of the Clean Rivers Project to significantly improve the health of the District's three waterways.

With this budget, we can meet the challenges of not only the past year, but also what we will be dealt in the coming year. I credit Chief Financial Officer Matthew Brown and his team for their commitment to the budget process and to their financial management during the public health emergency. I also thank the Executive Leadership Team and Board of Directors for their guidance and for supporting this budget.

David L. Gadis

DC Water Budget Overview

DC Water Budget Overview FY 2022 Operating Budget of \$658.4 million

\$178.8 million
Supports DC Water's 1231 employees who deliver for our customers every day, including 14 apprentices to achieve service levels

Adds two positions for LeadFree DC program inspections and eight positions to insource activities
\$1.6 million
LEAD FREE DC

\$85.4 million
Funds core operations like infrastructure maintenance and repairs, strategic programs, software technology, legal, compliance, insurance, credit card fees, facilities and biosolids hauling services

Continues expansion of the Backwater Valve Program
\$0.7 million

Funds debt service and Paygo for the capital program
\$269 million paygo

\$22.7 million
Makes PILOT & ROW payments to the District

Provides for chemicals, supplies, water purchase and utilities
\$96.7 million

Funds maintenance of the Green Infrastructure (GI) facilities to manage stormwater, and security guards needed for the new Fleet and Sewer facilities
\$2 million

Establishes programs to repair property side leaks and perform comprehensive inspection and maintenance of small sewers
\$1.5 million

DC Water Budget Overview FY 2021-2030 Capital Investments of \$5.4 billion

\$1.12 billion
Fully funds DC Clean Rivers and other CSO projects to meet Consent Decree requirements

\$336 million
Invests in process equipment, specialized vehicles, and information technology infrastructure; establishes funding for the innovation program

Invests in the Aqueduct's capital infrastructure
\$180.1 million

Continues investment in Water & Sewer infrastructure
\$2.46 billion
Ramps up to 1.5% replacement for small diameter water mains per year in FY 2028 and beyond
Ramps up to 1.0% rehabilitation for small sewer lines per year in FY 2024 and beyond, and 1.5% in FY 2031 and beyond

\$64 million
Improves stormwater pump stations to relieve local flooding

\$109.8 million
Constructs the new Fleet and Sewer Facilities, renovates the Historic Main Pump Station, and restores the Main & O campus seawall

\$1.16 billion
Funds rehabilitation and upgrades at Blue Plains



DC Water is one of the nation's leading utilities, and we are fortunate to have some of the most dedicated, innovative, and hardworking people in the business. There is no challenge that they cannot take on, including COVID-19.

The COVID-19 emergency was an immediate public health crisis, and the economic fallout was not far behind. As customers were impacted, so was our bottom line. With increased arrearages and reduced consumption, our revenues suffered. To maintain our financial strength so that we could support our employees and serve our customers, we took swift action to prioritize expenses while the finance team continually monitored consumption and revenues. We adopted the 3 P's as our financial guiding **principles** - to **preserve** cash, **prioritize** our employees and safety, and provide essential services to our customers.

We worked across DC Water to align expenditures with a reduced level of cash receipts. Our actions paid off – we finished FY2020 in strong financial position and expanded our customer assistance programs to help those who were negatively impacted by COVID-19. We even launched one of the first programs in the nation to assist residents of multi-family buildings.

Looking Forward

The approved operating budget of \$658.4 million advances our efforts to be the best utility in the world and pays for our core operations and the debt service requirements for our capital program. This budget adds two new positions to support the inspection work for the Lead Free DC program, and eight new positions to reduce our reliance on long-term contractors for day to day activities, and continues the apprenticeship program.

The FY 2022 operating budget also funds fleet investments and a new comprehensive inspection program for small local sewers in the District. Considering the average sewer main is more than 80 years old, this program is critical to identifying and addressing the most needed repairs to prevent failure.

We are proceeding with the increased investment in our aging water and sewer systems, although the ramp up will be slower than previously planned due to the pandemic. The ten-year capital program of \$5.43 billion includes significant growth on water and sewer projects and reduced spending starting FY 2025 for the Clean Rivers program as we approach the completion of the project.

Additionally, the CIP funds rehabilitation and upgrades of various projects at the plant, advances funding for innovation program initiatives and continues the construction of the Fleet and Sewer Services facilities.

Our finance team continues to monitor and analyze revenues and expenses to proactively respond and manage the budget to keep our finances strong so that we can protect our employees and serve our customers. We will continue to reflect the DC Water core values of customer service, well-being, teamwork, customer focus, trust and accountability in all that we do. These values are reflected both in the adopted budget and the way we work every day.

I want to appreciate the efforts of the Finance team, collaborating with the various departments and the Executive Leadership Team. Their dedication to DC Water and our customers were evident and crucial in delivering a balanced budget while working remotely and like everyone impacted by the pandemic, juggling the responsibilities of work, children and family.

A handwritten signature in black ink that reads "Matthew T. Brown". The signature is written in a cursive, slightly stylized font.

Matthew T. Brown

Budget at a Glance

Operating Expenditures (\$ Thousands)

Category	FY 2021 Approved	FY 2022 Approved
Authorized Headcount	1,231	1,241
Total Personnel Services	\$ 177,863	\$ 180,353
Chemicals	27,779	25,916
Supplies	8,302	8,285
Utilities	27,911	27,329
Contractual Services	88,532	88,504
Water Purchases	36,250	35,217
Small Equipment	1,030	1,108
Total Non-Personnel Services	\$ 189,804	\$ 186,359
Total Operations and Maintenance	\$ 367,668	\$ 366,711
Debt Service	222,268	231,164
PILOT & ROW	22,372	22,718
Payment in Lieu of Taxes	17,272	17,618
Right of Way	5,100	5,100
Cash Financed Capital Improvements	30,355	37,830
Total Debt Service/PILOT/ROW/ CFCI	274,995	291,712
Total Operating Expenditure	\$ 642,663	\$ 658,423
Less: Capital Labor	(24,382)	(25,086)
Total Net Operating Expenditure	\$ 618,281	\$ 633,337

Capital Disbursements (\$ Thousands)

Service Areas	FY 2021 Revised	FY 2022 Approved
Non-Process Facilities	\$ 38,004	\$ 12,725
Wastewater Treatment	78,992	63,922
Clean Rivers	165,435	160,582
Combined Sewer	5,407	4,694
Stormwater	5,931	9,228
Sanitary Sewer	50,547	75,437
Water	75,362	100,209
Capital Projects	\$ 419,678	\$ 426,797
Capital Equipment	36,207	36,019
Washington Aqueduct	15,382	13,324
Additional Capital Programs	51,589	49,343
Total CIP	\$ 471,267	\$ 476,140

Operating Revenues (\$ Thousands)

Category	FY 2021 Revised	FY 2022 Revised
Residential	\$ 118,771	\$ 129,062
Commercial	156,067	170,209
Multi-family	111,501	123,523
Federal Government	79,082	81,339
Municipal & Housing	28,767	31,260
Water System	39,717	39,717
Metering Fee	15,405	24,083
Wholesale	81,710	84,669
Other Revenue	61,242	72,523
Total Operating Revenue	\$ 692,262	\$ 756,385

Capital Revenues (\$ Thousands)

Source	FY 2021 Revised	FY 2022 Revised
Wholesale Capital Payments	\$ 75,803	\$ 83,640
EPA Grants & CSO	32,645	31,311
Interest Income on Bond	1,749	2,623
Pay-Go Financing	120,564	141,322
Debt Proceeds	200,000	200,000
System Availability Fee	7,000	7,700
Total Capital Revenue	\$ 437,761	\$ 466,596



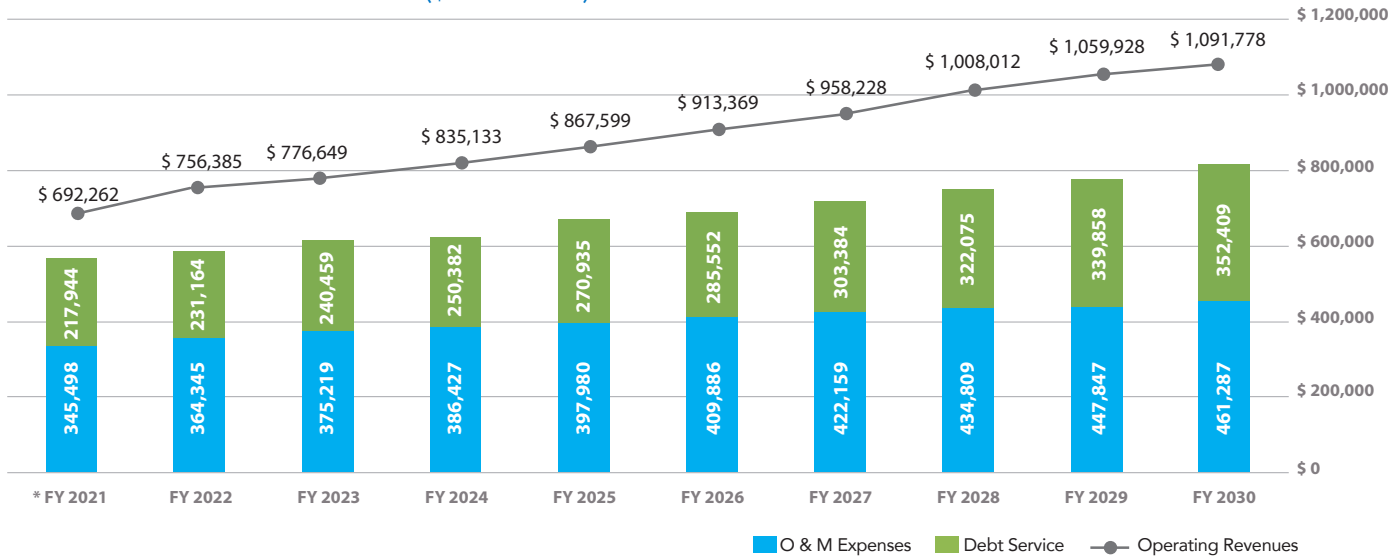
Anacostia Pumping Station inspection



Ten-Year Financial Outlook / Debt Management

DC Water’s ten-year financial plan provides a strong financial framework to support implementation of the Board strategic plan, policies, priorities and guidance in several key financial areas. This financial plan serves as one of management’s key tools to monitor progress in meeting financial goals and to proactively address future financial and operational issues. Given DC Water’s substantial borrowing needs over the next ten years, adherence to these Board policies is crucial to cost-effectively access the capital markets and retain our credibility with customers and regulators. The ten-year financial plan encompasses annual projected revenue requirements, operating expenditures, debt service costs, coverage ratios or indenture requirements, and sufficient liquidity to meet all the Authority’s financial obligations.

FY 2021 - FY 2030 Financial Plan (\$ Thousands)



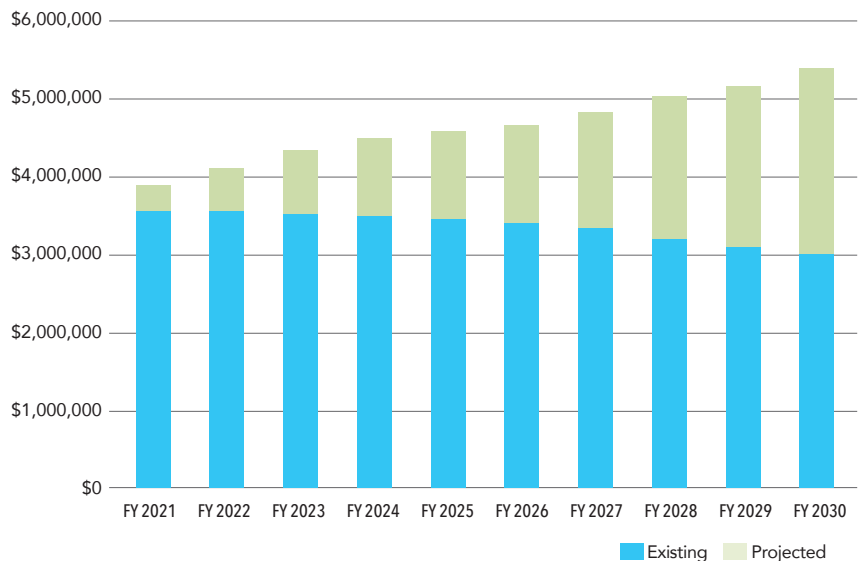
Debt Management

DC Water maintains strong financial performance and bond ratings. In August 2019, the authority’s senior lien public utility revenue bonds were upgraded to ‘AA+’ from ‘AA’ by Fitch ratings. As the result, the credit ratings on our senior lien bonds are AAA, Aa1, and AA+ ratings by Standard and Poor’s Ratings Services, Moody’s Investors Service and Fitch Ratings. These notable results are due to the Authority’s solid finance team, outstanding financial performance, management of our capital program, and diligent financial and capital planning. Additional information for current and future investors is available at dcwater.com and dcwaterbonds.com.

The Authority uses debt to finance its capital program and refund existing debt to obtain debt service saving. In April 2020, the Authority completed a \$300 million (Series A) Forward Direct Purchase agreement to be completed in July 2022, to refund Series 2012 A and C of subordinate lien revenue bonds.

Additionally, DC Water received the Water Infrastructure and Finance Innovation Act (WIFIA) loan administered by the Environmental Protection Agency (EPA) in March 2021 for \$156 million. The Authority’s long-term debt, including current maturities, totals \$3.5 billion at the end of FY 2020 and is projected to increase over the next ten years mainly to invest in our aging infrastructure.

FY 2021- FY 2030 Current and Outstanding Debt (\$ Thousands)



Operating Budget



Bryant Street Water Pumping Station

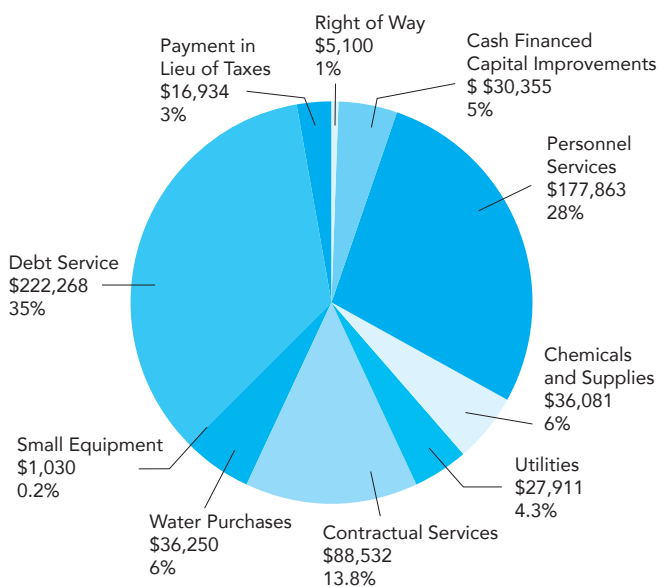
DC Water’s annual operating budgets provide the resources necessary to sustain a multi-billion dollar water treatment and distribution, sewage collection and treatment system. The Authority continues to deliver clean water, collect and treat the sewage before returning clean water to the local waterways and repair water main and sewer breaks as needed. The budget reflects management’s focus on supporting the most important assets with core values of reflecting “people, place and pay” while maintaining customer affordability and providing a high level of customer service.

The approved FY 2022 budget totals \$658.4 million, an increase of \$15.8 million or approximately 2.4 percent compared to the FY 2021 budget. The increase is mainly for the debt service and pay-go funding requirements to support the capital program. This budget also includes projected increases in personnel costs for ten new positions, a new assistance program to address leak repairs, a new inspection program for small local sewers, installation of backwater valves on private properties and the maintenance of the green infrastructure and other new operational facilities.

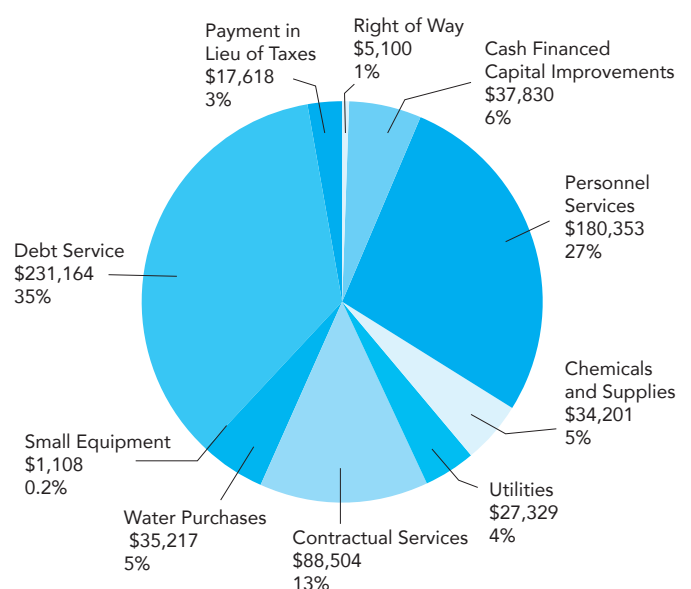
Detailed descriptions of the approved FY 2021 and FY 2022 operating budgets are available online at dcwater.com.

Comparative Operating Budgets by Category (\$ Thousands)

Approved FY 2021 \$642,663



Approved FY 2022 \$658,423





Capital Improvement Program (CIP)

DC Water’s ten-year Capital Improvement Program (CIP) provides a framework for the development, prioritization, implementation and measurement of the capital projects undertaken. The Board-approved FY 2021 – FY 2030 CIP disbursement budget decreased by \$17.5 million compared to the previous plan. This budget includes spending reductions of \$36.3 million in FY 2021 and \$134.9 million in FY 2022 due to the impact of the COVID-19 pandemic on revenues. The overall ten-year CIP continues management’s commitment to increased investments in its aging water and sewer infrastructure.

This year’s CIP funds replacement of 1 percent for small diameter water mains and ramps up to 1.5 percent replacement per year in FY 2028 and beyond. Additionally, this plan ramps up to 1 percent rehabilitation for small

sewer lines per year in FY 2024 and 1.5 percent per year in FY 2031 and beyond. This plan also pays for the Clean Rivers program, continues the construction of the new Fleet and Sewer Services facilities and the planned capital projects at the Washington Aqueduct.

The FY 2021 and FY 2022 capital budgets total \$471.3 million and \$476.1 million, respectively (cash disbursement basis). The planned disbursements over the ten-year period totals \$5.43 billion, while the lifetime budget is \$12.13 billion (total commitments for active projects prior to, during, and beyond the ten- year window).

Detailed descriptions of major CIP changes and program details can be found in Section V – Capital Improvement Program of the budget book and online at dcwater.com.

FY 2021 – FY 2030 Capital Improvement Program (\$ Thousands)

FY 2021 Revised	FY 2022 Approved	Service Area	Ten-Year Disbursement Plan	Total Lifetime Budget
\$38,004	\$12,725	Non Process Facilities	\$109,776	\$210,031
78,992	63,922	Wastewater Treatment	1,158,991	3,475,135
170,842	165,276	Combined Sewer Overflow	1,122,976	2,979,072
5,931	9,228	Stormwater	63,894	121,310
50,547	75,437	Sanitary Sewer	1,312,973	2,095,695
75,362	100,209	Water	1,147,717	2,346,963
\$419,678	\$426,797	Capital Projects	\$4,916,327	\$11,228,206
36,207	36,019	Capital Equipment	336,036	336,036
15,382	13,324	Washington Aqueduct	180,125	180,125
\$51,589	\$49,343	Additional Capital Programs	\$516,161	\$516,161
		Labor		388,747
\$471,267	\$476,140	Total Capital Budgets	\$5,432,489	\$12,133,115

Measure of Priority (\$ Thousands)

Mandates Agreements, Regulatory standards, Court orders, Issues and Permits requirements, Stipulated Agreements, Etc.	Health and Safety Required to address Public Safety	Board Policy Undertaken as a result of the Board’s commitment to outside agencies	Potential Failure Related to Facilities in danger of failing, or critical to meeting permit requirements	High Profile / Good Neighbor Address Public Concern	Good Engineering / High Payback Need to fulfill Mission and upgrade Facilities	Good Engineering / Lower Payback Lower priority projects	Total
FY 2021 \$170,417 36%	\$7,791	76,575	37,106	\$1,689	107,677 23%	\$69,591	\$471,267
FY 2022 160,270 34%	16,498	70,078	32,087	233	126,413 27%	70,338	\$476,140
FY 2023 118,064 22%	42,291	79,481	29,317	403	145,800 27%	124,677	\$540,585
FY 2024 67,097 13%	4,969	57,844	39,023	1,588	175,715 35%	153,757	\$500,427
FY 2025 58,499 12%	7,416	67,563	42,883	1,312	182,405 36%	139,840	\$499,918
FY 2026 147,834 22%	22,248	60,258	51,330	714	241,505 35%	157,392	\$681,280
FY 2027 99,877 16%	25,742	61,311	44,187	352	224,460 36%	176,145	\$632,075
FY 2028 86,036 15%	9,822	63,142	28,722	202	198,222 35%	181,921	\$568,067
FY 2029 113,315 20%	1,271	68,984	29,780	215	176,410 31%	182,287	\$572,262
FY 2030 11,436 2%	3,632	69,615	33,382	2,571	166,852 34%	202,979	\$490,468
TOTAL \$1,032,845	\$141,678	\$674,851	\$367,816	\$9,279	\$1,745,458	\$1,458,925	\$5,432,489
% of Total 19.0%	2.6%	12.4%	6.8%	0.2%	32.1%	26.9%	100%

Major Capital Investments

DC Clean Rivers

This project aims to control CSOs to the Anacostia and Potomac Rivers and Rock Creek to meet the District's water quality standards, while improving the health of the Chesapeake Bay. This ongoing project includes green infrastructure initiatives that will divert stormwater runoff prior to entering the sewer system.



Ongoing and Local Sewer Rehabilitation

Renewal of small diameter sewer infrastructure will reduce emergency repair, including overtime and maintenance demands for these neighborhood sewers.



Renewable Energy – Solar

In the spring of 2020 DC Water started Phase 1 of its energy mix by installing over 12,000 solar panels, covering around 264,000 square feet across its open and flat 153-acre Blue Plains Advanced Wastewater Treatment Plant, the largest advanced wastewater treatment plant in the world and the largest consumer of electricity in the District. By the end of FY 2020 the panels generated 5.2 MW of electricity. DC Water pays 2.5 cents per kilowatt-hour for the electricity, saving the utility \$4 million in operating costs over 20 years. Phase 2 will be implemented when it becomes cost effective.



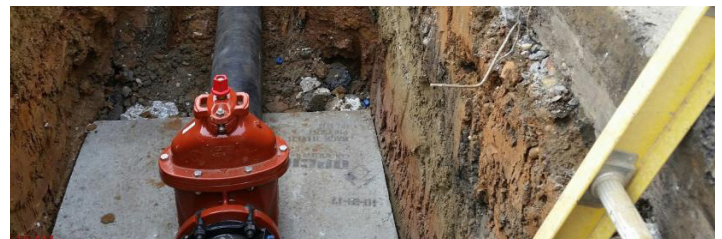
Heavy Duty Vehicles

Replacement of major heavy-duty equipment such as backhoes, jet-vacs, large meter trucks, and catch basin trucks will reduce vehicle downtime, improve fuel efficiency and lower maintenance and repairs.



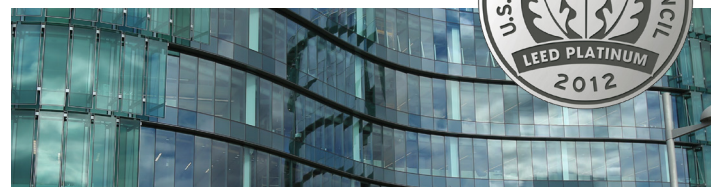
Water Mains

Renewal of small diameter water pipes with the goal of ramping up to 1.5 percent replacements per year starting FY 2028 and onwards.



LEED

DC Water headquarters, built along the Anacostia River, was certified as LEED Platinum (Leadership in Energy & Environmental Design) by the U.S. Green Building Council (USGBC) in 2021. It is one of 125 platinum certified buildings in DC. This building is centrally located and convenient to customers; it also increases use of public transit, biking and walking by DC Water staff and reduces energy consumption and controls stormwater. The building uses a wastewater thermal exchange system to heat and cool the building. The system captures heat from the flowing wastewater in the pump station in the winter and uses the wastewater as a heat sink in the summer, saving energy to heat and cool the building by using a readily available resource. The green roof reduces stormwater runoff and contains grass, flowers, and shrubs to absorb rainwater. A 40,000-gallon cistern collects any rainwater not absorbed by plantings. The collected water is then used for 100% of the toilet flushing and irrigation needs of the building. The use of the wastewater thermal exchange system and the rainwater capture saves up to 1.2 million gallons of water annually.





Operating Revenues

To provide continuous delivery of water and wastewater services, it is vital that DC water has a consistent revenue stream to cover operating and maintenance (O&M) costs, debt service, and other liquidity requirements. DC Water has a diverse customer base and receives revenues from a variety of sources. Retail rates are charges for water, sewer and other services to DC Water’s customers. Wholesale revenues are received from suburban water and sewer authorities for their share of the O&M costs of the Blue Plains Advanced Wastewater Treatment Plant.

DC Water maintains a combination of fixed and variable fees. Fixed fees are charged regardless of water usage, and include the Metering Fee, Water System Replacement Fee and the Clean Rivers Impervious Area Charge. Variable fees are based on water usage, and include the water and sewer fees. DC Water conducts a Cost of Service Study (COS) to help ensure that costs are appropriately allocated. For example, the cost of delivering water to our customers is reflected in the water rate, and the cost of wastewater treatment is part of the sewer rate.

Independent Review of Rate Structure and Customer Assistance Programs

In FY 2020, independent consultants conducted a review of our rate structure, FY 2021 rates and Customer Assistance Programs (CAP) and performed analysis of rates and CAP for comparable jurisdictions (e.g., benchmarking). The findings of the study concurred that DC Water’s current rate structure, customer classes, monthly water lifeline threshold of 4 Ccf, ERU basis for recovering the CRIAC charge, CAP bill discount and temporary assistance programs are consistent with industry standards. In response to recommendations in the review, DC Water has adjusted the Metering Fee and increased benefits for CAP customers.

2021 Cost of Service Study

In FY 2020, DC Water also conducted a Cost of Service Study (COS) to align the cost of providing service to the customers with the multi-year rate proposals. The COS consisted of three components: i) Revenue Sufficiency Analysis – Do the proposed rates recover adequate revenue to meet expenditures; ii) Cost of Service Analysis/Rate Equity – Are proposed rates equitably recovering the costs of providing service to customers; and iii) Alternative Rate Structure Analysis – Are there alternative rate structures that may more effectively meet DC Water’s highest priority pricing objectives. Both will be done every two years going forward.

Multi-Year Rates

DC Water’s Board approved its third multi-year rate proposal in FY 2020 covering the period FY 2021 and FY 2022. The FY 2022 rates will be effective October 1, 2021. The benefits of multi-year rates include greater revenue certainty, increased budget discipline and better alignment between revenues and expenditures.

Based on feedback from the Stakeholder Alliance and discussions with customers about the Clean Rivers Impervious Area Charge (CRIAC), which funds the Clean Rivers program, the Board approved for FY 2020 a shift of 18 percent of the costs for the Clean Rivers program from the CRIAC to the sewer volumetric rate. The CRIAC shift increased to 28 percent in FY 2021 and will increase to 37 percent in FY 2022. This is based on an assessment that, on average, 37 percent of the volume in the new tunnels is from wastewater.

Because of efforts to reduce the growth of operating costs, the overall charges for average household customer for FY 2022 is 6.7 percent as compared to 6.9 percent of the previous forecast.

Operating Revenues (\$ Thousands)

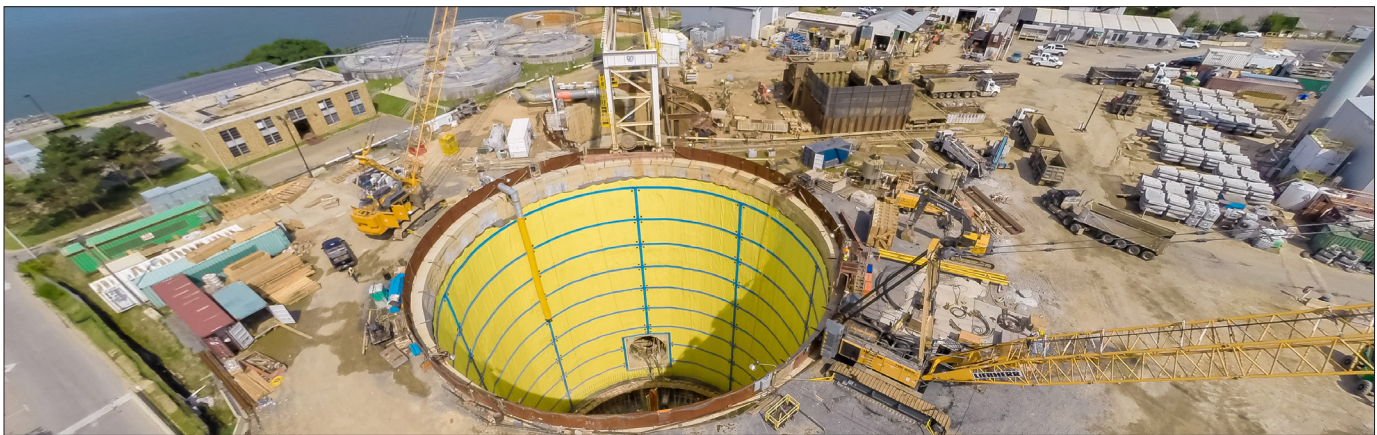
Category	FY 2021 Revised	FY 2022 Proposed
Residential	\$ 118,771	\$ 129,062
Commercial	156,067	170,209
Multi-family	111,501	123,523
Federal Government	79,082	81,339
Municipal & Housing	28,767	31,260
Water System Replacement Fee	39,717	39,717
Metering Fee	15,405	24,083
Wholesale	81,710	84,669
Other Revenue	61,242	72,523
Total Operating Revenue	\$ 692,262	\$ 756,385

FY 2021 - FY 2022 Retail Rates and Fees

Description of Fees	Units	FY 2021 Approved	FY 2022 Approved	FY 2022 Increase/Decrease	
DC Water Retail Rates – Water		\$	\$	\$	%
• Residential 0-4 Ccf (Lifeline) ²	Ccf	\$3.49	\$3.63	\$0.14	4.0%
• Residential – > 4 Ccf ²	Ccf	\$4.50	\$4.74	\$0.24	5.3%
• Multi-family / DC Housing ²	Ccf	\$3.96	\$4.15	\$0.19	4.8%
• Non-Residential	Ccf	\$4.65	\$4.91	\$0.26	5.6%
DC Water Retail Rates – Sewer	Ccf	\$9.77	\$10.64	\$0.87	8.9%
DC Water Clean Rivers IAC	ERU	\$19.52	\$18.40	(\$1.12)	(5.7%)
DC Water Customer Metering Fee	5/8"	\$4.96	\$7.75	\$2.79	56.3%
DC Water System Replacement Fee ¹	5/8"	\$6.30	\$6.30	\$0.00	0.0%
District of Columbia PILOT Fee	Ccf	\$0.54	\$0.56	\$0.02	3.7%
District of Columbia Right-of-Way Fee	Ccf	\$0.19	\$0.19	\$0.00	0.0%
District of Columbia Stormwater Fee	ERU	\$2.67	\$2.67	\$0.00	0.0%

(1)DC Water WSRF of \$6.30 effective October 1, 2015

(2) Proposed Class-Based rates



Clean Rivers Impervious Area Charge (CRIAC)

The CRIAC is a separate sewer service fee established in FY 2009 to recover the \$2.8 billion cost of implementing the DC Clean Rivers Project (the District's CSO-Long Term Control Program). The proposed monthly CRIAC ranges from \$19.52 per Equivalent Residential Unit (ERU) in FY 2021 to \$23.45 per ERU in FY 2030. From 2011 until 2020, all funds for the Clean Rivers program have come from the CRIAC, which is assessed for all customers based on the amount of impervious surface on each property. The ten-year plan assumes no external funding beyond the special Congressional appropriation. DC Water has received \$260.8 million through Federal appropriations as of September 30, 2020.

During FY 2019, the Board approved a proposed change in the way Clean Rivers costs are recovered starting in

FY 2020. The approved budget phased-in a CRIAC shift of 18 percent in FY 2020, and 28 percent in FY 2021, and will phase-in 37 percent in FY 2022 and beyond to sewer volumetric rate based on methodology that allocates volume of Sanitary Wastewater, Stormwater runoff and CSO in the Clean Rivers Tunnel. Shifting some of the Clean Rivers cost recovery to the volumetric rate gives customers more control over the amount that they pay towards the project. The change is expected to improve equity in the funding for the Clean Rivers program. Small volume customers in every class generally pay less and average residential customers pay about the same, prior to the change. In FY 2020, the CRIAC discount increased from 4 percent to 20 percent for customers who implement Stormwater Best Management Practices.



Customer Affordability – In the District of Columbia, one-fourth of the residents live below the poverty line, thus rate affordability is of the utmost concern in the planning process. DC Water seeks to balance its operating and financial needs with consideration to the financial impact upon its customers. EPA guidelines suggest that fees and charges should be within 4 percent of the median household income to be considered affordable (2 percent for water and 2 percent for sewer). Using the last available data (2018), DC Water's rates are well under that target and they are comparable with similar water and wastewater utilities.

DC Water, in partnership with the District, supports the following programs to assist low-income customers in paying their water bills:

Customer Assistance Program (CAP) – The Authority implemented the CAP in 2001 providing a discount of 4 Ccf per month of water service for single family residential homeowners that meet income eligibility guidelines. In FY 2004, the Authority expanded the CAP to include tenants who meet the financial eligibility requirements and whose primary residence is separately metered by the Authority. In January 2009, the Authority further expanded the CAP to provide a discount of 4 Ccf per month of sewer services to eligible customers.

In FY 2011, the discount was expanded to the first 4 Ccf associated with the PILOT/ROW fee in addition to the current discount provided on water and sewer services. In FY 2016, the CAP discount was expanded to include a 100 percent credit/discount for the Water System Replacement Fee (WSRF). In FY 2017, the Authority further expanded CAP to include 50 percent discount for CRIAC. In FY 2020, the Board approved the increase in CRIAC discount for CAP customers to 75 percent effective from FY 2021. In FY 2020, CAP assisted over 4,800 customers and provided \$1,584,808 in discounts to low-income customers.

CAP 2 – This was implemented in December 2018 to expand the CAP program for low-income residential customers with household income up to 80 percent Area Median Income (AMI) who do not qualify for CAP. Eligible customers receive a discount of up to 3 Ccf per month for water and sewer and a 50 percent discount for CRIAC. In FY 2020, the Board approved a Resolution to make CAP 2 permanent effective FY 2021.

CAP 3 – Is a District-funded program implemented in December 2018 that provides benefits to DC Water customers with household income greater than 80 percent and up to 100 percent Area Median Income (AMI) who do not qualify for CAP or CAP2. Eligible customers receive 75 percent discount for CRIAC.

Emergency Residential Relief Program (ERRP) – In FY 2019, DOEE established an Emergency Residential Relief Program. to provide one-time assistance of up to \$2,000 to customers impacted by COVID-19.

DC Water Cares, Residential Assistance Program (RAP) – In FY 2020 DC Water established a \$3.0 million program to continue the ERRP in FY 2021 to provide one-time assistance of up to \$2,000 to residential customers.

DC Water Cares, Multi-family Assistance Program (MAP) – A \$7.0 million program to provide one-time assistance to multi-family buildings where occupants have been negatively impacted by COVID-19. Payment plans are established and adhered to; assistance amounts are determined and provided per affordable unit and will be on matching basis.

CRIAC (Clean Rivers Impervious Area Charge) Non-profit Relief Program – A District-funded program implemented in December 2018 to provide up to 90 percent of CRIAC discounts to nonprofit organizations as determined by the District Department of the Environment (DOEE).

Serving People by Lending a Supporting Hand (SPLASH) – The SPLASH program was implemented in FY 2001. Through the SPLASH program, DC Water offers assistance to families in need so that they can maintain critical water and sewer services until they get back on their feet. The program is administered by the Greater Washington Urban League. Every dollar received by DC Water is distributed to eligible customers. In FY 2020, SPLASH assisted 133 households and provided \$74,323 in contributions to low-income customers.

Regional Demographics – DC Water provides water and wastewater services to retail customers in the District and wastewater treatment services on a wholesale basis to portions of Montgomery County and Prince George's County in Maryland and Fairfax and Loudon Counties in Virginia, serving about 1.6 million people. Despite increasing population and visitors, water consumption is declining through improved fixture efficiency and conservation. Reduced usage is excellent for the environment but places more strain on the 132,576 retail customers with the responsibility to pay for majority of the operations, maintenance and replacement of the water and sewer infrastructure throughout Washington, DC. Wholesale customers pay a relatively modest portion of the total cost of service.

The FY 2022 budget incorporates trends and statistics impacting DC and the region. It also highlights how the diversity of the DC Water revenue stream is helping to address the need for continuous improvement in the water, wastewater and stormwater system.

FY 2021 - FY 2022 Average Residential Customer Monthly Bill

dc DC WATER RATES AND FEES	Approved (FY 2021)	Approved (FY 2022)
Water / Sewer Retail Rates (Ccf) ⁽¹⁾	\$73.30	\$78.92
Clean Rivers IAC (ERU) ⁽²⁾	\$19.52	\$18.40
Customer Metering Fee	\$4.96	\$7.75
Water System Replacement Fee ⁽²⁾	\$6.30	\$6.30
DC Water Subtotal	\$104.08	\$111.37

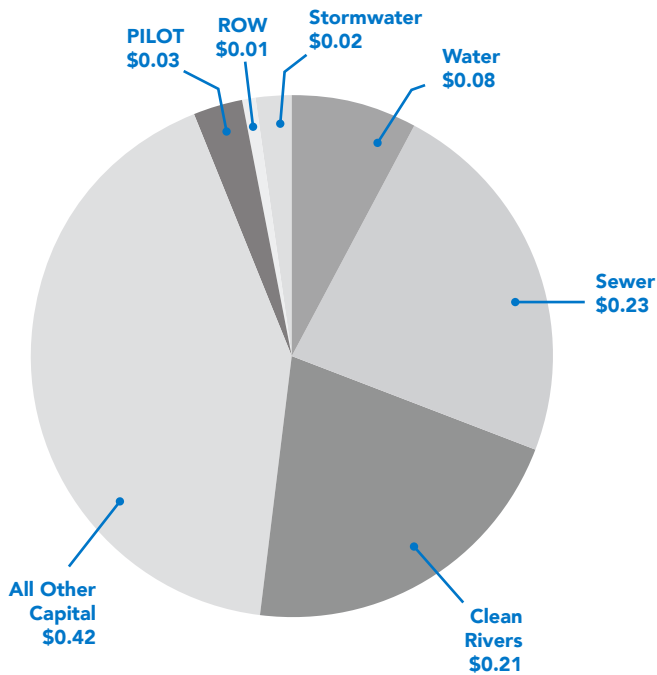
DISTRICT OF COLUMBIA CHARGES		
PILOT (Ccf) ⁽¹⁾	\$2.93	\$3.04
Right-of-Way Fee (Ccf) ⁽¹⁾	\$1.03	\$1.03
Stormwater Fee (ERU) ⁽³⁾	\$2.67	\$2.67
District Subtotal	\$6.63	\$6.74

Total Bill **\$110.71** **\$118.11**
 (% Increase) 6.6% 6.7%

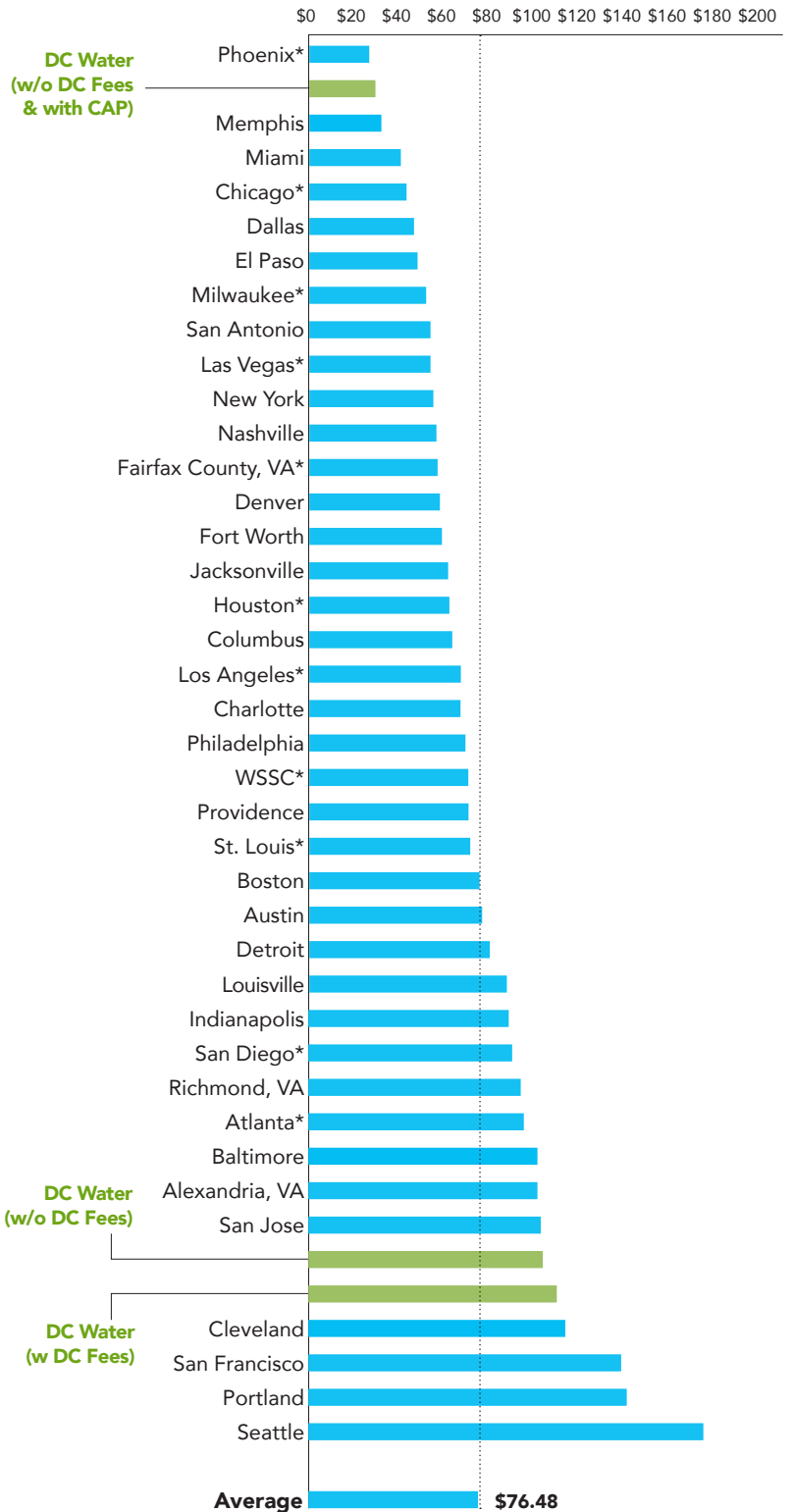
- (1) Assumes average monthly consumption of 5.42 Ccf, or (4,054 gallons)
- (2) Assumes average 1 Equivalent Residential Unit (ERU)
- (3) District Department of the Environment stormwater fee of \$2.67 effective November 1, 2010
- (4) DC Water "Water System Replacement Fee" of \$6.30 for 5/8" meter size effective October 1, 2015

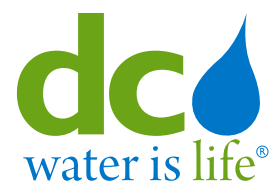
FY 2022: Where Does Your Money Go?

How does DC Water spend each dollar received from the average residential customer?

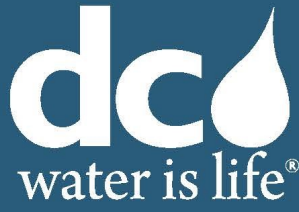


DC Water Retail Rates Compared to other Large Utilities





dcwater.com



Approved FY 2022 Budgets
Section II: OVERVIEW

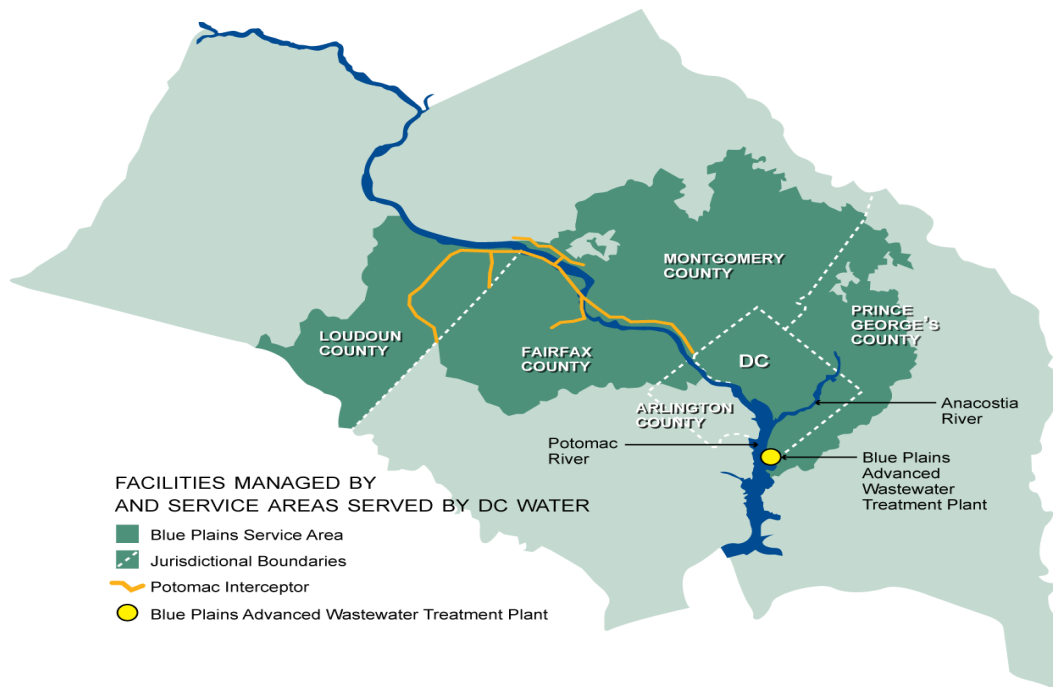


Blue Plains Advanced Wastewater Treatment Plant

History: The District of Columbia Water and Sewer Authority (DCWASA), was created by District law in 1996, with the approval of the United States Congress, as an independent authority of the District Government with a separate legal existence. In 2010, the Authority rebranded and became DC Water. DC Water is the sole water and sewer utility in the District of Columbia.

Age of Pipes: The median age of District water main pipes is over 77 years old, with approximately 9 percent of pipes installed in the 1900’s and 2 percent dating back to the 1860s before the Civil War.

Service Area: Providing approximately 700,000 residents and 21.3 million annual visitors in the District of Columbia with retail water and wastewater (sewer) service, DC Water has a total service area of approximately 725 square miles. In addition, DC Water treats wastewater for approximately 1.6 million people in neighboring jurisdictions, including Montgomery and Prince George’s Counties in Maryland and Fairfax and Loudoun Counties in Virginia.



Drinking Water Quality: With a strong emphasis on water quality, DC Water maintains an annual flushing program, regulatory and voluntary water quality testing, and ongoing system upgrades. DC Water, in partnership with the U.S. Army Corps of Engineer’s Washington Aqueduct, ensures a high-quality treatment process for delivering outstanding drinking water throughout the year. DC Water purchases water produced by the Aqueduct and distributes to its customers in the District of Columbia.

Pumped and Treated Water Storage: During Fiscal Year 2020, DC Water pumped an average of 92.2 million gallons of water per day. In addition, DC Water stores 52.9 million gallons of treated water at its seven facilities. The Washington Aqueduct stores an additional 49 million gallons.

Water Distribution System: DC Water delivers water through roughly 1,300 miles of interconnected pipes, four pumping stations, four reservoirs, three elevated water tanks, and approximately 43,860 valves, and 9,510 fire hydrants.

Sewer System: DC Water operates 2,000 miles of combined, separate, and stormwater sewers; 50,000 manholes and 25,000 catch basins; 9 off-site wastewater pumping stations, and 16 stormwater pumping stations.

Blue Plains Advanced Wastewater Treatment Plant (BPAWWTP): Blue Plains, located at the southernmost tip of the District, is the largest advanced wastewater treatment facility in the world, covering 150 acres along the Potomac River. Recycled water from the Blue Plains Plant is used in the treatment of wastewater and is not sold for retail use.

Wastewater Treatment Capacity: Through the complete treatment process, Blue Plains treats an annual average of 290 million gallons per day (MGD) and has a design capacity of 384 MGD, with a peak design capacity to treat more than 555 MGD. An additional 225 MGD can be treated utilizing the Wet Weather Treatment Facility at Blue Plains.

Customer Service: DC Water communicates valuable customer-related information through bill inserts, monthly newsletters, its website, and social media to include Facebook, YouTube, Flickr, Twitter and Instagram. Using an interactive voice recognition system, DC Water makes information readily available in more than 150 languages.

A 24-hour Emergency Command Center operates as the centralized communication facility for receiving and responding to a variety of emergency calls from customers and the public.

DC Water's Customer Information System (CIS) provides an integrated environment that enrolls new customers, generates billings, manages credit and collections, and tracks water consumption. CIS also tracks and manages meters, handles customer inquiries, complaints, and service orders as well as provides call center support.

Community Service: Donating its time and resources, DC Water strives to be present at events that align with its mission and allows the Authority to engage with the residents about pertinent projects and services. Employees actively support a variety of charitable projects and community services. DC Water also invests in the community, conducting science laboratory exercises in District high schools and engaging the public through tours of the Blue Plains Plant.



Facts at a Glance

Community Outreach: Maintaining an active presence in the community through sharing time and resources is a core value at DC Water. Employees participate in meetings and community events throughout the District; invite the public to the Blue Plains Advanced Wastewater Treatment Plant (BPAWWTP) and new headquarters building; and provide hands-on-lessons, field trips and environmental education events to more than 2,000 students in our service area during the school year. DC Water seeks to educate and support its customers as stewards of the environment.

Employees: Approximately 1,100 people are employed by DC Water and work at various facilities across the District of Columbia to provide vital services to our customers.

Governance: DC Water’s Board of Directors establishes policies and guides the strategic planning process. The Board is composed of 22 members, (11 principals and 11 alternates) representing the District, Montgomery and Prince George’s Counties in Maryland and Fairfax County in Virginia. The District members set rates, charges and policies for District services. The entire Board votes and establishes policies for joint-use services. The Chief Executive Officer and General Manager reports to the Board and manages operations and performance of the enterprise. The members of the Board of Directors also serve on various Sub Committees: DC Retail Water & Sewer Rate; Environmental Quality and Operations; Finance and Budget; Governance; Human Resources and Labor Relations; Strategic Planning and Audit.

Financial Performance: In August 2019 , Fitch Ratings upgraded DC Water’s credit rating to AA+ for senior lien revenue bonds and the Authority maintained AAA credit rating by S&P and an Aa1 by Moody’s. DC Water also maintained a GB1 rating for green bonds, Moody’s highest possible green bond assessment. DC Water also received its 23rd consecutive unqualified audit opinion of its financial statements and 20th consecutive Distinguished Budget Presentation Award from the Government Finance Officers Association (GFOA).

DC Water Financial Information (\$ Millions)

Bond Rating: AAA/Aa1/AA+	FY 2021	FY 2022
Revenue (Cash Receipts)	\$ 692.3	\$ 756.4
Operating Expenditure Budget	\$ 642.7	\$ 658.4
Capital Disbursement Budget	\$ 471.3	\$ 476.1



Budget Summary

The chart below highlights DC Water’s operating expenditures, capital disbursements, revenues, rates and fees.

Description	Unit of Measure	FY 2021 Revised	FY 2022 Revised	FY 2022 vs FY 2021 Increase / (Decrease)
Total Operating Expenditure	\$ in thousands	\$642,663	\$658,422	\$15,760
Capital Disbursements	\$ in thousands	\$471,267	\$476,140	\$4,873
Ten-Year CIP (Cash Disbursement)	\$ in billions	\$5.45	\$5.43	(\$0.02)
Total Operating Revenue	\$ in thousands	\$692,262	\$756,385	\$64,123
Wholesale Operating Revenues	\$ in thousands	\$81,710	\$84,669	\$2,959
Residential 0-4 Ccf (Lifeline) ²	Ccf	\$3.49	\$3.63	\$0.14
Residential - > 4 Ccf ²	Ccf	\$4.50	\$4.74	\$0.24
Multi-family / DC Housing ²	Ccf	\$3.96	\$4.15	\$0.19
Non-Residential	Ccf	\$4.65	\$4.91	\$0.26
DC Water Retail Rates – Sewer	Ccf	\$9.77	\$10.64	\$0.87
DC Water Clean Rivers IAC	ERU	\$19.52	\$18.40	(\$1.12)
DC Water Customer Metering Fee	5/8"	\$4.96	\$7.75	\$2.79
Water System Replacement Fee ¹	5/8"	\$6.30	\$6.30	\$0.00
PILOT Fee	Ccf	\$0.54	\$0.56	\$0.02
Right of Way Fee	Ccf	\$0.19	\$0.19	\$0.00
Stormwater Fee	ERU	\$2.67	\$2.67	\$0.00

Ccf - hundred cubic feet or 748 gallons
 DC WATER WSRF of \$6.30 effective October 1, 2015.
 Proposed Class-Based rates



Comparative Capital & Operating Expenditures

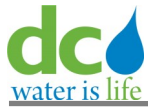
\$ in thousands

Capital Disbursements and Operating Budgets Ensure Service Needs and Strategic Objectives are Met

	APPROVED FY 2021	APPROVED FY 2022
CAPITAL (Cash Disbursements Basis)*		
Wastewater Treatment	\$ 78,992	\$ 63,922
Sanitary Sewer	50,547	75,437
Combined Sewer Overflow	170,842	165,276
Stormwater	5,931	9,228
Water	75,362	100,209
Washington Aqueduct	15,382	13,324
Capital Equipment	36,207	36,019
Non Process Facilities	38,004	12,725
Total Capital	\$ 471,267	\$ 476,140
OPERATING		
Personnel Services	\$ 177,863	\$ 180,353
Contractual Services	88,532	88,504
Water Purchases	36,250	35,217
Chemicals and Supplies	36,081	34,202
Utilities	27,911	27,329
Small Equipment	1,030	1,108
Total O&M	367,668	366,711
Debt Service	222,268	231,164
Cash Financed Capital Improvements	30,355	37,830
Payment in Lieu of Taxes	17,272	17,618
Right of Way Fees	5,100	5,100
Subtotal Operating	642,663	658,423
Personnel Services charged to Capital Projects	(24,382)	(25,086)
Net Operating	\$ 618,281	\$ 633,336



*Reflect revisions to FY 2021 capital disbursement budget during the FY 2022 cycle.



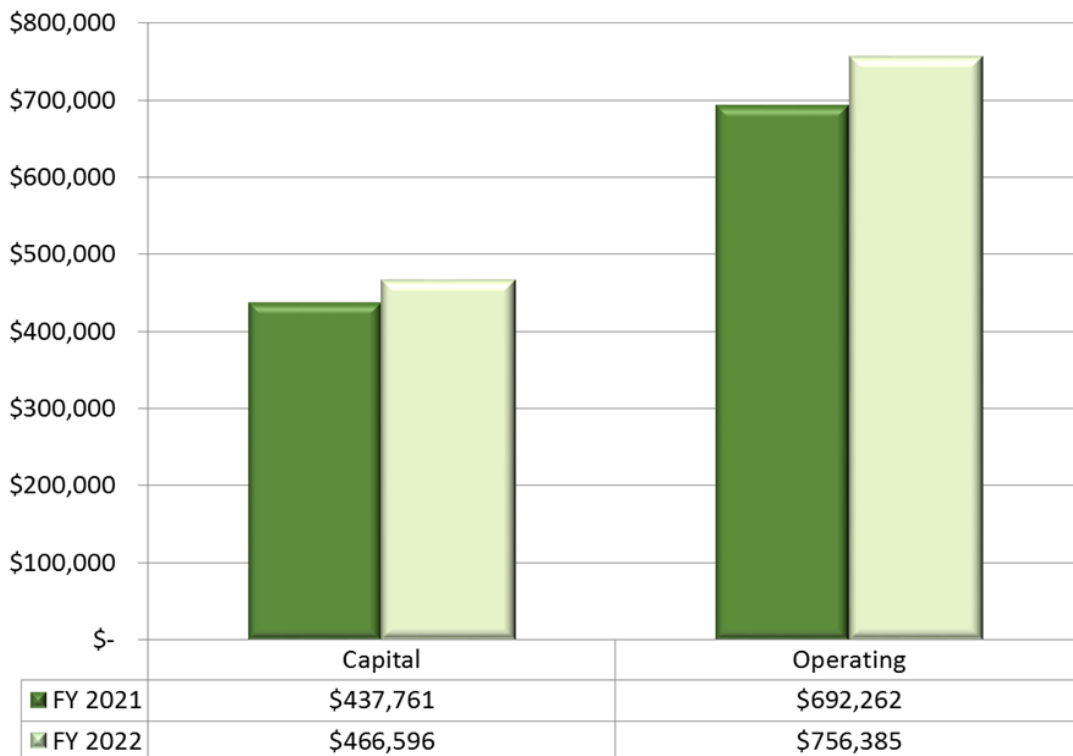
Comparative Capital & Operating Revenues

\$ in thousands

Capital and Operating Budgets Ensure Revenue Sufficiency to Maintain Service Levels

	REVISED FY 2021	REVISED FY 2022
CAPITAL		
Wholesale Capital Payments	\$ 75,803	\$ 83,640
EPA Grants & CSO Appropriations	32,645	31,311
Interest Income on Bond Proceeds	1,749	2,623
Pay-Go-Financing	120,564	141,322
Revenue Bonds/Commercial Paper/EMCP*	200,000	200,000
System Availability Fee	7,000	7,700
Total Capital Revenue	\$ 437,761	\$ 466,596
OPERATING		
Residential	118,771	129,062
Commercial	156,067	170,209
Multi-Family	111,501	123,523
Federal Government	79,082	81,339
Municipal & Housing	28,767	31,260
Water System Replacement Fee (WSRF)	39,717	39,717
Metering Fee	15,405	24,083
Wholesale	81,710	84,669
Other Revenue	61,242	72,523
Total Operating Revenue	\$ 692,262	\$ 756,385

* Extensible Municipal Commercial Paper



- Water and Sewer volumetric rates are listed below:
 - Residential customers: “Consumption of 0 – 4 Ccf” water rate increase of \$0.43 per Ccf to \$3.49 per Ccf, {increase of \$0.58 to \$4.67 per 1,000 gallons}
 - Residential customers: “Consumption greater than 4 Ccf” water rate increase of \$0.40 per Ccf to \$4.50 per Ccf, {increase of \$0.54 to \$6.02 per 1,000 gallons}
 - Multi-family customers: water rate increase of \$0.42 per Ccf to \$3.96 per Ccf, {increase of \$0.56 to \$5.29 per 1,000 gallons}
 - Non-residential customers: water rate increase of \$0.40 per Ccf to \$4.65 per Ccf, {increase of \$0.54 to \$6.22 per 1,000 gallons}
- Sewer rate increase of \$0.88 per Ccf to \$9.77 per Ccf, {increase of \$1.17 to \$13.06 per 1,000 gallons}
- Monthly Clean Rivers Impervious Area Charge decrease of \$1.42 to \$19.52 per ERU to recover the costs of the DC Clean Rivers Project
- Monthly Customer Metering Fee increase of \$1.10 from \$3.86 to \$4.96 for a 5/8” meter size. The Customer Metering fee varies by size.
- Water System Replacement Fee (WSRF) of \$6.30 for 5/8” meter size will remain the same. This fee varies with meter size. The WSRF is to recover the costs of 1% renewal and replacement program for water service lines
- PILOT fee increase of \$0.03 per Ccf to \$0.54 per Ccf {increase of \$0.04 to \$0.72 per 1,000 gallons}
- No increase in ROW fee, which remains the same at \$0.19 per Ccf {\$0.25 per 1,000 gallons}

Ccf is equivalent to hundred cubic feet or 748 gallons

- Water and Sewer volumetric rates are listed below:
 - Residential customers: “Consumption of 0 – 4 Ccf” water rate increase of \$0.14 per Ccf to \$3.63 per Ccf, {increase of \$0.18 to \$4.85 per 1,000 gallons}
 - Residential customers: “Consumption greater than 4 Ccf” water rate increase of \$0.24 per Ccf to \$4.74 per Ccf, {increase of \$0.32 to \$6.34 per 1,000 gallons}
 - Multi-family customers: water rate increase of \$0.19 per Ccf to \$4.15 per Ccf, {increase of \$0.26 to \$5.55 per 1,000 gallons}
 - Non-residential customers: water rate increase of \$0.26 per Ccf to \$4.91 per Ccf, {increase of \$0.34 to \$6.56 per 1,000 gallons}
- Sewer rate increase of \$0.87 per Ccf to \$10.64 per Ccf, {increase of \$1.16 to \$14.22 per 1,000 gallons}
- Monthly Clean Rivers Impervious Area Charge decrease of \$1.12 to \$18.40 per ERU to recover the costs of the DC Clean Rivers Project
- Monthly Customer Metering Fee increase of \$2.79 from \$4.96 to \$7.75 for a 5/8” meter size. The Customer Metering fee varies by size.
- Water System Replacement Fee (WSRF) of \$6.30 for 5/8” meter size will remain the same. This fee varies with meter size. The WSRF is to recover the costs of 1% renewal and replacement program for water service lines
- PILOT fee increase of \$0.02 per Ccf to \$0.56 per Ccf {increase of \$0.03 to \$0.75 per 1,000 gallons}
- No increase in ROW fee, which remains the same at \$0.19 per Ccf {\$0.25 per 1,000 gallons}

Ccf is equivalent to hundred cubic feet or 748 gallons



Cash Flow Summary

\$ in thousands

	FY 2020 Actual	FY 2021 Revised	FY 2022 Revised
OPERATING BUDGET			
Operating Revenue			
Residential, Commercial & Multi-Family	\$ 318,870	\$ 317,697	\$ 361,143
Federal	48,007	56,914	62,100
Municipal	9,378	8,839	11,445
D.C. Housing Authority	9,731	11,130	11,521
Groundwater	-	5	5
Water System Replacement Fee (WSRF)	41,456	39,717	39,717
Metering Fee	11,829	15,405	24,083
Payment in Lieu of Taxes / Right of Way Fee	21,546	20,744	21,588
Clean Rivers IAC Revenue	111,917	99,604	89,179
Sub-total Retail	572,735	570,055	620,781
Wholesale	79,157	81,709	84,669
Interest Earnings	4,469	2,234	3,352
Transfer from Rate Stabilization Fund	-	2,500	10,500
Other Operating Rev ⁽¹⁾	53,624	35,706	36,998
Total Operating Revenue ⁽¹⁾	709,984	692,205	756,300
Operating Expenditures			
Personnel Services	134,542	143,827	155,267
Contractual Services	80,767	82,987	88,504
Chemicals & Supplies	33,835	33,763	34,202
Utilities & Rent	20,849	27,771	27,329
Water Purchases	29,234	33,750	35,217
Small Equipment	960	1,028	1,108
Subtotal - Operating Expenditures	300,187	323,126	341,627
Payment in Lieu of Taxes / Right of Way Fee	22,034	22,372	22,718
Debt Service	199,056	217,944	231,164
Cash Financed Capital Improvements/Defeasance	28,556	30,355	37,830
Total Operating Disbursements	549,832	593,797	633,338
CAPITAL Disbursements (See Section VI for more details)			
Sources of Capital Funds	539,782	437,761	466,596
Uses of Capital Funds	345,858	471,267	476,140
Capital Disbursements Overage / (Shortage)	193,924	(33,506)	(9,544)
CASH RESERVES			
Beginning O&M Reserve Balance (Net of Rate Stabilization Fund)	186,764	186,827	185,000
Operating Surplus	160,152	98,407	122,962
Wholesale Customer Refunds/Payments for Prior Years	14,925	(5,243)	(3,342)
Transfer to Rate Stabilization Fund	(28,794)	-	-
Federal Customer Refund/Payments for Prior Years	1,317	6,161	488
Transfer to CAP Fund	(15,000)	-	-
DC Fleet Reimbursement	-	-	-
Interest Earned from Bond Reserve	113	57	85
Pay-As-You-Go Capital Financing	(128,651)	(97,209)	(111,192)
Project Billing Refunds	(4,000)	(4,000)	-
Ending O&M Reserve Balance (Net of Rate Stabilization Fund)	186,827	185,000	194,000
Rate Stabilization Fund	\$ 90,244	\$ 87,744	\$ 77,244

⁽¹⁾ Does not include interest earned from the debt service reserve fund

In the early history of Washington, DC, water and sewer operated as separate entities. Early incarnations of the agency we now call DC Water included the District of Columbia Water Board (1859—1872) and the District of Columbia Board of Public Works (1872—1932).

Beginning in 1932, the Agency operated as the District of Columbia Department of Sanitary Engineering and constructed the first sewage treatment plant at Blue Plains. The Agency went through another transition to the District of Columbia Department of Environmental Services in 1971, then operated as the Water and Sewer Utility Administration (WASUA) under the Department of Public Works from 1985 to 1996.

The District of Columbia Water and Sewer Authority (DC Water) was created in April 1996 and began operating October 1, 1996 under and pursuant to an act of the Council of the District of Columbia and an act of the United States Congress. Previously, the Water and Sewer Utility Administration, a division of the District’s Department of Public Works, performed DC Water’s operations. In the aftermath of the District’s financial crisis in the 1990s, Congress created an independent utility agency governed by a Board of Directors consisting of eleven principal and eleven alternate members who represent the District of Columbia, Montgomery and Prince George’s Counties in Maryland and Fairfax County in Virginia to govern DC Water. The Mayor of the District of Columbia appoints, and the Council confirms, all District Board members, including the Chairperson. In addition, the Mayor appoints the five principal and five alternate members who represent the surrounding jurisdictions based on submissions from those jurisdictions. All members serve four-year terms. The existence of a quorum and an affirmative vote of a majority of the members present, who are permitted to participate in the matter under consideration, is required to approve any Board action; except, that 7 affirmative votes are required for approval of the Authority’s budget and 8 affirmative votes are required for the selection or relieving of the CEO/General Manager. All Board members participate in decisions directly affecting the general management of joint-use facilities (such as projects at the Blue Plains Advanced Wastewater Treatment Plant), and only the District of Columbia members participate in decisions for those matters that affect only District ratepayers. Rate setting authority resides solely with the Board of Directors, and is a non-joint use matter.

At its inception, DC Water faced a cash shortage and projected multi-million dollar deficit. The newly established utility was also burdened with a barely functional fleet, poorly maintained infrastructure, an antiquated billing system, and many operating weaknesses. Through the leadership of an active Board of Directors and strong management staff, a line of credit was obtained, municipal bonds were issued and new strategic goals, business processes and technologies were developed. DC Water made tremendous strides in its prudent financial management and cutting-edge technology, customer service improvements, extensive capital investment, environmental stewardship, peer-reviewed research and establishment of an award winning fleet. Our credit rating since 1996 has gone from no credit to AAA. Today, DC Water is one of the best utilities not only in North America but in the world.

Over the years, we have developed strong partnerships with the District government, Congress, suburban jurisdictions, federal regulators and environmental advocates. We are continuing to strengthen our existing partnerships while reaching out to establish new relationships. Our success has been acknowledged through many awards as well as positive financial results and audits over the years. Since 1996, the Authority has met its mission of providing clean drinking water to residents of the District of Columbia and wastewater conveyance and treatment services to both residents of the District of Columbia and wholesale customers in Maryland and Virginia.

At DC Water, we focus all of our technology initiatives on improving both the quality of services we provide to our customers and organizational effectiveness. We were one of the first utilities to automate our meter reading program (AMR) which has been heralded as a best practice in the industry. The automated meters use radio frequency and cell phone technology to send daily water usage information from the meter to DC Water. This tool analyzes daily water consumption and provides monthly and yearly averages on an account so a customer can monitor their own water use. In addition, we developed a powerful application in-house called the High Use Notification Application (HUNA). This tool alerts customers of unusually high amounts of water delivered to their meter so they can check for leaks and avoid a high bill. In FY 2018 we issued 36 thousand alerts to over 16 thousand customers .

Basis of Accounting

DC Water is a single enterprise fund and maintains accounting records using the modified accrual basis of accounting in accordance with Generally Accepted Accounting Principles (GAAP). Under this basis of accounting, revenues are recorded when earned, and expenses are recorded when incurred. DC Water’s expenditure budget is prepared on a comparable basis to GAAP, with the exception of debt service (including principal and interest) that is budgeted in full when due. Depreciation and interest expense are recorded as expenses for financial statement purposes. (Depreciation is not budgeted.)

Annual Budget Process

As a first step in the budget development process, the Finance Department updates DC Water’s ten-year financial plan to reflect any revisions to the capital improvement program and any other major revenue or operating budget issues, and analyzes the potential impact of these items on rates. In addition to these items, the ten-year plan is also developed based on the financial and rate-setting policies adopted by the Board as well as the Board’s Strategic Plan.

Approval Process

Typically, in May or June, the CEO & General Manager and CFO kick off the budget season. In July, departments submit their initial budget requests for management review. DC Water’s strategic and operational priorities are included in each department’s work plan and performance agreements, as appropriate. During the month of August and in early September, departments complete budget reviews with budget staff, and in September and October, reviews are held with the Executive Team and with the CEO & General Manager in tandem.

Between December and February, management presents the operating budget, ten-year capital improvement program and ten-year financial plan to the Board’s Environmental Quality and Operations Services, DC Water Retail Water and Sewer Rates and Finance and Budget Committees for their review. The budget is proposed for the following fiscal year (e.g., beginning October 1, 2021). The Committees review the budget documents in December through February and submit budget recommendations to the full Board in March. Typically, decisions are finalized and Board action on the budget is taken between March and April.

Upon budget adoption, the Budget Office publishes and distributes the approved budget book and ensures that DC Water’s budget is included in the District of Columbia’s budget submission, which is transmitted to the U.S. Congress for approval. Once approved by Congress, the budget is effective October 1 of each year.

Budgetary Control

After the U.S. Congress approves the budget, the operating and capital budgets are loaded into the DC Water’s financial management system, which prevents overspending without appropriate approvals. The Finance Department prepares monthly management reports for each operating unit, management staff, the Board of Directors and its various committees. The reports are consistently reviewed each month to ensure that DC Water complies with its authorized budget levels.

Amendment Process

The CEO & General Manager has control over the budget as approved by the U.S. Congress, at the appropriation level, i.e., DC Water’s overall approved operating budget and capital authority at the Authority-wide level in the capital budget. The CEO & General Manager has the authority to approve budget reprogramming between departments. Any additional budget spending above the budget appropriation level requires approval from the U.S. Congress.





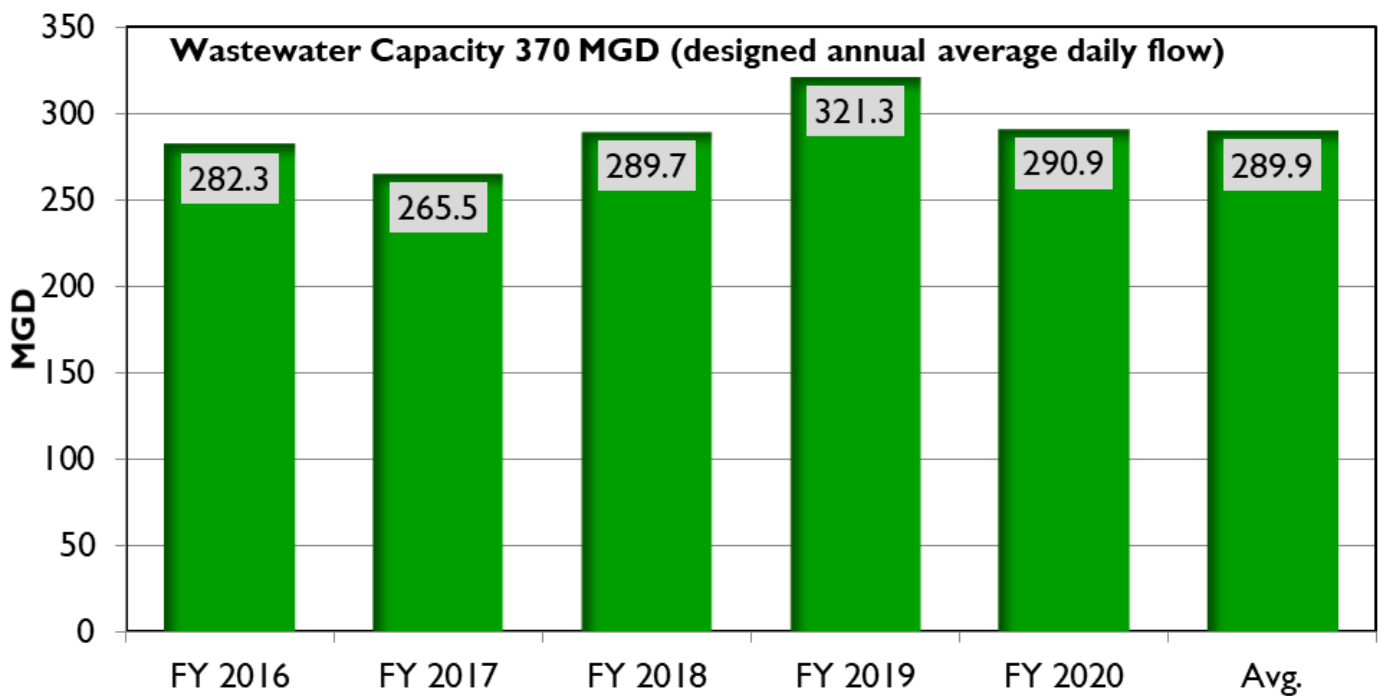
FY 2022 Budget Calendar

Month	Activity
July 31	Distribution of budget templates and guidance
August 4	Chief Executive Officer (CEO) & General Manager's (GM) Budget Kickoff Meeting
August 5	Guidance/Training for Departments
September 11	Departmental FY 2022 budget submission to Budget Office
September 23	Chief Financial Officer Briefing on Departmental Budget Requests
September 28 – November 6	Departmental FY 2021 Operating and Capital Equipment Budget Reviews with the Chief Executive Officer, Chief Financial Officer and the Budget Office
November 30	Executive Team Briefing (Operating and Ten-year Capital Improvement Program)
November	Finalize Ten-Year Financial Plan (Operating, Capital Improvement Program, Revenues, Rates & Fees) Transmittal of CEO's & GM's Final Budget Proposal to Executive Vice Presidents & Department Heads
February 4	Budget Workshop – Board Briefing of the CEO & GM's Proposed FY 2022 Budgets
February 12	Wholesale Customer Briefing
February 18	Environmental Quality & Operations Committee Review of Capital Improvement Program
February	Board Committees Conducted in-depth Review of Budget Proposal
March	Board Committees Forward Recommendations to Full Board for deliberation/action Budget Book Preparation & Production
April 1	Board Adoption Submission to the District of Columbia for onward transmission to U.S. Congress

Wastewater System Capacity Ensures Service Area Meets Needs Through 2040

- Blue Plains is the world’s largest advanced wastewater treatment plant
 - Treats an average of approximately 300 million gallons per day (MGD) annually
 - Designed for average daily flow of 384 MGD and peak wet weather capacity of 1,076 MGD
- System comprises 2,000 miles of sanitary, stormwater and combined sewers; 125,000 building sewer lateral; 22 flow-metering stations; 9 off-site wastewater pumping stations; and 16 stormwater pumping stations

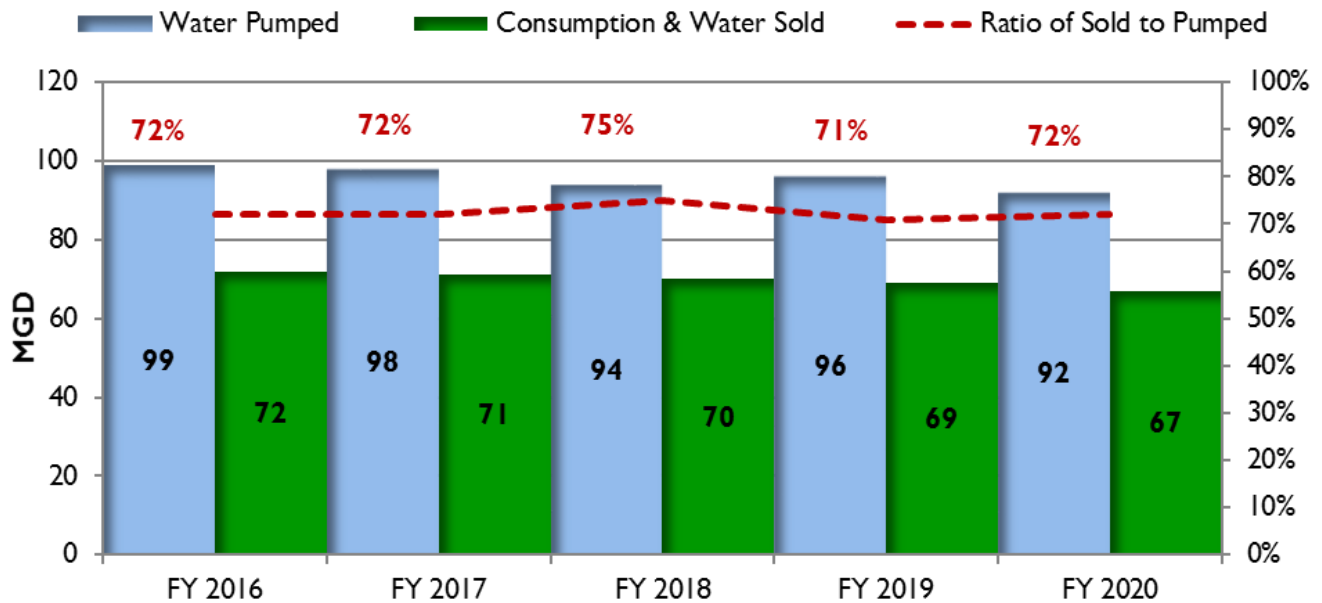
Historical Wastewater Treatment vs. Capacity FY 2016 – FY 2020



Water System Capacity Meets Service Area Needs

- Water is purchased from the Washington Aqueduct, owned and operated by the U.S. Army Corps of Engineers
- Four pumping stations provide adequate capacity to meet peak demand
 - Bryant Street, New Fort Reno, 16th and Alaska, Anacostia
- One Washington Aqueduct pumping station with capacity sufficient to take over for Bryant Street pumping station
- System comprises 1,300 miles of interconnected pipes

Volume of Water Pumped versus Sold FY 2016 – FY 2020



Infrastructure Index Leakage (ILI) :

FY 2016 – 7.84
 FY 2017 – 9.00
 FY 2018 – 9.84
 FY 2019 – 12.53

Strong financial planning requires careful monitoring and analysis of various trends and factors that may influence the market place. In this case, the market place for DC Water is the District of Columbia and its surrounding region. DC Water monitors consumption and wastewater flow trends within the customer base, weather patterns, regional income changes, population trends, federal activity in the region, housing starts, office vacancy rates and employment trends. A review of experiences from similar national systems is a useful benchmark assessment. While there are no crystal balls in the area of forecasting water demand, monitoring such data can provide insight into customer behavior and anticipated service demands.

Regional Economy

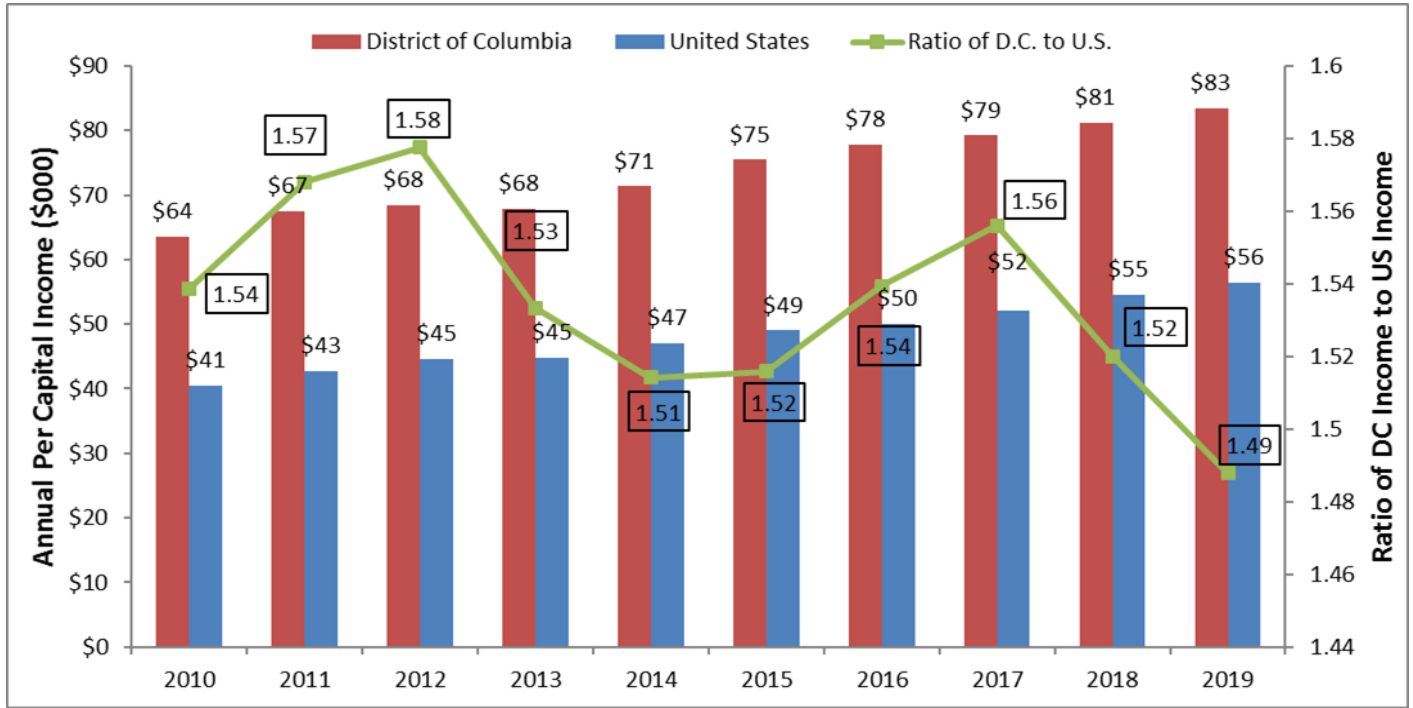
DC Water's service area has historically been resilient, even during fluctuations in nationwide economic conditions. Employment at the U.S. government and all of the professional and service industry firms that support the federal government have been a steady force through various economic cycles.

The effects of the recent decline in the federal workforce has been offset to some extent by growth in private sector employment as well as major redevelopment efforts such as Nationals Park and the adjoining area along the Anacostia River. The population of the District grew by over 100,000 people from 2009 to 2019. Per capita incomes within the District and for the region as a whole continue to be higher than the U.S. average. Regional office vacancy rates have increased somewhat in recent years while retail vacancy rates remain low. The strengths of the District are complimented by its highly rated partners: the federal government and wholesale wastewater users. Select demographic charts that follow support the overall positive outlook for the Washington Metropolitan region and its economy.



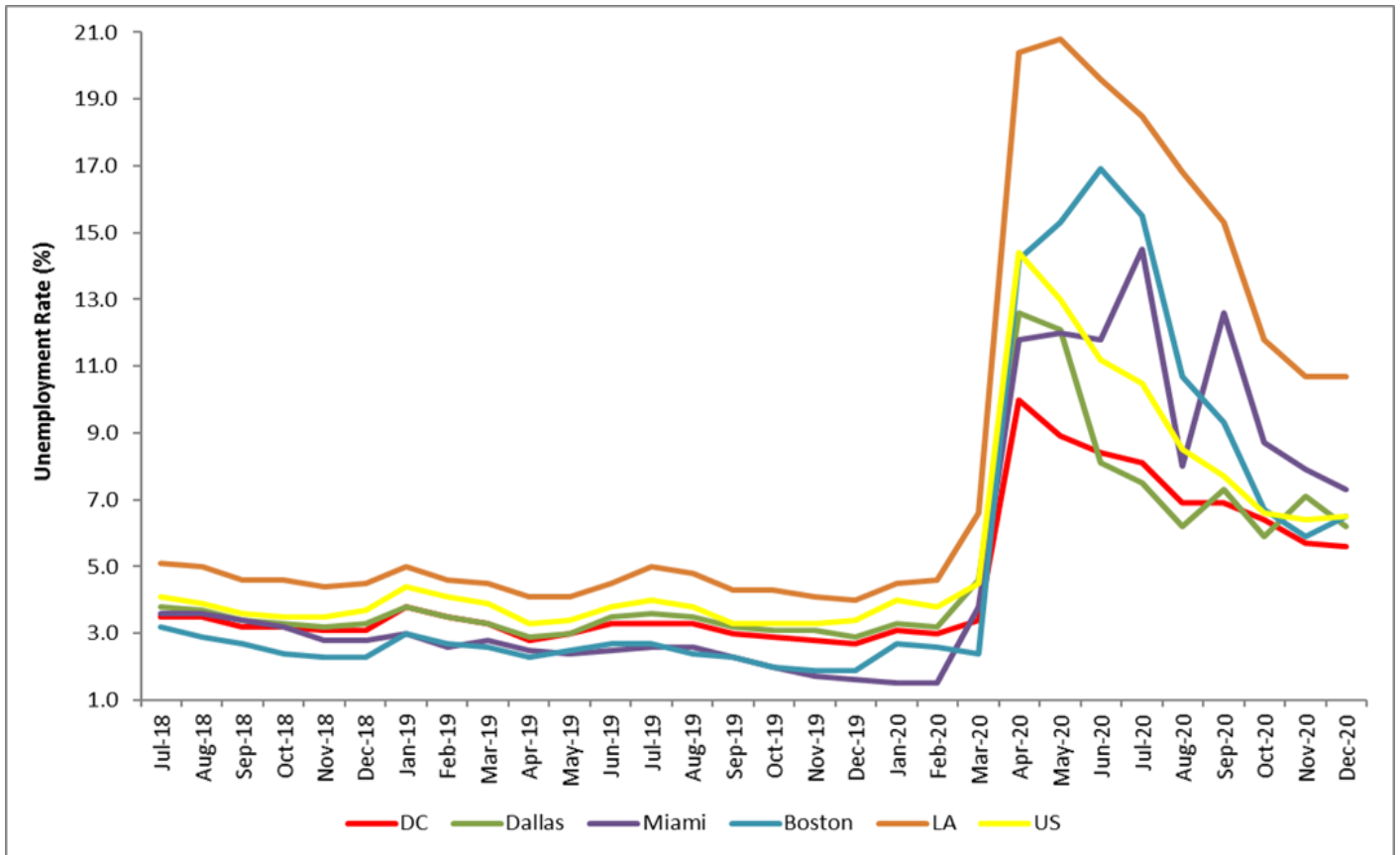
Regional Demographics and Customer Demand

DC Per Capita Income is Higher than US Average



Source: Bureau of Labor Statistics

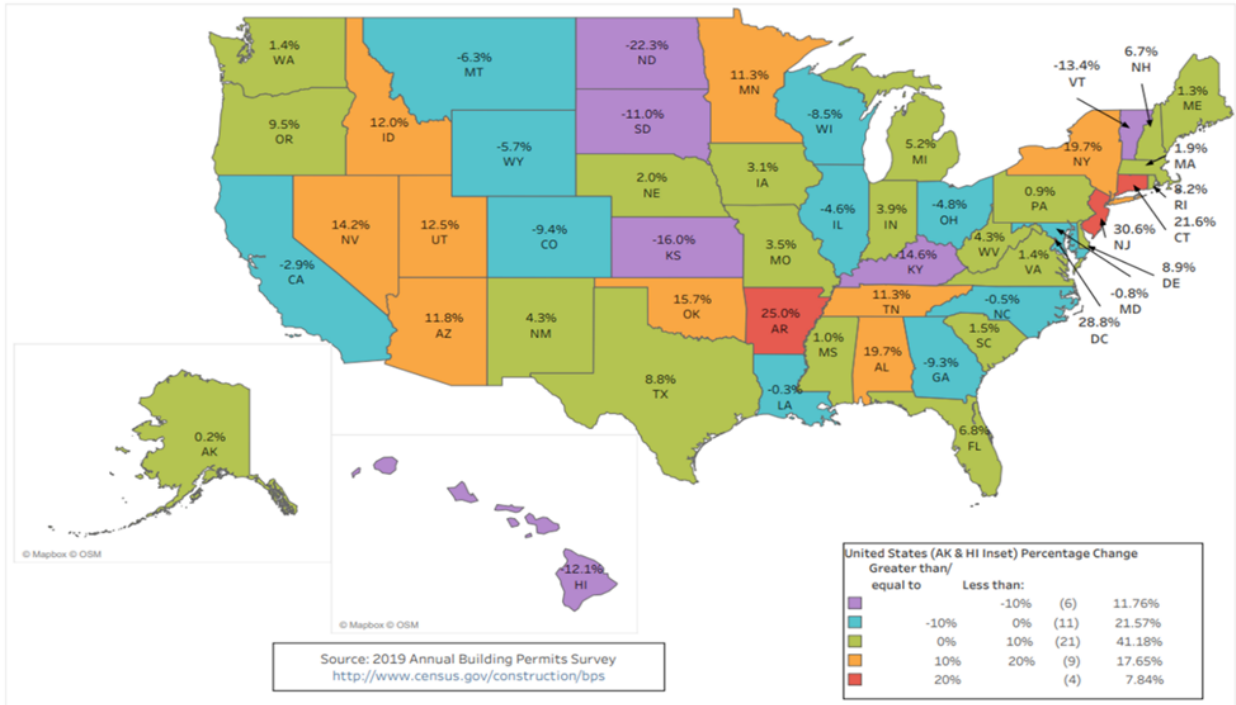
Unemployment Rate in the DC Region Remains Relatively Low



Source: Bureau of Labor Statistics

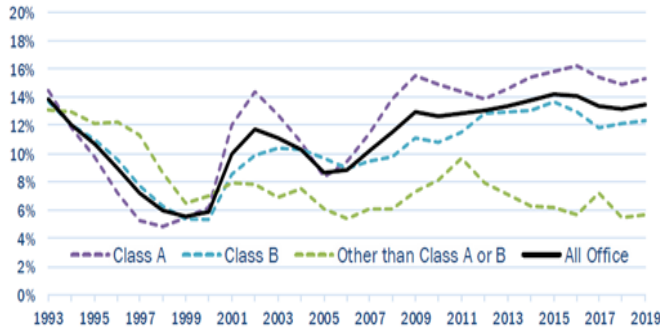
2018 – 2019 Significant Growth in New Housing Permit Issuance in DC

Percent Change from 2018-2019 of New Privately-Owned Housing Units Authorized by State

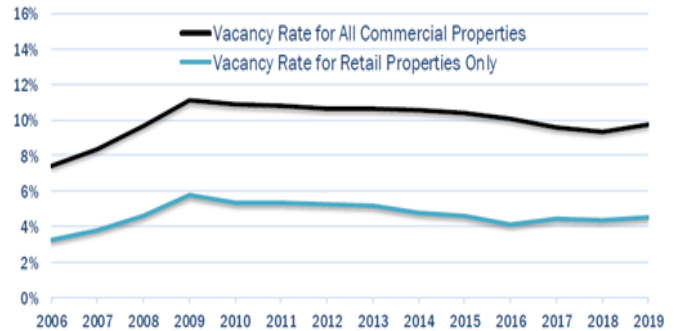


DC Metro Vacancy Rates are Above Pre-Recession Levels partly due to New Spaces Added to the Market

Vacancy Rate for Office Space
1993 - 2019



Vacancy Rate for Retail Space
1993 - 2019



DC Water’s performance is driven by federal government growth and associated industries, supporting regional growth and diversification.

- Source: Metropolitan Washington Council of Governments, Commercial Construction Indicator Report
- Note: The Metropolitan Washington Council of Governments (COG) is an independent, nonprofit association that brings area leaders together to address major regional issues in the District of Columbia, suburban Maryland, and Northern Virginia.

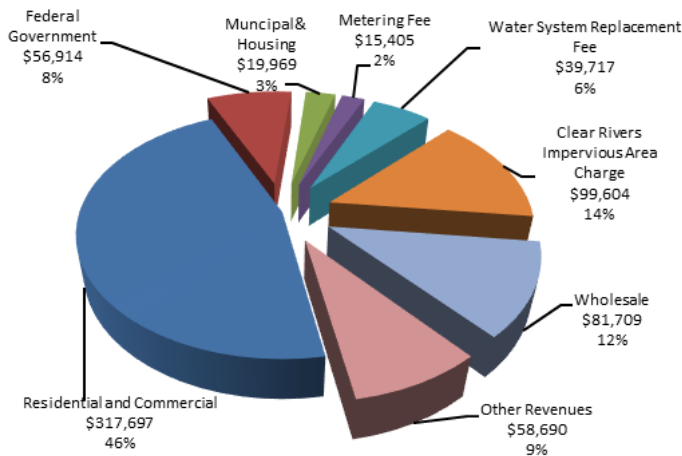
The regional indicators are positive with strong incomes and unemployment below the national level. These factors coupled with stable consumption and the financial strength of the major AAA rated customers helps to ensure the financial success of DC Water.

The DC Water service area includes highly-rated customers

- About 23.0% of the projected FY 2021 revenues came from “AAA” rated entities and are received in advance of service:
 - Federal Government
 - Fairfax County
 - Washington Suburban Sanitary Commission
 - Loudoun County Sanitation Authority
 - District of Columbia

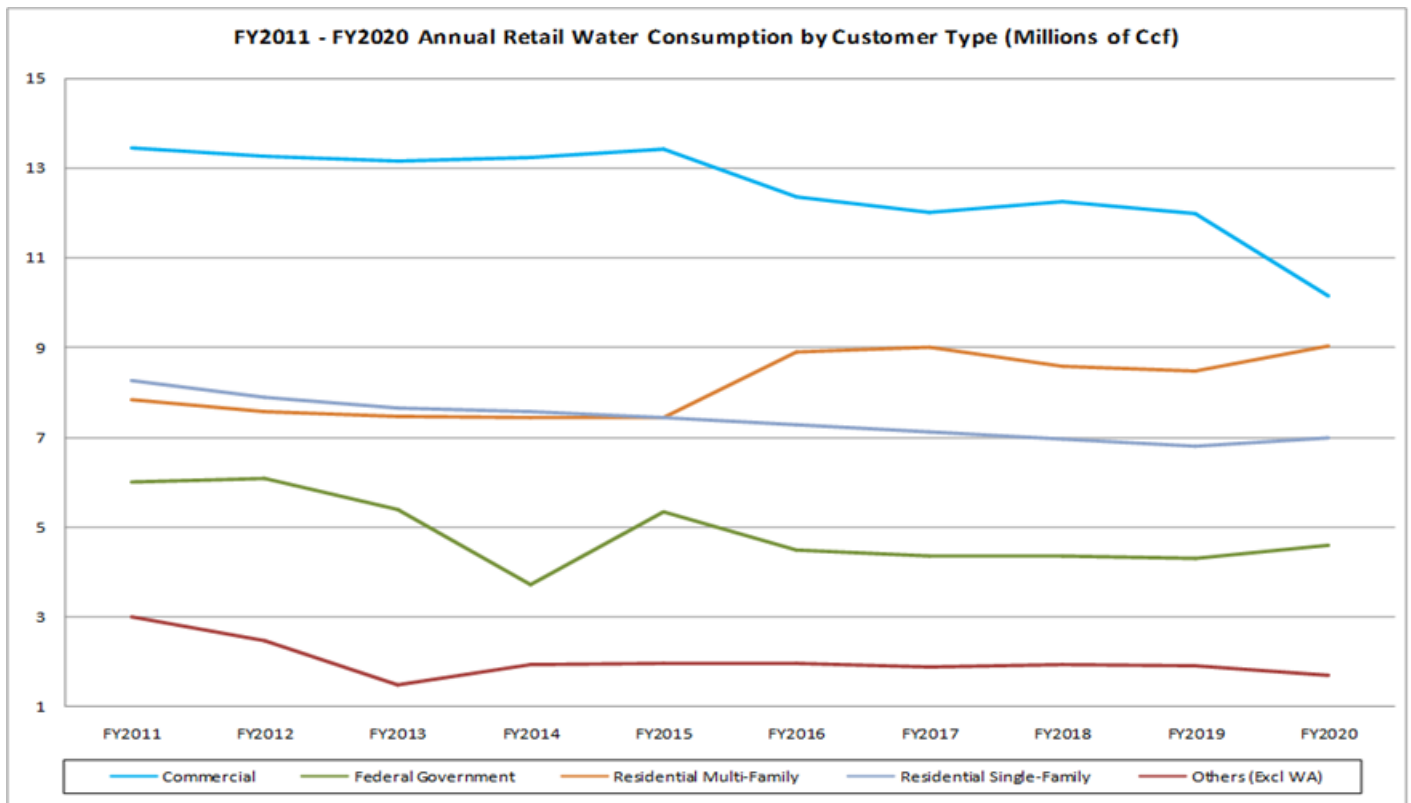
Media reports reference the service area’s economic strength

- "... the DC government finished its 2020 fiscal year with a surplus of more than half a billion dollars... The better-than-expected revenue picture was driven by a 5 percent increase in property tax receipts, a 13 percent jump in corporate franchise tax receipts, and a 3 percent increase in individual income tax receipts ..." Washingtonian, February 2021
- "... Office workers slowly started to make their way back to work over the past three months. The percentage of office workers in their offices went from 5% in the summer to 10% in the fall." WAMU 88.5, November 2020
- "The housing market, particularly in the Washington, D.C. region, was on track for a robust spring... July's report showcased more improvement in the regional market, with the number of pending sales up 12 percent compared with July 2019... August saw sales continue to grow, up 12 percent from the prior year." The Washington Post, October 2020



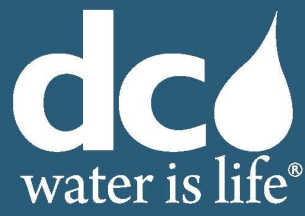
Customer Demand: A reasonable degree of accuracy in forecasting water demand is important for sound financial planning and rate-setting. The FY 2011 - 2020 actual average decline in usage is 1.9% annually, excluding the Washington Aqueduct. FY 2011 – FY 2020 average annual rate of change in demand for the customer classes: Commercial -3.1%; Federal Government: -2.9%; Single Family: -1.9%; and Other (include Exempt, DC Housing Authority, DC Municipal Government, and DC Water): -6.1%. Multi-Family increased by 1.6% annually.

DC Water Consumption by Customer Type



Source: DC Water

- FY 2020 consumption decreased 2.8%, mostly due to impact of COVID-19 leading to decreases in consumption for Commercial accounts .
- DC Water has typically assumed an annual reduction in water demand of 1.0% in line with historic averages. The Financial Plan assumes an annual retail water consumption decline of 1.5% in 2021 and 1% thereafter. We believe that this estimate is prudent, consistent with peers such as New York and Boston and assures revenue sufficiency for the Authority.



Approved FY 2022 Budgets
Section III: FINANCIAL PLAN



Clean Rivers / First Street Tunnel community tour

The Blueprint

The Blueprint is DC Water’s Strategic Plan Framework for future decision-making and provides a structure through which annual reviews can be accomplished to assure that the goals and objectives retain their relevance over time. By laying out a course of action, this plan represents a disciplined process for making fundamental decisions and shaping DC Water's future.

The plan represents the collaboration of the Board of Directors, Executive Management, and the management team, as well as input from key external stakeholders. The plan is designed to be a lasting framework, although updates should be made to goals, objectives, and initiatives as the organization moves forward and circumstances change.

This plan contains the DC Water vision, mission statement, values, goals, objectives, and initiatives. It addresses DC Water's current challenges and helps ensure continued success in operations and management of resources and assets.

DC Water's vision describes the desired future state and guides the organization toward the future, while the mission of the utility describes the purpose of the organization and its role within the service area. Values articulate the deeply-held beliefs, norms, and qualities of the utility, and are the basis from which each DC Water staff member should operate.



Overview

DC Water’s strong financial performance and its success in achieving and maintaining strong bond ratings have been primarily due to the annual development of and adherence to a ten-year strategic financial plan. In August 2019, Fitch Ratings upgraded DC Water’s credit rating to AA+ for senior lien revenue bonds and the Authority maintained a AAA credit rating by S&P and an Aa1 by Moody’s. DC Water also maintained a GB1 rating for green bonds, Moody’s highest possible green bond assessment. This financial plan serves as one of management’s key tools to monitor progress in meeting financial goals and to proactively address future financial and operational issues. During FY2020, DC Water met or exceeded the goals set by Board policy and the FY 2020 – FY 2029 ten-year plan. This budget includes DC Water’s twenty first comprehensive ten-year financial plan, covering FY 2021 – FY 2030.

The necessity of a ten-year financial plan is clear:

1. DC Water operates under a regulatory and capital project-driven environment that requires a longer-term ten-year planning horizon. In order to provide our customers with the best service possible and with gradual and predictable rate increases, DC Water must plan for all projects on a long-term and integrated basis, including both capital and operating requirements. A five- year, capital-only financial plan would insufficiently prepare DC Water to address the major regulatory, operational and capital project issues that will impact service, operations, and rates over the next five to ten years.
2. In accordance with Board policy, DC Water sets rates so that each customer is charged for the actual cost to provide each service, rate increases are implemented transparently and predictably, utilizing all available options to mitigate future customer impacts. Since proposed future rate increases are primarily driven by financing of DC Water’s capital program and full utilization of the rate stabilization fund, the development of a ten-year financial plan allows DC Water to meet these key goals.
3. The Board has directed DC Water management to undertake internal improvements and investments that will significantly lower operating costs over a ten-year period. A ten-year plan is required to bridge current operations and related capital and operating budgets with these longer-term cost reduction goals.

Board policies, strategic plan, priorities and guidance in several key financial areas drive the development of the FY 2021 - FY 2030 financial plan. Given DC Water’s substantial borrowing needs over the next ten years, adherence to these Board policies is crucial in order to cost-effectively access the capital markets and retain our credibility with customers and regulators.

Financial Plan Objectives

The financial plan serves as the framework to support the Board’s strategic plan, policies, priorities, and guidance in several key financial areas

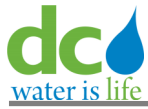
- It is one of management’s key tools to monitor progress in meeting financial goals and to proactively address future financial and operational issues
- It also ensures meeting or exceeding indenture and Board’s coverage requirements and providing sufficient liquidity to meet all obligations
- The ten-year financial plan projects revenue requirements, operating and maintenance expenses, capital expenditures, debt service charges, coverage ratios, and rate increases

DC Water’s financial plan objectives focus on:

- minimizing rate increases while meeting all financial obligations;
- satisfying all indenture requirements and Board policies; and
- maintaining the DC Water’s current credit ratings of AAA/Aa1/AA+

Ten-Year Financial Plan Assumptions

- Maintain Debt Service as a percentage of revenue equal to 33.0 percent or less
- Maintain combined coverage of 160 percent
- Maintain 250 days of cash including Rate Stabilization Fund
- FY2020 actual consumption declined by 3.0 percent. Assumed 7.4 percent decline in consumption for FY2021, 1.2 percent decline in FY2022 and 1.0 percent conservation in FY2023 and onwards
- FY 2020 Debt Service was lower as compared to budget due to deferring bond issuance as well as achieving lower interest than projected. The new plan assumed lower interest rates with slightly lower Debt Service projections.
- Assumed \$1.0 million per month increase in delinquencies
- Assumed lower miscellaneous fee revenue and interest earnings
- Assumed lower \$0.6 million per month loss in Late fees



FY 2021 – FY 2030 Financial Plan

Financial Metrics

Metrics	Indenture Requirement	Board Policy	Management Target	Financial Plan
Days of Cash on Hand	60 days	\$125.5 million or 120 Days	250 Days	276 - 306 Days
Combined Coverage Ratio	–	–	1.6X	1.68X – 1.88X
Senior Coverage	1.2X	1.4X	–	4.77X – 6.42X
Subordinate Coverage	1.0X	1.0X	–	2.05X – 2.26X
Debt Service as a % of Revenue	–	–	33% of Revenue or Less	28.2% - 32.9%
Rate Stabilization Fund	–	–	10% of Revenue	–

DC Water’s board policies include:

- **DEBT SERVICE COVERAGE** – DC Water will set rates and develop operating and capital budgets that ensure **senior debt service coverage of 140 percent**
 - This coverage level exceeds DC Water’s bond indenture requirement of 120 percent senior debt service coverage
- **CASH RESERVES** – DC Water will maintain **cash reserves equivalent to 120 days of budgeted operations and maintenance expenses with the objective of maintaining at least \$125.5 million** in operating reserves.
- **PAY-GO FINANCING OF CAPITAL** – DC Water will finance a portion of its capital program on a **pay-go basis from cash balances that exceed operations requirements or restricted use.**
- **RATE-SETTING POLICIES**
 - Rates that, together with other revenue sources, **cover current costs** and **meet or exceed all bond and other financial requirements** as well as goals set by the Board
 - Rates that yield a **reliable and predictable** stream of revenues, taking into account trends in costs and in units of service
 - Rates based on **annually updated forecasts of operating and capital budgets**
 - Rate structures that are **legally defensible**, based on objective criteria, **and transparently designed**
 - Rate structures **that customers can understand** and DC Water can **implement efficiently and efficaciously**
 - Rates increases, if required, are implemented **transparently and predictably.**

To the extent annual revenues exceed costs, the Board’s policy will continue to utilize all available options to mitigate future customer impacts and annual rate increases, including transferring some or all of such excess funds to the Rate Stabilization Fund.

- **RATE STABILIZATION FUND** - Once DC Water achieves its **required level of cash reserves**, a **rate stabilization fund** will be established **to avoid “rate shock.”** Based on favorable financial performance in FY 2020, the balance in the RSF was \$90.24 million.

Financing and Reserve Policies

In FY 2004, and again in FY 2008, the Board completed a review of its existing financing policies, reaffirming the core policies. Two modifications were made to the reserves policy: 1) Changing the timing of when DC Water is required to meet its overall operations and maintenance reserve requirement from September 1 to an average daily balance basis, resulting in a more conservative calculation; and 2) revising the indenture-required renewal and replacement reserve requirement from two percent of original plant in service to \$35 million, with a requirement to revisit this reserve level every five years in conjunction with the indenture-required system assessment prepared by DC Water’s independent rate consultants. The assessment was performed in 2013 and then in 2018.

In FY 2013, the Board adopted further revisions which modified the operating reserve policy and under Resolution #13-57 revised the DC Water’s Statement of Financial Policies as follows:

1. DC Water will maintain financial practices and policies that result in high quality investment grade bond ratings to ensure the lowest practical cost of debt necessary to finance DC Water’s long-term capital program.
2. DC Water will maintain strong levels of operating cash reserves, equivalent to 120 days of budgeted operations and maintenance costs, calculated on an average daily balance basis, with the objective of maintaining at least \$125.5 million in operating reserves. The annual reserve amount will be formally approved by the Board as part of its annual approval of the operating and capital budgets and ten-year plan. The operating reserve requirement will be evaluated every five years by DC Water’s independent rate consultant in conjunction with the Indenture-required system assessment.
3. The operating reserve will, at a minimum, include any reserve requirements contained in DC Water’s Master Indenture of Trust, (the “Indenture”), excluding any debt service reserve funds and the rate stabilization fund, as follows:
 - Operating Reserve – equivalent to sixty days’ operating costs
 - Renewal & Replacement Reserve - \$35 million. This reserve requirement will be in conjunction with the Indenture-required system assessment
4. DC Water will maintain senior debt service coverage of 140 percent, in excess of DC Water’s indenture requirement of 120 percent. Senior debt service coverage will be calculated in accordance with DC Water’s indenture.
5. In general, DC Water will utilize operating cash in excess of the Board’s reserve requirement and any other significant one-time cash infusions for capital financing or for repayment of higher cost debt.
6. DC Water will whenever possible use the least costly type of financing for capital projects, based on a careful evaluation of DC Water’s capital and operating requirements and financial position for each year.
7. DC Water will attempt to match the period of debt repayment, in total, with the lives of the assets financed by any such debt.

Pay-As-You-Go Capital Financing Policy

1. The CEO/General Manager will include in the annual ten-year financial plan, developed as part of the annual operating budget process, a separate schedule showing projected annual cash balances and planned annual pay-go financing of capital projects.
2. The planned annual pay-go financing will be formally approved by the Board of Directors as part of its annual approval of the ten-year financial plan, operating and capital budgets.
3. At any time during the fiscal year, the CEO & General Manager may use pay-go financing for capital projects, as approved by the Board of Directors.
4. During the fourth quarter of each fiscal year, the CEO & General Manager (or designee) will conduct an analysis of DC Water's financial performance.
5. The CEO & General Manager will report the results of this analysis and provide recommendations, including updated projected annual cash balances and annual pay-go financing, to the Finance and Budget Committee no later than its regularly scheduled meeting in July, for recommendation to the Board for action at its September meeting.

Cash Management and Investment Policies

The Board has adopted a "Statement of Investment Policy". This policy is designed to ensure the prudent management of Authority funds, the availability of operating and capital funds when needed, and an investment return competitive with comparable funds and financial market indices. The investment portfolio shall be managed to accomplish the following hierarchy of objectives:

1. Safety
2. Liquidity
3. Return on investment

The current Investment Policy is available on-line at www.dewater.com.

Debt Policy and Guidelines

The purpose of DC Water’s Debt Policy and Guidelines (the “Debt Policy”) is to provide DC Water officials and staff a comprehensive guide to DC Water’s issuance and use of debt to fund capital projects or to refund/refinance/restructure outstanding debt. The advantages of adopting and adhering to a clear, concise and comprehensive debt policy are:

- Enhancing the quality of decisions
- Documenting the decision-making process
- Identifying objectives clearly to facilitate staff implementation
- Demonstrating a commitment to Long-Term financial planning objectives that result in a sound financial position
- Enhancing the positive assessment of credit quality by the bond Rating Agencies to maintain and improve DC Water’s high credit ratings
- Integrating the Debt Policy with the operating and capital budgets, the multi-year Capital Improvement Program (CIP), multi-year Financial Plan and other financial policies

The financial policies outlined in this document, in most cases, impose higher standards than the legal requirements contained in DC Water’s Master Indenture of Trust dated as of April 1, 1998 as amended and supplemented from time to time (the “Indenture”) and other legal requirements.

The current Debt Policy and Guidelines is available on-line at www.dcwater.com.

During FY 2020 DC Water met or exceeded the financial goals set out by the Board and the FY 2020 – FY 2029 financial plan. Senior debt service coverage, reserve levels, and budget performance met or surpassed Board policies, as discussed in more detail below:

- DC Water Board policy requires senior debt service coverage of at least 140 percent; greater than the indenture requirement of 120 percent. **DC Water's senior debt service coverage in FY 2020 was at 524 percent**, while maintaining the Board's rate setting and financial policies. The senior debt service coverage is expected to increase to 641 percent by FY 2030 despite increase in capital spending and related debt issuance; the coverage is above the Board requirement of 140 percent. Subordinate debt service coverage, which includes DC Water's subordinated lien revenue bonds and Jennings Randolph Reservoir debt, was at 241 percent in FY 2020. DC Water is required to have 100 percent coverage of subordinate debt service. Combined debt service coverage was at 190 percent in FY 2020.
- DC Water has maintained its bond rating from Standard & Poor's (AAA), Moody's (Aa1), and Fitch (AA+). DC Water's Green bond was assessed at GB1.
- **COMMERCIAL PAPER:** These notes issued are considered subordinate debt under the Master Indenture of Trust. DC Water's commercial paper is issued in increments with maturities less than 270 days. The Board approved the commercial paper program in early FY 2002; proceeds from the sale of the notes are used for interim bond financing, short-term financing for capital equipment and certain taxable costs for the Washington Aqueduct. Each new bond issuance is evaluated to determine the most cost effective way of reducing the amount of taxable commercial paper. Normal market conditions for commercial paper carry significantly lower interest rates than long-term debt. Two series of notes have been issued under the commercial paper program: the tax-exempt Series B CP Notes in an aggregate principal amount not to exceed \$100,000, and the taxable Series C CP Notes in an aggregate principal amount not to exceed \$50,000. To provide liquidity and credit support for the Commercial Paper Notes, the Authority obtained irrevocable, direct-pay letters of credit issued by TD Bank, NA.
- **EXTENDABLE MUNICIPAL COMMERCIAL PAPER (EMCP):** The addition of the EMCP program in the amount of \$100 million provides diversification of the variable rate products available for interim financing needs. EMCP does not require a supporting bank letter of credit but relies on DC Water's liquidity to address any failed re-marketing of the EMCP. The initial placement is typically for 90 – 180 days and in the event of a failed re-marketing due to poor market conditions, DC Water has 3 – 6 months to address payment with a maximum number of days from the initial issuance of 270 days.

- **DC Water contributed \$28.79 million at the end of FY 2020 which increased the Rate Stabilization Fund balance to \$90.24 million.**
- **DC Water continued its strong operating budget performance in FY 2020** – For FY 2020, actual cash receipt was higher than the budget by \$11.1 million, or 1.6 percent. Actual operating expenditures were \$40.0 million, or 6.6 percent lower than budget. Underspending in debt service was attributable to lower interest rates, refinancing and delayed issuances. Furthermore, due to favorable O&M position at 93.4 percent of budget, the Cash Financed Capital Improvements Fund was utilized for pay-go financing.
- **The Clean Rivers Impervious Surface Area Charge (CRIAC) was implemented in May 2009** to recover the cost of the Combined Sewer Overflow Long-Term Control Plan (CSO LTCP), also known as the DC Clean Rivers Project. In FY 2011, a six-tiered rate structure was successfully implemented for all residential retail customers to better reflect the impacts of various size residential properties. The thirty-year CSO LTCP, whose terms are outlined in a consent decree executed in March 2005, exclusive of the nine-minimum controls programs are projected to cost \$2.8 billion. See “Combined Sewer Overflow Long-Term Control Plan” in Section IV, Rates and Revenues for additional details on the projected rate impact of the plan.
- **DC Water implemented a retail water and sewer rate increase of 11.5 percent in FY 2020** to recover increased retail water and sewer revenue requirements of \$43.7 million. In FY 2020, the Rate Stabilization Fund (RSF) was not utilized. If needed, the RSF helps to mitigate rate shock and reduces needed retail rate increases. In addition, there was a 2 percent increase in PILOT as per the PILOT MOU signed with the District on September 4, 2014. PILOT and ROW fees increased to \$0.51 per Ccf and \$0.19 per Ccf respectively. The changes in PILOT and ROW fee are made to recover the full costs of these fees charged to DC Water by the District of Columbia government. The rate changes are mainly due to the increase in debt service cost to finance the capital improvement program.
- **Water System Replacement Fee (WSRF) was implemented in FY 2016**, effective October 1, 2015 (FY 2016), WSRF recovers the costs of 1 percent renewal and replacement program for water service lines. WSRF varies with meter size. The WSRF for 5/8” meter size is \$6.30. Low income CAP customers get 100 percent discount for this fee.
- **Multi-Year Rates:** DC Water moved to a multi-year rate proposal in FY 2016 covering the period FY 2017 and FY 2018. This is the third time that DC Water has adopted a multi-year rate proposal in FY 2020 covering the period FY 2021 and FY 2022 and will become effective from October 1, 2020, and October 1, 2021, respectively.

The benefits of multi-year rates include:

- Greater revenue certainty
- Increased budget discipline
- Better alignment between revenues and expenditures

- In FY 2020, an Independent Review of Rate Structure and Customer Assistance Programs was conducted to review and benchmark DC Water’s rates, rate structure and Customer Assistance Programs (CAP) to peer utilities. The findings of the study concurred that DC Water’s current customer class structure, monthly water lifeline threshold of 4 Ccf, ERU basis for recovering the CRIAC charge, CAP bill discount and temporary assistance programs are consistent with industry standards for ratemaking.
- In FY 2020, DC Water conducted a Cost of Service Study (COS) to align the COS with the multi-year rate proposals, therefore both will be done every two years going forward. Previously, Cost of Service study was conducted every three years. The COS consist of three components: i) revenue sufficiency analysis – to ensure that the revenues cover the costs that DC Water incurs; ii) cost of service analysis/rate equity – to ensure that the rates are equitably recovering the costs of service provided to customers; and iii) alternative rate structure analysis – to ensure that DC Water meets its priority pricing objectives. The results of the COS support the multi-year rate, charges and fee proposals for FY 2021 and FY 2022.
- For the twentieth-consecutive year, DC Water received the Government Finance Officers’ Award for Distinguished Budget Presentation for its FY 2021 budget submission. DC Water also received its twenty third unqualified audit opinion for the fiscal year ended September 30, 2019 and received the twenty third GFOA Certificate of Achievement for Excellence in Financial Reporting.
- In FY 2020, DC Water successfully renewed all of the Authority’s operations insurance policies at essentially the same terms up 12.0 percent from expiring costs than previous year. DC Water’s coverage is generally comparable to expiring.
- DC Water completed its sixteenth year of its rolling owner-controlled insurance program (ROCIP), twelfth year of ROCIP II, ninth year of ROCIP III and is actively managing ROCIP IV. DC Water procures general liability and workers’ compensation insurance coverage for the majority of its construction contractors. The result is substantially higher insurance coverage levels for all enrolled contractors and significant cost savings. At the end of FY 2020, 65 projects and 393 contractors were enrolled in the expired ROCIP I program, 46 projects and 770 contractors were enrolled in the now expired ROCIP II program, 10 projects and 200 contractors were enrolled in the ROCIP III program, and 24 projects and 250 contractors are/were enrolled in the ROCIP IV program. Verified avoided costs (aka savings) are in the range of \$5.4 million for ROCIP I; approximately \$11.2 million for ROCIP II, \$8.1 million for ROCIP III and \$5.8 million for ROCIP IV. ROCIP II and III were three-year insurance programs that support an estimated \$2.4 billion of planned and completed construction. A major reason for the cost savings is the implementation of a uniformly strong safety program for all contractors.
 - **Customer Assistance Programs (CAP)** – In FY 2019, DC Water, Mayor Muriel Bowser and the DC Council worked together to expand the existing customer assistance program. The new benefits were earmarked for non-profits, including churches and cemeteries, along with a group of residential customers who did not previously meet the income guidelines for assistance.



Major Financial Accomplishments

In FY 2020, in response to District residents falling behind on their bills during the COVID-19 public health emergency DC Water, Mayor Muriel Bowser, DC Council and DOEE worked together to establish an emergency relief fund. The assistance provided up to \$2,000 to help customers eliminate their past due balance, assisting 2,098 customers for \$884,388.

The assistance provided to customers in FY2020 is listed below:

Program	Assistance	Assisted Customers
CRIAC Residential Relief Program		
CAP (Original)	\$1.58 million	4,818
CAP 2	\$173,837	681
CAP 3	25,863	133
CRIAC Non-Profit Relief Program		
Non-Profit Relief	\$1.029 million	189
CRIAC Emergency Residential Relief Program		
ERRP	\$884,388	2,098

The CAP and CAP2 discount programs administered by DOEE provided discount as of September 30, 2020, to 5,499 customers representing \$1,758,645.

SPLASH – This program provides assistance to needy customers as well. It operates solely on contributions from Customers, the community and DC Water employees. DC Water pays all administrative fees to Greater Washington Urban League (GWUL), who administers the program. For FY2020, DC Water received \$74,323 in contributions and assisted 133 customers as of September 2020. CAP and SPLASH together provide \$1,832,968 per year in assistance to approximately 5,632 low income households to help make their bills more affordable.

Expansion of Customer Assistance Programs to mitigate the impact of COVID-19:

The COVID-19 pandemic impacted DC Water with declines in commercial, federal, and municipal consumption and increases in delinquencies which impacted revenue. In response DC Water took strategic and cost reduction initiatives. This included delaying non-critical purchases and activities and pausing some hiring as well as modifying operations to protect staff by arranging work from home for most employees. DC Water also assessed its critical infrastructure needs and balanced it to its revenue challenges and continued to invest in critical capital programs based on priority. Additionally, DC Water also took initiatives to help our customers during the pandemic by reconnecting customers previously disconnected for non-payment, waiving late fees, pausing placing liens, arranging payment plans, and partnering with the District for emergency assistance for those impacted by COVID-19.

To respond to the impact of COVID-19 on our customers, both the District and DC Water have expanded customer assistance programs:

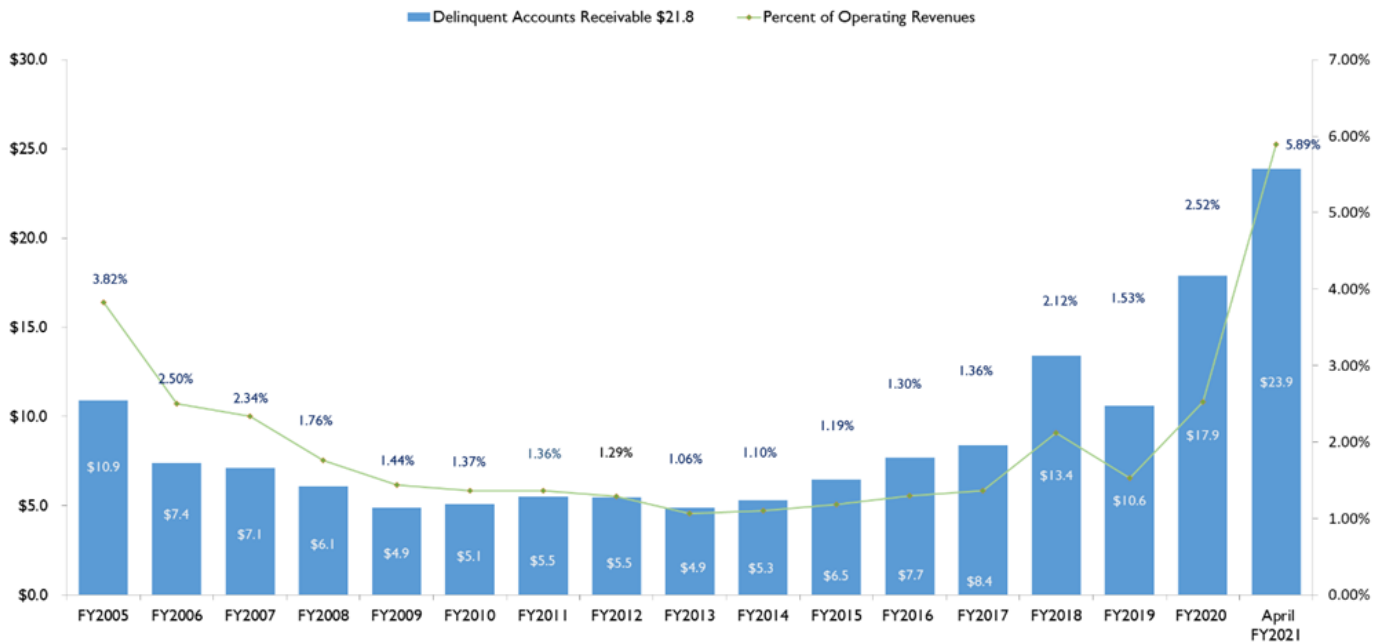
- Emergency Residential Relief Program (District Funded ERRP) – For customers struggling with unpaid DC Water bills during the coronavirus (COVID-19) public health emergency and 105 days thereafter, eligible households may receive bill assistance up to \$2,000 as a one-time emergency benefit
- DC Water Cares Residential Assistance Program (RAP) – New \$3 million program to continue the Emergency Residential Relief Program in FY2021 to provide onetime assistance to customers impacted by COVID. Assistance up to \$2,000 per residential customer
- DC Water Cares Multi-Family Assistance Program (MAP) – New \$7 million for a new program to provide one-time assistance to residents in multi-family buildings that have been negatively impacted by COVID; assistance amount to be provided per affordable unit with household income 80% AMI or less.
- FY2022 Target Assistance - \$5 million held for FY2022 targeted assistance for customers in need

Other Projects:

- Defined as the Water Meter Rehabilitation Program, the first phase of the project from 2nd quarter FY 2017 to late FY 2019 completed 84,334 meter/MTU installations, which increased the overall AMI transmission rate to 90 percent. The program entered the second phase in October 2019. Through May 2020, approximately 7,552 meters were exchanged, increasing the overall AMI transmission rate to 93 percent.
- Increasing AMI transmission rates should reduce the number of estimated bills and provide better revenue projections by capturing accurate consumption.
- Benefits Observed
 - New technology provides two-way communication to and from a device
 - New technology allows us to increase data points from the field from twice daily to hourly or 15 minute interval data
 - Increased data points set the foundation for improved technology advancements in consumption analysis, leak detection, and bill accuracy

- Provides complete control over access to consumption data with on-demand reads virtually eliminating the need for truck rolls after installation
- Assures the highest read success rate in the industry with redundant readings transmissions and collection paths
- Customer Information System (CIS) – In 2017, DC Water upgraded its system to a new Vertex One CIS
 - New functionality for managing customer relationships, not just locations
 - Improved customer relationship management
 - Advanced process automation capabilities
 - Improved customer self-service features
 - Enhanced security over personal and financial information
 - Robust customer communication/notifications related to changes to customer profiles
- New mobile work management application
- The gradual decoupling of revenues from volumetric based revenues to more predictable relatively fixed revenue sources increase our ability to negotiate payment plans with customers based on expected future bills
- Maintain the predictive dialer outbound calls to remind customers to pay before balances become unmanageable
- Adhering to payment plan policies that balance managing arrears and keep a vital service on for customers
- Continuous placement of property liens when an account balance exceeds \$200 and is more than 60 days past due

Delinquent Accounts Receivable (\$ in Millions)



- The graph above represents Delinquent Accounts Receivable as percent of Total Operating Cash Receipts (includes Retail, Wholesale and Other)
- In FY 2019, there was a decrease in delinquent accounts receivable, greater than 90 days. However, due to the impact of Covid19 and a suspension of cut off and collection efforts the delinquency greater than 90-days increased from 1.53 percent in FY 2019 to 2.52 percent in FY 2020. The delinquency increased further to 5.89 percent at the end of April 2021.
- Delinquent accounts receivable increased by \$7.3 million from FY 2019 to FY 2020 due to suspension in regular collection activity and disconnection of delinquent accounts. These actions were taken in support of on-going meter replacement projects through December of 2019 and following the on-set of the coronavirus public health emergency in March of 2020 through the remainder of the fiscal year.

General Principles of Affordability for Low-Income Customers Policy

On September 4, 2014, The General Principles of Affordability for Low-Income customers was approved. It is the policy of the Board of Directors of DC Water in setting retail rates, to follow the General Principles of Affordability for Low-Income Customers articulated herein:

1. Consideration of rate impacts on low-income customers;
2. Exploration of affordability alternatives for low-income customers; and
3. Development of a more innovative rate structure, the goal of which is to reduce the economic burden on low-income customers at the earliest practicable date consistent with the Board's need to gather sufficient data to support any rate structure chosen.

DC Water reviews the equity and sufficiency of its rates and rate structures periodically through various cost of service (COS) studies. The COS study prioritizes the following pricing objectives:

- Revenue sufficiency – Rates should recover revenue necessary to operate and maintain the utility in perpetuity
- Cost of Service Recovery – Rates should be supported by industry practice and ensure that customers pay their fair share
- Simplicity – Rates and charges should be easy for our customers to understand
- Affordability – DC Water should minimize customer bills while not sacrificing good, clean and safe service

In FY 2015, a Cost of Service Study was conducted by the Independent Financial Consultants which provided several recommendations:

Additional Alternative Fees and Charges:

1. Customer Class-Based Volumetric Rates – Rate differentiation based on the peaking demands of each customer class (residential, multi-family and non-residential)
2. Lifeline Rate – A lifeline rate for first 4 Ccf of Single Family Residential (SFR) water use to reflect baseline usage by residential customers without peaking costs. The lifeline rate provides an economic benefit to low-volume Residential customers, while spreading the cost of peaking to high-volume Residential customers.
3. Water System Replacement Fee (WSRF) – In Fiscal Year 2016, DC Water to modify its existing rate structure and to implement a new meter-based Water System Replacement Fee (WSRF) in order to recover the cost of the 1 percent renewal and replacement program for water service lines. It is anticipated that the new WSRF will generate \$40 million per year. DC Water's low income CAP customers would receive a 100% credit for this fee.

4. System Availability Fee (SAF) – DC Water to propose a new System Availability Fee (SAF). A one-time fee assessed to a property owner of any premises, building or structure to recover the cost of system capacity put in place to serve all metered water service and sanitary sewer connections and renovation or redevelopment projects that require an upsized meter service connection to the District’s potable water system. The fee is assessed based on the peak water demand, excluding fire demand, for new meter water service connection and renovation or redevelopment projects that increase the peak water demand and associated SAF meter size for the property.
5. Based on the 2015 Cost of Service Study, DC Water has adopted several changes to its existing retail rate structure starting in Fiscal Year 2016. These changes are designed to better align the Authority’s revenues and expenditures by establishing customer class-based volumetric water rates based upon peaking factors, to create a more progressive rate structure for its residential customers by establishing lifeline water rates which discount core consumption, and to fund the authority’s water main replacement program by establishing a monthly, fixed Water System Replacement Fee.

In FY 2018, a Cost of Service study was conducted by the Independent Financial Consultants which provided several recommendations:

- Every three years DC Water conducted Cost of Service Study for the Water and Sewer rates, and the Clean Rivers Impervious Area Charge (CRIAC) to update actual and projected expenditures to ensure that these charges are appropriately recovering costs
- DC Water has taken several actions over the last several years to lower CRIAC costs including Century Bonds, refinancing older debt for savings, and restructuring debt so the relief is provided to today’s customers. These savings are now reflected in the projected charges
- A reallocation of the costs associated with the Clean Rivers Impervious Area Charge (CRIAC) to the Sewer utility results in a reduction in the CRIAC and an increase in the Sewer volumetric charge
- The revenue collected from the Water System Replacement Fee, originally designed to fund the annual costs of 1 percent of DC Water’s water service line renewal and replacement program has been used in its entirety to offset the Water utility’s revenue requirements, resulting in a decrease to all Water volumetric charges
- Although these two reallocations cause shifts in the cost structure, and subsequent rates, DC Water customers will see only minimal changes to their bills

In FY 2020, an Independent Review of Rate Structure and Customer Assistance Programs was conducted to review and benchmark DC Water’s rates, rate structure and Customer Assistance Programs (CAP) to peer utilities. The findings of the study concurred that DC Water’s current customer class structure, monthly water lifeline threshold of 4 Ccf, ERU basis for recovering the CRIAC charge, CAP bill discount and temporary assistance programs are consistent with industry standards for ratemaking.

In FY 2020, DC Water conducted a Cost of Service Study (COS) to align the COS with the multi-year rate proposals, therefore both will be done every two years going forward. Previously, the Cost of Service study was conducted every three years. The COS consist of three components: i) revenue sufficiency analysis – to ensure that the revenues cover the costs that DC Water incurs; ii) cost of service analysis/rate equity – to ensure that the rates are equitably recovering the costs of service provided to customers; and iii) alternative rate structure analysis – to ensure that DC Water meets its priority pricing objectives. The

results of the COS support the multi-year rate, charges and fee proposals for FY 2021 and FY 2022.

According to the COS, the proposed CRIAC shift to sewer volumetric with 18 percent in FY 2020, 28 percent in FY 2021 and 37 percent in FY 2022 and beyond was recommended because it balances infrastructure investment with growth in rates. The shift is based on an assessment that on average 37 percent of volume in the tunnels is from wastewater. With the proposed shift the overall household charges increase by 6.6 percent in FY 2021 and 6.7 percent in FY 2022. The gradual shift helps avoid rate shock to customers. The CRIAC for FY 2021 is projected to decrease from \$20.94 to \$19.52 per ERU, per month and to \$18.40 per ERU per month for FY 2022.

As part of the COS, the study focused on the reallocation of some Customer Service operating costs associated with metering, billing and collections activities to the Metering Fee. Historically, only automated metering capital costs were recovered in the Metering Fee. Many utilities recover capital and operating costs associated with metering and billing in a fixed, meter-based charge, which shifts costs to the Metering Fee and away from the volumetric rates. The 2020 COS study recommended to re-allocate more customer service expense for metering and billing to the metering fee. The changes in Metering Fee are summarized below:

- In FY 2019, Metering Fee recovered \$11.6 million.
 - In FY 2003, established Metering Fee at @2.01 for 5/8" meter
 - In FY 2011, increased Metering Fee to \$3.86 for 5/8' meter
 - Originally fee amount set to cover the capital costs of the original Automated Meter Infrastructure (AMI) system and meter purchase and installation (debt service) plus about \$4 million of Customer Service costs
- The 2020 Cost of Service Study recommended recovering \$24.1 million in FY2022, consistent with independent rate review recommendation.
 - Includes costs associated with metering and billing
 - Customer assistance, shutoff/restore, and leak adjustment etc. remain in the volumetric charges
 - Proposed FY 2021 fee recovers \$15.4 million, all the debt service and coverage plus about half of the full Customer Service O&M allocation (\$4.96 for a 5/8" meter)
 - Proposed FY2022 fee adds the additional half of Customer Service allocation for a total of about \$24.1 million (\$7.75 for a 5/8" meter)

Water System Replacement Fee (WSRF)

Effective October 1, 2015 (FY 2016), DC Water modified its existing rate structure and implemented a new meter-based Water System Replacement Fee (WSRF) in order to recover the cost of the 1 percent renewal and replacement program for water service lines. It is anticipated that the new Water System Replacement Fee (WSRF) will generate approximately \$39.7 million per year from fiscal years 2019 through 2028. The fee is based upon meter size and average flow. DC Water's low-income CAP customers receive a 100 percent credit for this fee.

Effective October 1, 2017, (FY 2018), DC Water amended the Water System Replacement Fee (WSRF) regulations to add rules and procedures for a Multi-family WSRF adjustment; amend the Customer Classifications to clarify the definitions for Residential, Multi-family and Non-Residential customers to include cooperative housing associations and other clarifications; and amend the definitions set forth in Chapter 41 to define the terms Condominium, Cooperative Housing Association, and Dwelling Unit used in the Customer Classification regulations.

The following terms are defined:

Condominium – means real estate, portions of which are designated for separate ownership and the remainder of which is designated for common ownership solely by the owners of the portions designated for separate ownership, provided the undivided interests in the common elements are vested in the unit owners.

Cooperative Housing Association – an association, whether incorporated or unincorporated, organized for the purpose of owning and operating residential real property, the shareholders or members of which, by reason of their ownership of a stock or membership certificate, a proprietary lease or other evidence of membership, are entitled to occupy a dwelling unit pursuant to the terms of a proprietary lease or occupancy agreement.

Dwelling Unit – any habitable room or group of rooms with kitchen and bathroom facilities forming a single unit located within a building or structure, which is wholly or partially used or intended to be used for living, sleeping and the preparation and consumption of meals by human occupants, and is under the control of and for the use of the occupant.

System Availability Fee (SAF)

Many utilities have implemented a fee, assessed to new development (or redevelopment) to recover the investment in available system capacity. On June 17, 2016, DC Water's Board approved a new System Availability Fee (SAF) to be effective from January 1, 2018. All Residential Customers with meters 1 inch or smaller will use the same set of fees. All Residential Customers with meters larger than 1", and all Multi-Family and Non-Residential Customers will have SAF based on their meter size.

The System Availability Fee will be assessed for all new buildings, structures or properties under development and properties under redevelopment. For properties under redevelopment, DC Water will determine the net System Availability Fee by determining the property's proposed capacity requirements and applying a credit for the capacity of accounts being removed from the system. However, if the associated credit for capacity removed is equal to or greater than the future System Availability Fee, the net System Availability Fee shall be zero. Properties under redevelopment shall not receive a credit for accounts that are inactive for more than 12 months.

In FY 2018, DC Water has determined that implementing the System Availability Fee (SAF) regulations on the effective date of January 1, 2018 could present significant fiscal impacts to the District's New Communities Initiative, which includes redevelopment, one for one replacement and/or augmentation, of affordable housing units. On March 1, 2018, the DC Water Board considered comments received during the SAF public comment period and agreed to; 1) Extend the System Availability Fee (SAF) effective date from January 1, 2018 to June 1, 2018 for DCRA Construction Permit Applicants and federal facilities new water and sewer connections and renovation or redevelopment projects for existing connections to the District's potable water and sanitary sewer systems based on the SAF meter size in accordance with the fee schedule and requirements; 2) Revised the DC Water guidance document used to determine the SAF meter size from DC Water Standard Details and Guideline Masters to DC Water's Sizing Instructions and Worksheets; 3) Added procedures and requirements to receive credits for Affordable Housing Units (AHU) development and redevelopment; 4) Clarified the requirements for projects submitted prior to the effective date of June 1, 2018 and approved by June 1, 2019; 5) Added formulas to clarify how the SAF is calculated with the SAF credit, AHU credit and Net AHU credit; 6) Clarified requirements for Payment Plan Agreement; 7) Properties under redevelopment shall not receive a credit for accounts that are inactive for more than 24 months.

Effective June 1, 2018, DCRA Construction Permit Applicants and federal facilities shall be assessed a System Availability Fee (SAF) for new water and sewer connections and renovation or redevelopment projects for existing connections to the District’s potable water and sanitary sewer systems based on the SAF meter size in accordance with the following fee schedule and requirements.

- In 2021, the Independent Financial Consultants performed a cost of service study (COS) to determine the costs of providing fire protection service to the District. DC Water provides Fire Protection Services to the District, including but not limited to the delivery of water for firefighting, inspection, maintenance and upgrading of public fire hydrants in the District of Columbia. The consultants compared DC Water costs with the revenues received from the District for fire protection services. The consultants reviewed and tabulated historical fire service costs of DC Water (FY 2016 - 2020). Projections of DC Water costs were developed for FY 2021 – FY 2024. As per terms of the 2013 MOU and based on the results of the 2021 COS, Fire Protection Service fee was established at \$11.535 million for fiscal years FY 2022, FY 2023 and FY 2024. This fee is \$0.992 million lower than the FY 2018 fee of \$12.527 million.
- A new PILOT MOU was signed between DC Water and the District of Columbia on September 4, 2014, which reduced the annual PILOT payment. As per agreement, the PILOT of \$15.3 million for FY 2015 would be escalated by 2 percent per year. The agreement will be effective till September 30, 2024.
- On October 07, 2014, DC Water and the District reached an agreement on the ROW terms and conditions, which provides that DC Water will continue to make payments totaling \$5.1 million annually to the District for FY 2015 – FY 2024.

DC Water periodically reassesses its policies every five years regarding the operating reserve requirement. The Independent Financial Consultants conducted the study to consider the appropriate level of its Total Operating Reserves for FY 2013 and subsequent years. The Independent Financial Consultants recommended that DC Water maintain its current operating reserve policy to require a minimum balance of the greater of \$125.5 million or 120 days of budgeted O&M expenses. In 2018, Independent Financial Consultants conducted the study and recommended to revise the current reserve policy (120 days of operating and maintenance expenses or \$125.5 million, the bond indenture requires 60 days of operating expenses) to the higher of \$140.0 million or 140 days of operating and maintenance expense. The next Operating Reserves study will be conducted in FY 2022.

- The Independent Financial Consultants noted that the wholesale customers have not contributed to the reserves and that DC Water may consider having wholesale customers provide a proportionate share of the contributions required for the R&R Reserve Fund.
- DC Water Indenture of Trust requires the Authority to maintain a Renewal and Replacement (R&R) Reserve Fund. In FY 2013, the Independent Financial Consultants conducted this study to examine the reasonableness of the amount on deposit in the R&R Reserve Fund and make recommendations to the Authority for the value of the Fund for the next 5-year period of FY 2013 through FY 2017. The Independent Financial Consultants recommended that DC Water maintain its current R&R Reserve Fund policy to require a balance of \$35 million. In FY 2018 study, the Independent Financial Consultants recommended to maintain R&R Reserve Fund at \$35.0 million. The recommendation will be presented to the DC Water Board for approval. The next R&R Reserve Fund study will be conducted in FY 2022.
- Over the last ten years, DC Water has made contributions to the RSF and made withdrawals to help mitigate rate increases. In FY 2018, the Independent Financial Consultant performed a cost of service (COS) study to determine the appropriate level of Rate Stabilization Fund (RSF) to help mitigate rate increases. The study recommended that the Authority maintain current RSF policy of allowing management discretion on deposits and withdraws; consider adding to the RSF in future years from year-end operation balances to support one or more Board objectives.
- With respect to Operating Reserves, Renewal and Replacement (R&R) Reserve Fund Study and Rate Stabilization Fund (RSF), the Independent Financial Consultants also recommended the following:
 - DC Water’s Operating Reserves, Rate Stabilization (RSF) and R&R Reserve Fund requirement be reassessed at least every five years in conjunction with the Indenture-required system assessment (or sooner in event of changes in the underlying factors, assumptions, or market conditions)
 - DC Water and its financial advisor should monitor the rating agencies assessment of the Total Operating Reserves (including the R&R Reserve Fund) on an ongoing basis. The purpose of such monitoring would be to ensure that the rating agencies remain comfortable with the level of the reserves



Future Goals and Financial Assumptions

All Legal Covenants, Financial Board Policies, Accomplishments and Targets are Incorporated into the Ten-Year Financial Plan

Compliant	Description	Legal covenant	Performance Target	FY 2019 Actual	FY 2020 Actual	FY 2021 Revised	FY 2022 Revised
<input checked="" type="checkbox"/>	Senior Debt Service Coverage	120%	140%	463%	524%	477%	532%
<input checked="" type="checkbox"/>	Operating Cash Reserves	N/A	\$125.5 million	186.8 million	186.8 million	\$185 million	\$194 million
<input checked="" type="checkbox"/>	Short Term Investment Return Benchmark Merrill Lynch 3-Month Treasury Index	N/A	25 basis points	226 basis points	69 basis points	7 basis points	19 basis points
<input checked="" type="checkbox"/>	Long Term Investment Return Benchmark Merrill Lynch 1-3 Year Treasury Index	N/A	50 basis points	225 basis points	70 basis points	21 basis points	55 basis points
<input checked="" type="checkbox"/>	Water and Sewer Rates	Revenues must be sufficient to cover: operating expenses, senior and sub debt service, amounts necessary to maintain DSRF and ORF levels, and any annual PILOT payments	Each customer will be charged for the actual cost to provide each service, and rate increases will be reliable and predictable		Future rate increases are driven by financial impact of the capital program and full utilization of the RSF; the development of a 10-year financial plan allows DC Water to meet these key goals of full cost recovery and predictability	Same as Performance Target	
<input checked="" type="checkbox"/>	Rate Stabilization Fund (RSF)	N/A	Help to avoid spikes in rate increases for retail customers	\$6.0 million utilization from and \$6.0 million contribution to the RSF leaving a balance of \$61.45 million	\$28.7 million contribution to RSF resulted in a balance of \$90.24 million	Projected at \$87.7 million at the end of FY 2021	Projected at \$77.2 million at the end of FY 2022

The Approved FY 2021 - FY 2030 financial plan includes the resources necessary to accomplish critical financial and operational goals over the coming years, as summarized below.

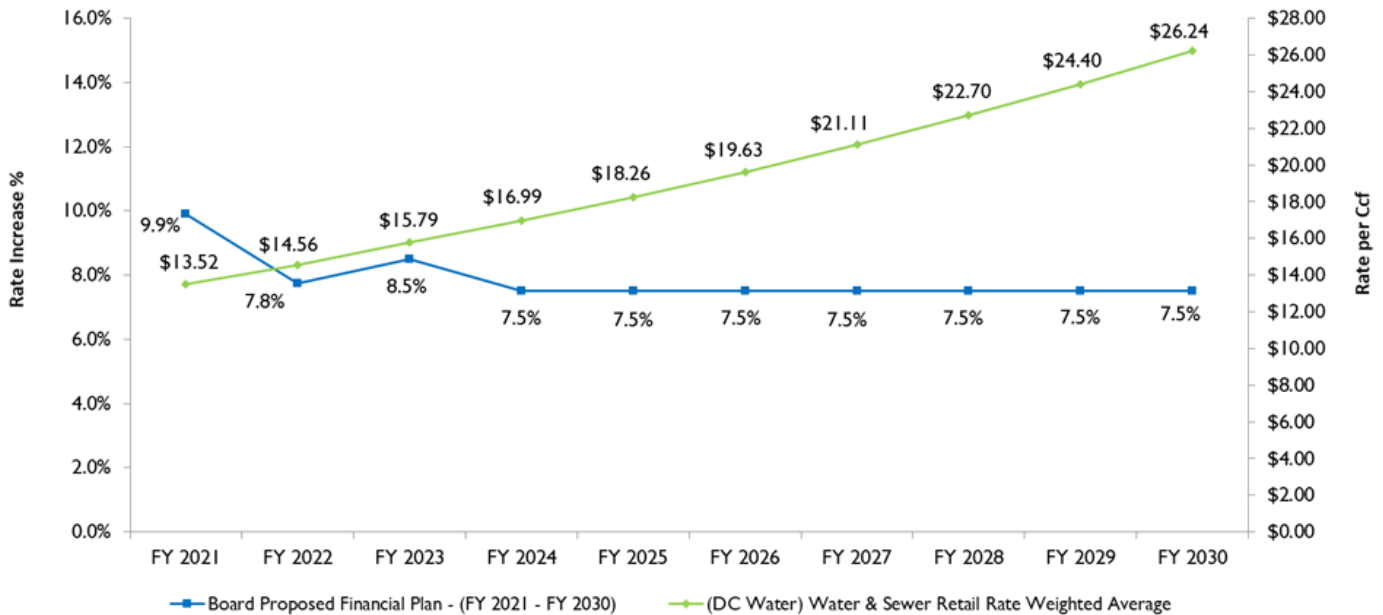
- Continue adherence to the Board's financial, investment, rate-setting and long-term planning policies
- Continue implementation of the ten-year \$5.43 billion capital improvement program
- Includes disbursements of \$1.03 billion over the ten-year planning period for Clean Rivers Project (CSO Long-Term Control Plan) exclusive of the nine-minimum controls program
- Continued exceptional financial performance, reduction in overtime, adherence to Board's customer outreach and transparency to include customer input and flexibility to meet emerging needs
- Improving Public Image: re-focus of the government relations activities to bring greater visibility to DC Water and the national need for infrastructure investment and funding; and various pilot projects to look for additional improvements to DC Water services
- Workforce
 - Continue to focus employees' efforts on DC Water's most important goals in line with the Board Strategic Plan
 - Improve recruiting process by identifying high-quality candidates using job descriptions based upon the expertise of high performing employees holding uniquely valued competencies
 - Fill critical talent management needs and address company and industry changes promptly
 - Continue to Enhance management skills through training

The ten-year financial plan reflects the following major assumptions:

- Operating and maintenance expenses (excluding the payment-in-lieu-of-taxes and right-of-way fee) are projected to grow at an average annual rate of 3.4 percent, primarily due to projected inflation
- Personnel services is projected to increase to accommodate for insourcing initiatives to support the capital program
- Payment-in-lieu-of-taxes (PILOT) to the District of Columbia for FY 2021 and FY2022 will be at \$17.27 million and \$17.62 million respectively. PILOT payment is projected to increase by 2 percent per annum in accordance with the new memorandum of understanding (MOU) signed on September 4, 2014 with the District
- According to the new memorandum of understanding (MOU) dated October 4, 2014, the Right-of-Way payment to the District of Columbia stays level at \$5.1 million
- Days of cash on hand which is an important measure of short and long term liquidity typically exceeds 250 days of cash including the Rate Stabilization Fund
- Management’s practice is to target combined coverage at 1.6X. The combined coverage for FY 2022 to FY 2030 range from 1.75 to 1.88. DC Water Indenture requires Senior Lien coverage of 1.2X and Subordinate at 1.0X, Board Policy is 1.4X for Senior and 1.0X for Subordinate
- Debt Service:
 - Overall increase of Debt Service is to support the capital program. The Debt Service as a percent of operating revenues does not exceed 33 percent in the Financial Plan. Debt Service represents 31.7 percent and 31.1 percent of the total operating revenue in FY 2021 and FY 2022, respectively
 - Interest on Variable debt assumed to be 2.5 percent in FY 2021 and FY 2022
 - Interest on Fixed debt assumed to be 5.0 percent in FY 2021 and FY 2022
 - Utilization of the Commercial Paper program/Extendable Municipal Commercial Paper (EMCP) is assumed for interim financing for bond issuance, capital equipment and Washington Aqueduct

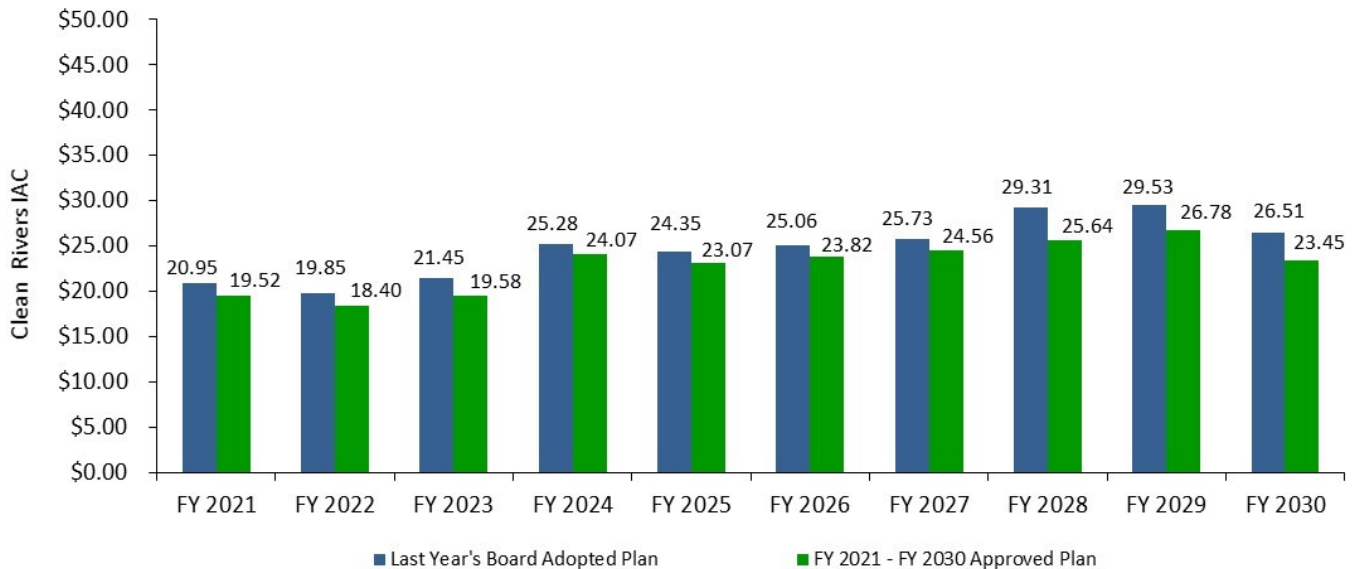
Due to these ongoing and new initiatives, from FY 2021 – FY 2030 DC Water’s water and sewer volumetric retail rates are projected to increase by \$1.23 to \$1.84 per 100 cubic feet as shown in the chart below. Cumulative rate increases would total 78.7 percent over the ten-year period compared to 82.7 percent projected in last year’s ten-year plan (FY 2020 – FY 2029).

**Projected Retail Rate Increases
FY 2021—FY 2030**



Rates shown above reflect weighted water and sewer rates for Residential customers’ category. The proposed retail water and sewer combined rate for FY 2021 is \$13.52 per Ccf and \$14.56 per Ccf for FY 2022. In addition, the proposed increase in the combined Right-of-Way and PILOT Fees is \$0.03 per Ccf, {\$0.04 per 1,000 gallons}, in FY 2021 and is \$0.02 per Ccf, {\$0.03 per 1,000 gallons} in FY 2022 to recover the full amount for services charged to DC Water by the District. There is no increase in Right-of-Way Fee for FY 2021 and FY 2022, which remains same at \$0.19 per Ccf (\$0.25 per 1,000 gallons). The proposed monthly Clean Rivers Project CRIAC charges for FY 2021 and FY 2022 are \$19.52 and \$18.40 respectively per ERU (Equivalent Residential Unit); decrease of \$1.42 compared to the FY 2020 charge and decrease of \$1.12 compared to the FY 2021 charge respectively.

Projected Monthly Clean Rivers Impervious Surface Area Charge Increases FY 2021 – FY 2030



- The projected charges displayed in the chart above are primarily driven by anticipated debt service costs necessary to support the thirty year \$2.8 billion Clean Rivers Project, which includes the federally mandated CSO-LTCP and the nine-minimum controls program
- The annual Clean Rivers Project costs for the average Tier 2 residential customer (700 – 2,000 sq. ft. of impervious area) is projected to increase from \$19.52 per month in FY 2021 to \$23.45 per month in FY 2030
- The proposed CRIAC shift to sewer volumetric with 18 percent in FY 2020, 28 percent in FY 2021 and 37 percent in FY 2022 and beyond is recommended because it balances infrastructure investment with growth in rates. The shift is based on an assessment that on average 37 percent of volume in the tunnels is from wastewater. With the proposed shift the overall household charges increase by 6.6 percent for FY 2021 and 6.7 percent for FY 2022. The gradual shift helps avoid rate shock to customers. The CRIAC is projected to decrease from \$20.94 to \$19.52 per ERU, per month for FY 2021 and to \$18.40 per ERU per month for FY 2022.

The proposed rate and fee adjustments included in the FY 2021 – FY 2030 financial plan are driven by the following trends and initiatives:

- Assumed retail water consumption decline of 7.4 percent in FY 2021 over FY 2020 Actual, conservation of 1.0 percent in FY 2022 for all categories of customers except for Commercial. Due to the impact of COVID-19, 15.0 percent decline is projected for Commercial in FY 2022. For FY 2023 and onwards, 1.0 percent conservation is assumed.
- Increasing debt service expenditures, driven by DC Water’s \$5.43 billion capital improvement program (cash disbursements basis), which increases on average by 5.5 percent over the Financial Plan period.
- Operations and maintenance expenditure (excluding the payment-in-lieu-of-taxes and right-of-way -fee) increase on average of 3.4 percent annually over ten-year period.
 - Increasing operating expenditures, driven primarily by projected increases in personnel services, contractual services, chemicals, and water purchases
 - Continuation of In-Sourcing Proposals for in-house planning & design and valve operations
 - Enhanced service to the development community through improved permitting operations

Customer Assistance Programs (CAP): We continued our commitment to help improve the quality of life for those of our customers who are least able to pay, by providing relief through our customer assistance programs (CAP). Through CAP, we provide eligible customers a discount of 4 Ccf per month on their water and sewer bills. Since it began in FY 2001, participation in CAP has continued to increase. In FY 2004, the Authority expanded the CAP to include tenants who meet financial eligibility requirements and whose primary residence is separately metered by the Authority. As of October 1, 2010, the Board expanded the CAP discount to include the first 4 Ccf of Payment-in-Lieu of Taxes (PILOT) and Right- of -Way (ROW) to qualifying low-income residential customers. The District Department of Energy and Environment (DOEE), administers this program for the Authority and several other utilities in the area.

In FY 2016, DC Water implemented Water System Replacement Fee (WSRF). This is a fixed monthly fee set to recover the costs of the 1 percent renewal and replacement program for water service lines. The fee is based on meter size and average flow. The DC Water’s low-income CAP customer will receive 100 percent credit for this fee.

As of May 1, 2017, the Authority further expanded the CAP to include 50 percent discount for CRIAC. Effective October 1, 2020, the CRIAC discount for low-income CAP customers was increased from fifty percent to seventy five percent.

In FY 2019, DC Water, Mayor Muriel Bowser and the DC Council worked together to expand the existing customer assistance program. The new benefits were earmarked for non-profits, including churches and cemeteries, along with a group of residential customers who did not previously meet the income guidelines for assistance (CAP2 and CAP3).

CAP2 provides a discount on the first 300 cubic feet (2,250 gallons) of water and sewer services used each month (with the exception of PILOT and ROW fees) and a fifty percent reduction in the monthly CRIAC fee.

CAP3 provides a discount of seventy five percent off the monthly CRIAC.

For FY 2020, \$1,584,808 in discount benefits was provided to 4,818 CAP customers and 681 CAP2 customers received discount of \$173,837. The CAP and CAP2 discount programs administered by DOEE provided discount as of September 30, 2020 to 5,499 customers representing \$1,758,645. DC Water's SPLASH program customers donated an additional \$74,323 through their water bills for the benefit of those customers who needed additional help.

DC Clean Rivers Impervious Surface Area Charge Incentive Program: DC Water Board Approved a DC Clean Rivers Impervious Surface Area Charge Incentive Program (CRIAC) effective from October 1, 2013. This is a three-year pilot credit/discount program for the DC Clean Rivers Impervious Surface Area Charge. Eligibility determinations are made by the District Department of Energy and Environment. Customers who manage stormwater on their property through the use of approved best management practices such as rain gardens, rain barrels, pervious paving, green roofs, bio retention practices and stormwater will avail this discount. FY 2020 budget proposed an increase from 4 percent to 20 percent for stormwater best management practices. The DC Water Board approved the CRIAC Incentive Discount Program's incentive discount from four percent to twenty percent, which became effective from October 1, 2019.

Expansion of Customer Assistance Programs: To respond to the impact of COVID-19 on our customers, both the District and DC Water are expanding customer assistance programs:

- Emergency Residential Relief Program (District Funded) – For customers struggling with unpaid DC Water bills during the coronavirus (COVID-19) public health emergency and 105 days thereafter, eligible households may receive bill assistance up to \$2,000 as a one-time emergency benefit
- DC Water Cares Residential Assistance Program (RAP) – New \$3 million to continue the Emergency Residential Relief Program in FY2021 to provide one-time assistance to customers impacted by COVID. Assistance up to \$2,000 per residential customer
- DC Water Cares Multi-family Assistance Program (MAP) - New \$7 million for a new program to provide one-time assistance to residents in multi-family buildings that have been negatively impacted by COVID; assistance amount to be provided per affordable unit with household income 80% AMI or less
- FY2022 Target Assistance - \$5 million held for FY2022 targeted assistance for customers in need



Revenues

\$ in thousands

The Revised FY 2021 operating receipts projection totals \$692.3 million, a decrease of \$17.8 million as compared to the FY 2020 Actual budget. The Revised FY 2022 operating receipts total \$756.4 million, an increase of \$64.1 million over the Revised FY 2021 receipts.

Comparative Operating Receipts FY 2020 – FY 2022

	FY 2020 Actual	FY 2021 Revised	Increase/ (Decrease)	Percent Change	FY 2022 Revised	Increase/ (Decrease)	Percent Change
Residential	122,774	118,771	(4,003)	-3.3%	129,062	10,291	8.7%
Commercial	161,824	156,067	(5,757)	-3.6%	170,209	14,142	9.1%
Multi-family	112,286	111,501	(784)	-0.7%	123,523	12,022	10.8%
Sub-Total Residential, Commercial and Multi-family	396,884	386,339	(10,545)	-2.7%	422,794	36,455	9.4%
Federal Government(1)	71,954	79,082	7,128	9.9%	81,339	2,257	2.9%
District Government	18,067	16,502	(1,565)	-8.7%	18,668	2,166	13.1%
D.C. Housing Authority	10,998	12,265	1,267	11.5%	12,592	327	2.7%
Transfer from Rate Stabilization Fund	-	2,500	2,500	0.0%	10,500	8,000	320.0%
Water System Replacement Fee (WSRF)	41,456	39,717	(1,739)	-4.2%	39,717	-	0.0%
Metering Fee	11,829	15,405	3,576	30.2%	24,083	8,678	56.3%
Total Retail	551,188	551,810	622	0.1%	609,693	57,883	10.5%
IMA Wastewater Charges	69,020	71,543	2,522	3.7%	74,226	2,683	3.8%
Potomac Interceptor Wastewater Charges	10,136	10,167	31	0.3%	10,443	276	2.7%
Total Wholesale	79,157	81,710	2,553	3.2%	84,669	2,959	3.6%
District Stormwater Revenue (2)	1,143	1,000	(143)	-	1,000	-	0.0%
Misc. Rev. (e.g. water tap installation, fire hydrant usage, etc.)	47,017	27,513	(19,504)	-41.5%	28,105	592	2.2%
Washington Aqueduct Debt Service Revenue for Falls Church & Arlington	193	193	(0)	-	193	-	0.0%
Interest Income (including interest on Bond Debt Service Reserve Fund)	4,582	2,291	(2,291)	37.7%	3,437	1,146	50.0%
System Availability Fee (SAF)	5,271	7,000	1,729	32.8%	7,700	700	10.0%
Transfer from DC PILOT/ROW Fund	-	-	-	0.0%	-	-	0.0%
DC Contribution of 50% PILOT Fund to DCW	-	-	-	0.0%	-	-	0.0%
Right of Way	5,100	5,100	-	0.0%	5,100	-	0.0%
PILOT Fee	16,446	15,644	(802)	-4.9%	16,488	844	5.4%
Total Other	79,752	58,742	(21,011)	-26.3%	62,023	3,281	5.6%
Total Operating Cash Receipts	\$ 710,097	\$ 692,262	\$ (17,836)	-2.5%	\$ 756,385	\$ 64,124	9.3%

1. Historical actuals are presented on revenue basis. Projected amounts shown are billed revenues. Actual Federal receipts are a combination of current year projected revenues and prior year adjustments, which are presented as reserve items.
2. Reflects District stormwater fee revenue that will fund DC Water's share of District stormwater permit compliance activities, and will not be funded through DC Water's retail rates or other DC Water revenue sources.

Major assumptions underlying the revenue projections contained in the FY 2021 – FY 2030 financial plan include:

- For FY 2022, 1.0 percent reduction in water sales is assumed over FY 2021 projection for all customer categories, except Commercial, based on historical trends in consumption levels. For Commercial category, due to impact of COVID-19, fifteen percent decline in consumption is assumed. For FY 2023 and onwards, 1.0 percent conservation is assumed for all categories.
- 3.0 percent average revenue increase between FY 2023 and FY 2030 for wholesale customers, in line with operating and maintenance expense increases for joint use facilities. In FY2022, however, the wholesale revenues are projected to increase by \$3.0 million or 3.6 percent mainly due to 3.0 percent escalation for FY 2022.
- Based on the current interest rate environment, interest projections are conservatively assumed at 1.0 percent earnings rate in FY 2022 and 2.0 percent in FY 2024 and FY 2025, and 3.0 percent in FY 2026 and FY2027. Interest rates for FY 2028 and onwards are assumed at 4.0 percent.
- The majority of other non-operating revenues, totaling \$37.0 million in FY 2022 are projected to increase within the ten-year plan, and include such items as:
 - Reimbursement from Arlington County and Falls Church for debt service issued for pre-1997 Washington Aqueduct capital improvements - \$0.2 million.
 - Reimbursement from the Stormwater Enterprise Fund for services provided to DOEE under their MS4 permit - \$1.0 million.
 - Recovery of indirect costs from DC Water’s IMA partners - \$5.1 million - this reflects recovery of indirect costs on capital projects (e.g., costs for Finance, Accounting and Budget, General Counsel, and Human Resources functions).
 - Reimbursement from the District for the Fire Protection Services fee of \$10.8 million.
 - Other miscellaneous fees and charges, including service line replacements, developer-related fees, and the Engineering Review, wastehauler fees and System Availability Fee (SAF) - \$19.9 million.

The Revised FY2021 receipts projection totals \$692.3 million, approximately \$17.8 million, or 2.5 percent lower than the FY 2020 Actuals. The decrease is due primarily to

- **Residential, Commercial and Multi-Family Receipts** - Projections for FY 2021 reflect a decrease of \$10.5 million, or 2.7 percent from FY 2020 Actual, mainly due to decline in consumption in Commercial category on account of the impact of COVID-19. For FY2021, increase in retail rate is 9.9 percent (water and sewer volumetric rates), but decrease in monthly ERU fee for the Clean Rivers IAC is \$1,42 . (See Section IV – Rates and Revenues for details on all rate and fee proposals). 7.4 percent decrease in overall consumption has been assumed due to conservation and impact of COVID-19 in FY2021.
- **Federal revenues** - Revised FY 2021 federal revenues are projected to increase by \$7.1 million or 9.9 percent over FY 2020 Actual. Under existing federal billing legislation, federal billings are prepared on an estimated basis eighteen months in advance of the start of the fiscal year (e.g., the FY 2021 billing was prepared in April 2019, and are based on the current consumption estimates and projected rate increases as included in the current ten-year plan. These estimates are then reconciled with actual consumption and rate increases, and an adjustment is made in the subsequent year’s billing (e.g., the reconciliation of FY 2019 estimated vs. actual consumption and rate increases will be included in the FY 2022 billing, prepared in April 2020). Federal revenues in the ten-year plan are presented on a revenue basis, net of any adjustments for prior year reconciliations which are accounted for as reserve items. Consistent with this methodology, the proposed FY 2021 federal revenues reflect the final billing sent to the federal government in April 2019 net of the adjustment for the prior-year (FY 2018) reconciliation.
- **Municipal & D.C. Housing Authority Receipts** - are projected to decrease by \$0.3 million (or 0.1.0 percent) mainly due to the decline in Municipal consumption due to COVID-19 and decrease of \$1.42 monthly ERU fee for the Clean Rivers IAC.
- **Rate Stabilization Fund Utilization** – The ten-year plan and near-term revenue projections assume utilization of \$2.5 million of RSF in FY 2021. There will be a balance of \$77.2 million by the end of FY 2030. Prior years’ plans assumed the use of these funds, which is necessary as DC Water reaches its peak years of spending in the CIP. Utilization of RSF monies allows DC Water to implement future rate increases in a reliable and predictable manner while still meeting Board and indenture policies on cash reserves and debt service coverage.
- **Water System Replacement Fee** – Proposed fixed monthly fee set to recover the costs of 1 percent renewal and replacement program for water service lines generating approximately \$39.7 million per year.
- **Customer Metering Fee** - This fee recovers the costs associated with installing, operating, maintaining and replacing meters, and is charged to all retail customers (including federal and municipal customers). The fee varies based on meter size, with monthly fees ranging from \$4.96 for a 5/8-inch meter (typical size of a residential customer meter) to \$449.04 for 16” meters (typically used for large commercial customers). Based on the FY 2020 Cost of Service study, the Customer Metering fees due to proposed increase is projected to generate \$15.4 million in FY 2021.

- **Wholesale Receipts** – DC Water’s wholesale customers are responsible for a proportionate share of operating and maintenance expenses (associated only with shared facilities primarily at Blue Plains) based on their respective share of wastewater volume discharged. In addition, each user is responsible for a proportionate share of related indirect costs. In FY 2021 wholesale revenues are projected to increase by \$2.6 million or 3.2 percent to \$81.7 million mainly due to 3.0 percent escalation.
- **Stormwater** - DC Water’s FY 2021 and FY2022 receipts include \$1.0 million each year from the Department of Energy and Environment (DOEE) formerly DDOE which will be used to fund DC Water’s services provided on behalf of the District’s stormwater permit compliance activities including the billing and collection through DC Water invoices of fees established by DOEE. The FY 2021 – FY 2030 financial plan assumes that all incremental costs borne by DC Water for stormwater permit compliance activities will be reimbursed by the stormwater fund, and that DC Water funds will be advanced to pay for these activities.
- **Right-of-Way and Payment-In-Lieu of Taxes (PILOT) Pass-Through Fees** - Similar to other Washington area utilities, DC Water has implemented fees that pass through the costs of the District’s Right-of-Way fee (ROW) and Payment In Lieu of Taxes (PILOT) as separate line items on its bill. PILOT fee increase by 2 percent over prior year as per PILOT MOU signed with the District Government on September 4, 2014. In FY 2021 Revised budget as compared to FY 2020 Actual, PILOT is projected to decrease by \$0.8 million or 4.9 percent mainly due to lower consumption on account of COVID-19. ROW fee remains same at \$5.1 million.

The Revised FY 2022 receipts projection totals \$756.4 million, approximately \$64.1 million, or 9.3 percent higher than the Revised FY 2021 projections. This increase is due primarily to:

- **Residential, Commercial & Multi-Family** - FY 2022 projections reflect an increase of \$36.4 million, or 9.4 percent from FY 2021 Revised due primarily to proposed retail rate increases of 7.8 percent (water and sewer volumetric rates) and decrease of \$1.12 monthly ERU fee for the Clean Rivers IAC (see Section IV- Rate and Revenues for detail on all rate and fee proposals)
 - One percent decrease in consumption over FY 2021 projections has been assumed for Residential and Multi-family due to conservation in FY 2022. For Commercial category, assumed fifteen percent decline in consumption due to impact of COVID-19
- **Federal Revenues** - Revised FY 2022 federal revenues are projected to increase by \$2.3 million or 2.9 percent above the FY 2021 Revised budget to \$81.3 million.
- **Municipal & D.C. Housing Authority Receipts** - are projected to increase by \$2.5 million (or 8.7 percent), mainly due to proposed retail rate increases of 7.8 percent and decrease of \$1.12 monthly ERU fee for the Clean Rivers IAC.
- **The Rate Stabilization Fund** - The ten-year plan and near-term revenue projections assume utilization of \$10.5 million of RSF in FY 2022. There will be a balance of \$77.24 million by the end of FY 2030.
- **Water System Replacement Fee** - Proposed fixed monthly fee set to recover the costs of 1 percent renewal and replacement program for water service lines generating approximately \$39.7 million per year.
- **Customer Metering Fee** - This fee recovers the costs associated with installing, operating, maintaining and replacing meters, and is charged to all retail customers (including federal and municipal customers). The fee varies based on meter size, with monthly fees ranging from \$7.75 for a 5/8 inch meter (typical size of a residential customer meter) to \$701.62 for 16” meters (typically used for large commercial customers). Based on the FY 2020 Cost of Service study, the Customer Metering fees due to proposed increase is projected to generate \$24.1 million in FY 2022.
- **Wholesale Receipts** - In FY 2022, Wholesale revenues are projected to increase by \$3.0 million or 3.6 percent to \$84.7 million due to projected 3.0 percent increase in operations and maintenance expenses.
- **Stormwater** - As noted earlier, the Revised FY 2022 receipts for this category include \$1.0 million each year from the Department of Energy and Environment (DOEE).
- FY 2022 **PILOT Fee** increase by 2.0 percent over prior year as per the PILOT MOU signed with the District Government on September 4, 2014.

(\$ in thousands)

DC Water FY 2021 – FY 2030 Financial Plan

OPERATING	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Retail* Wholesale*	\$ 570,055	\$ 620,781	\$ 648,304	\$ 700,728	\$ 727,823	\$ 765,019	\$ 805,865	\$ 850,203	\$ 896,819	\$ 924,823
Other	81,709	84,669	87,209	89,825	92,520	95,295	98,154	101,089	104,132	107,256
RSF	37,997	40,435	41,136	44,580	47,256	52,054	54,209	56,710	58,977	59,700
Operating Receipts ⁽¹⁾	\$ 692,262	\$ 756,385	\$ 776,649	\$ 835,133	\$ 867,599	\$ 913,369	\$ 958,228	\$ 1,008,012	\$ 1,059,928	\$ 1,091,778
Operating Expenses	(345,498)	(364,345)	(375,219)	(386,427)	(397,980)	(409,886)	(422,159)	(434,809)	(447,847)	(461,287)
Debt Service	(217,944)	(231,164)	(240,459)	(250,382)	(270,935)	(285,552)	(303,384)	(322,075)	(339,858)	(352,409)
Cash Financed Capital Improvement	\$ (30,355)	\$ (37,830)	\$ (45,381)	\$ (49,051)	\$ (56,225)	\$ (68,942)	\$ (72,528)	\$ (76,518)	\$ (80,714)	\$ (83,234)
Net Revenues After Debt Service	\$ 98,464	\$ 123,046	\$ 115,589	\$ 149,273	\$ 140,458	\$ 148,988	\$ 160,158	\$ 174,610	\$ 191,509	\$ 194,848
Operating Reserve-Beg Balance	186,827	185,000	184,000	201,000	205,000	215,000	220,000	230,000	240,000	250,000
Other Misc (Disbursements)/Receipts	918	(2,854)	(3,761)	(6,742)	-	-	-	-	-	-
Wholesale/Federal True Up	(4,000)	-	-	-	-	-	-	-	-	-
Project Billing Refunds	-	-	-	-	-	-	-	-	-	-
Transfers To RSF	-	-	-	-	-	-	-	-	-	-
Pay-Go Financing	(97,209)	(111,192)	(104,828)	(138,532)	(130,458)	(143,988)	(150,158)	(164,610)	(181,509)	(189,848)
Operating Reserve - Ending Balance	\$ 185,000	\$ 194,000	\$ 201,000	\$ 205,000	\$ 215,000	\$ 220,000	\$ 230,000	\$ 240,000	\$ 250,000	\$ 255,000
Rate Stabilization Fund Balance RSF ⁽²⁾	\$ (87,744)	\$ (77,244)	\$ (77,244)	\$ (77,244)	\$ (77,244)	\$ (77,244)	\$ (77,244)	\$ (77,244)	\$ (77,244)	\$ (77,244)
Senior Debt Service Coverage	477%	532%	489%	587%	620%	594%	572%	589%	642%	641%
Combined Debt Service Coverage	168%	178%	175%	186%	182%	185%	185%	186%	188%	186%
Actual/Projected Water/Sewer Rate Increases	9.9%	7.8%	8.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
*Operating Receipts \$ Increase/Decrease	(2,680)	50,727	27,523	52,425	27,094	38,196	39,846	44,337	46,617	28,004
Retail	2,553	2,959	2,540	2,616	2,695	2,776	2,859	2,945	3,033	3,124
Wholesale	-0.5%	8.9%	4.4%	8.1%	3.9%	5.2%	5.2%	5.5%	5.5%	3.1%
*Operating Receipts % Increase/Decrease	3.2%	3.6%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Retail										
Wholesale										

⁽¹⁾ Includes interest earnings on senior lien revenue bonds' debt service reserve fund

⁽²⁾ FY 2022 planned transfers of \$0.0 million to Rate Stabilization Fund and \$10.5 million utilization will bring the total fund balance to \$77.2 million



Operating Expenditures

\$ in thousands

As in previous years, debt service continues to be the fastest growing expenditure in the ten-year financial plan as a result of DC Water’s \$5.43 billion capital improvement program, growing at an average annual rate of 5.5 percent. All other operating expenses are projected to grow at an average annual rate of 3.4 percent. The following chart provides detailed comparison of the FY 2021 and FY 2022 operating budgets.

Comparative Operating Budgets FY 2021 – FY 2022

	FY 2021 APPROVED	FY 2022 APPROVED	Increase (Decrease)	Percentage Change
Personnel Services	\$177,863	\$180,353	\$2,490	1.4%
Contractual Services	88,532	88,504	(28)	0.0%
Water Purchases	36,250	35,217	(1,033)	-2.9%
Chemicals and Supplies	36,081	34,201	(1,880)	-5.2%
Utilities	27,911	27,329	(582)	-2.1%
Small Equipment	1,030	1,108	78	7.6%
Subtotal Operations & Maintenance	\$367,667	\$366,711	(\$956)	-0.3%
Debt Service	222,268	231,164	8,896	4.0%
Cash Financed Capital Improvements	30,355	37,830	7,475	24.6%
Payment in Lieu of Taxes	17,272	17,618	346	2.0%
Right of Way Fees	5,100	5,100	-	0.0%
Subtotal Debt Service, CFCI & PILOT/ROW	274,995	291,712	16,717	6.1%
Total Operating Expenditures	\$642,662	\$658,423	\$15,761	2.5%
Personnel Services charged to Capital Projects	(24,382)	(25,086)	(704)	2.9%
Total Net Operating Expenditures	\$618,280	\$633,337	\$15,057	2.4%

The approved FY 2022 budget total of \$658.4 million is approximately 2.5 percent higher than the approved FY 2021 budget. The net increase is primarily due to increase in Debt Service and Cash Financed Capital Improvements costs associated with DC Water’s capital improvement program. The FY 2022 operations and maintenance budget net decrease of 0.3 percent is primarily due to lower unit price for major chemicals, utilities costs and decrease in various maintenance and professional services. Specific information regarding each department is included in Section VII. A description of the assumptions and major issues/changes in each major expenditure category follows.

Personnel Services – increase of \$2.5 million or 1.4 percent above the approved FY 2021 budget. The increase is primarily attributable to salary adjustments, combined with 10 new positions were added to advance the Lead Free DC initiatives for inspection work and reduce continued reliance on consultants for support of various operational and day-to-day activities, off-set by reduced funding for vacant positions.

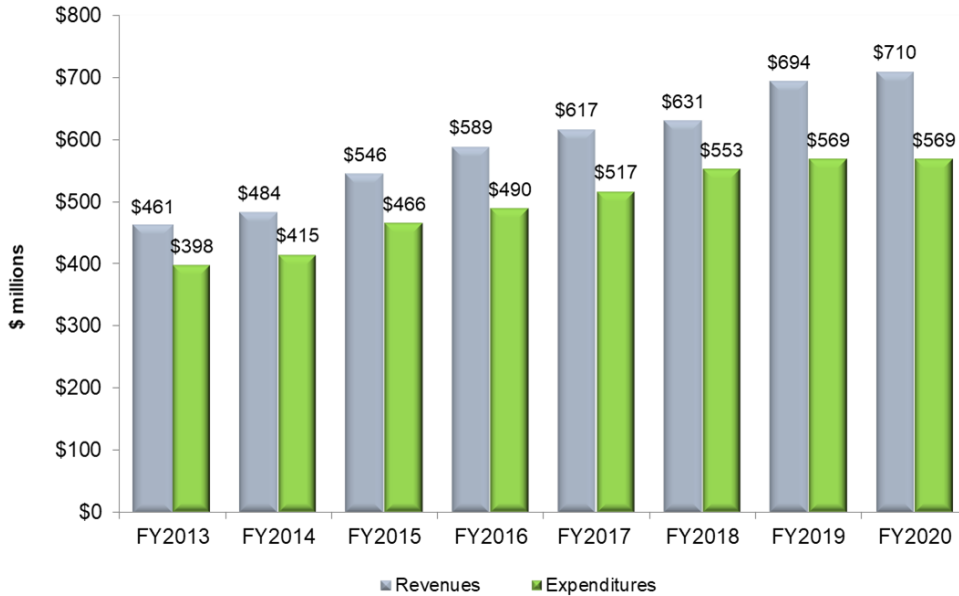
- **Chemicals** – decrease of \$1.9 million or 5.5 percent below the approved FY 2021 budget is due to lower unit prices for major chemicals (methanol, ferric chloride and sodium bisulfite) and reduced chemical usage from decreased effluent from the Tunnel Dewatering Pump Station during rain events.
- **Water Purchase** – decrease of approximately \$1.0 million or 2.9 percent below the approved FY 2021 budget. This represents DC Water’s share of the Washington Aqueduct’s FY 2022 O&M budget.
- **Utilities** – decrease of approximately \$0.6 million or 2.1 percent below the approved FY 2021 budget is due to electricity budget decrease of \$0.1 million in the energy needed to operate the Plant, Pump Stations and Operational Facilities. DC Water’s thermal hydrolysis process and anaerobic digesters continues to generate approximately 6MW electricity to offset the Authority-wide energy consumption of 33MW. Additional reduction of \$0.4 million in water usage on the Plant resulted from changes made in the treatment process and comparatively reduced flow on the Plant, and decrease in fuel usage as a result of recent reduction in automotive fuel prices.
- **Biosolids Hauling** – slightly lower compared to FY 2021 budget, due to continued increased marketing efforts of BLOOM, and the materialized savings from reduced transportation costs attributable to production of Class A biosolids, estimated at 450 wet tons/day from the Combined Heat and Power (CHP) facility. Previously, the Blue Plains Plant produced 1,200 wet tons per/day of Class B biosolids.

\$ in thousands

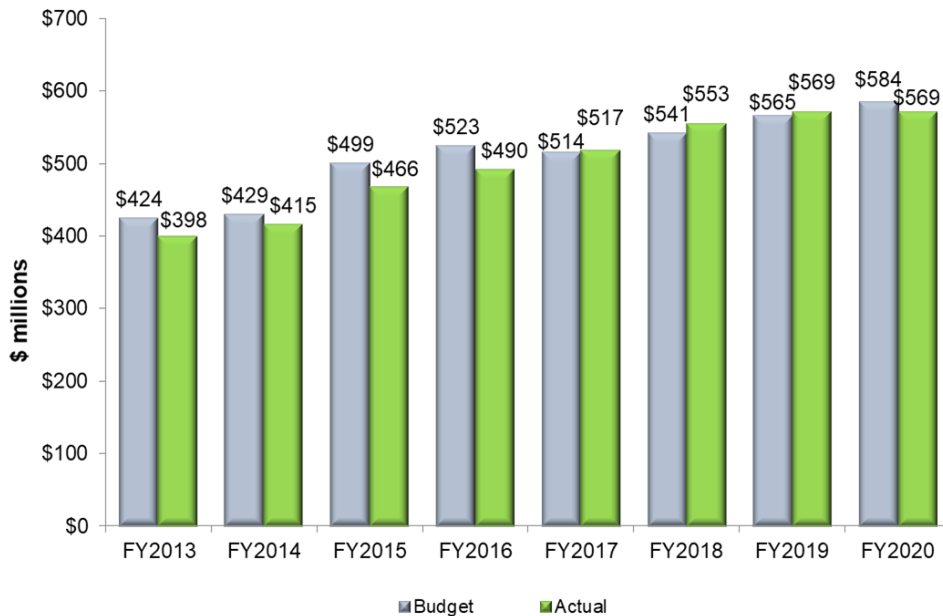
Solid Financial Performance with Revenues Consistently Exceeding Expenses

- FY 2020 Actual Operating cash receipts increased by 15.6 million to \$710.1 million or 2.3 percent
- FY 2020 Actual Operating expenses decreased by \$0.5 million to \$569.3 million, or -0.1 percent
- FY 2020 Budget to actual results showed both revenues exceeding and expenses below budget

Comparative Operating Receipts



Expenditure Budget to Actual



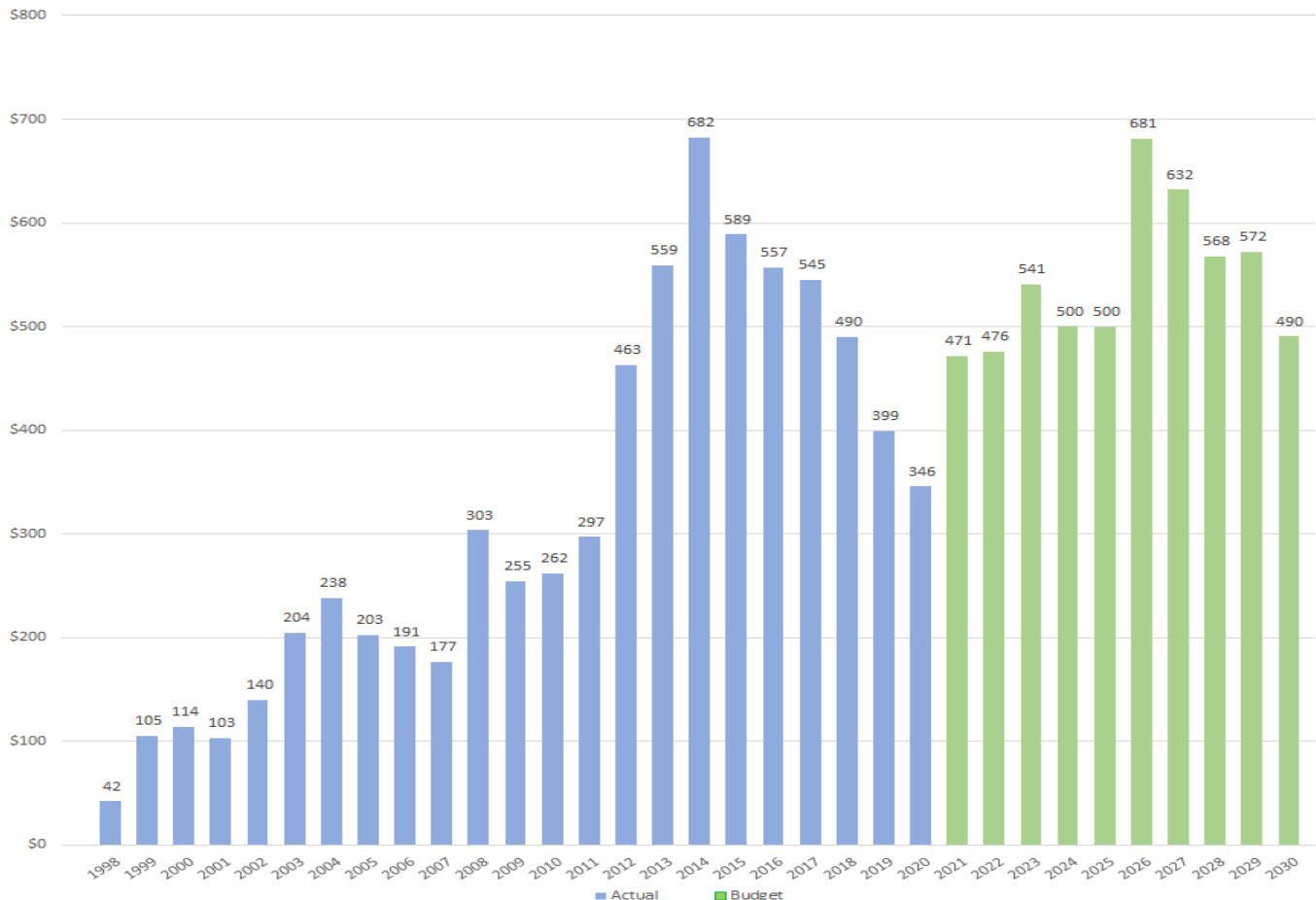
\$ in thousands

The \$5.43 Billion Ten-Year CIP Protects Our Assets While Leveraging Long-Term Debt

The FY 2021 – FY 2030 financial plan anticipates capital disbursements of \$5.43 billion. Over the last 23 years, \$7.26 billion has been invested on DC Water’s system averaging approximately \$315.8 million per year. Projected annual spending ranges from \$471 million to nearly \$681 million as shown in the chart below (or approximately \$543 million per year from FY 2021 – FY 2030). The financing of DC Water’s capital program comes from four primary sources, as more fully described in this section. The amount of EPA grant funding is defined by annual federal appropriations, while jurisdictional capital contributions are based on a fixed percentage of Blue Plains and other shared facilities. The remainder of the program is funded with DC Water’s debt and Pay-Go financing from operations.

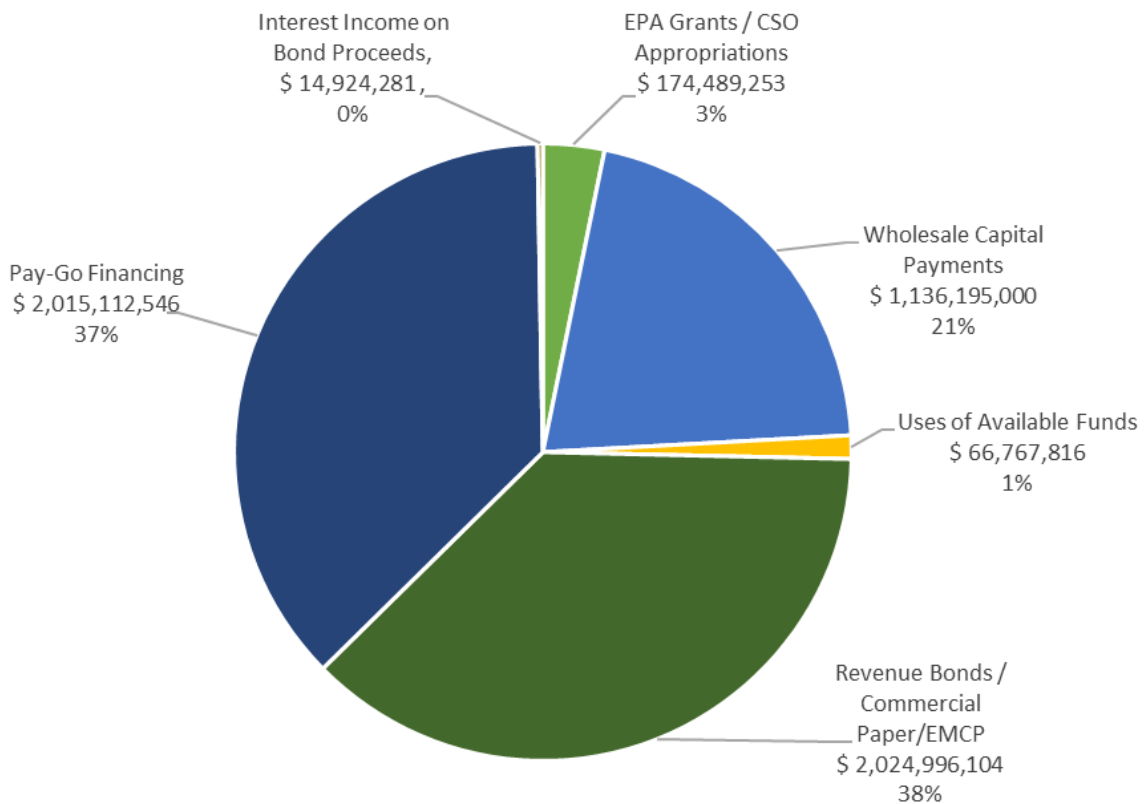
As noted earlier in this section, DC Water developed a comprehensive financing plan in FY 1999 with the dual goals of 1) securing the lowest cost of capital possible, and 2) maximizing administrative and operating flexibility. The plan includes the following components: Grants; wholesale capital payments; permanent financing; Interim financing and Pay-Go.

**Historical and Projected Capital Spending
FY 1998 – FY 2030**



FY 2021 – FY 2030 Capital Improvement Program Sources of Funds

	FY2021 - 2030 PLAN TOTAL	Percent of Total
EPA Grants / CSO Appropriations	174,489,253	3.2%
Wholesale Capital Payments	1,136,195,000	20.9%
Uses of Available Funds	66,767,816	1.2%
Revenue Bonds / Commercial Paper/EMCP	2,024,996,104	37.3%
Pay-Go Financing	2,015,112,546	37.1%
Interest Income on Bond Proceeds	14,924,281	0.3%
TOTAL SOURCES	\$ 5,432,485,000	100.0%



- **EPA and CSO Grants** – For FY 2021 – FY 2030, EPA and CSO grants represent only 3.2 percent of the funding for 10-year capital program. DC Water currently plans to finance part of its Ten-Year CIP through EPA grant funding for certain eligible projects under the Clean Water and Safe Drinking Water Acts. In general, the District of Columbia projects carried out by DC Water are supported by approximately one percent of the available annual funding through revolving fund programs associated with the Clean Water and Safe Drinking Water Acts. In addition, DC Water has received \$268.8 million in Congressional appropriations for the Clean Rivers Project (aka CSO LTCP) as of September 30, 2020.
- **Wholesale Capital Payments** - Approximately 60 percent of the capacity of DC Water’s wastewater treatment facilities are contractually committed to provide wholesale service to suburban jurisdictions under various contracts. Montgomery and Prince George's Counties (through the Washington Suburban Sanitary Commission (WSSC), Fairfax County, and the Loudoun County Sanitation Authority pay a proportionate share of capital-related costs equal to their share of contracted capacity at Blue Plains. DC Water anticipates 20.9 percent of its capital funding will come from wholesale customers.
- **Revenue Bonds/Commercial Paper/EMCP** - Currently debt financing represents only 37.3 percent of the funding in the ten-year capital program.
- **Pay-Go (Internal) Financing** – ‘Pay-go’ financing shall mean any cash financing of capital projects. The amount transferred from operations to the capital program each year shall be cash in excess of all operating requirements or restricted use. Approximately 37.1 percent of total funding for the FY 2021 – FY 2030 plan is projected to come from PAY-GO financing, which strikes an appropriate balance between maintaining moderate debt levels and financing provided by current ratepayers.
Pay-Go funds will be used in a manner consistent with our financial policies: 1) to fund capital financing or for repayment of higher cost debt and that whenever possible, the least costly capital financing be used for capital projects, 2) to produce the lowest practical cost of debt for financing its capital projects.

FY 2020 and FY 2021 Debt Issuance Plans & Debt Service Assumptions

DC Water issued \$300 million in new bonds for Series 2019 A, B, C, and D, additionally refunding \$343 million of Series 2013A bonds in the first quarter of FY 2020. Moreover, DC Water capitalized on the volatile investment market in the third quarter of FY 2020, by refunding \$300 million of Series 2012 A and C bonds with a Forward Direct Purchase (FDP). The FDP does not afford the ability to accelerate savings prior to FY2022. The deal will be completed in July 2022.

Based on current capital project spending, DC Water plans to: 1) issue approximately \$300 - \$400 million in new bonds between the first and second quarters of FY 2022. For the purpose of financial planning, we have assumed fixed rate, tax-exempt bonds at 5.0 percent for FY 2022. Similarly, for the remainder of the ten-year plan we have assumed issuing long term bonds at 5.5 percent for FY 2023 and FY 2024, 6.0 percent for FY 2025 – FY 2029 and 6.5 percent for FY 2030; and 2) issue commercial paper/EMCP for interim financing. The ten-year plan assumes a variable interest rate of 2.5 percent in FY 2022 – FY 2030. To yield the best possible interest rate savings, our debt portfolio is evaluated on a regular basis. Cash balances

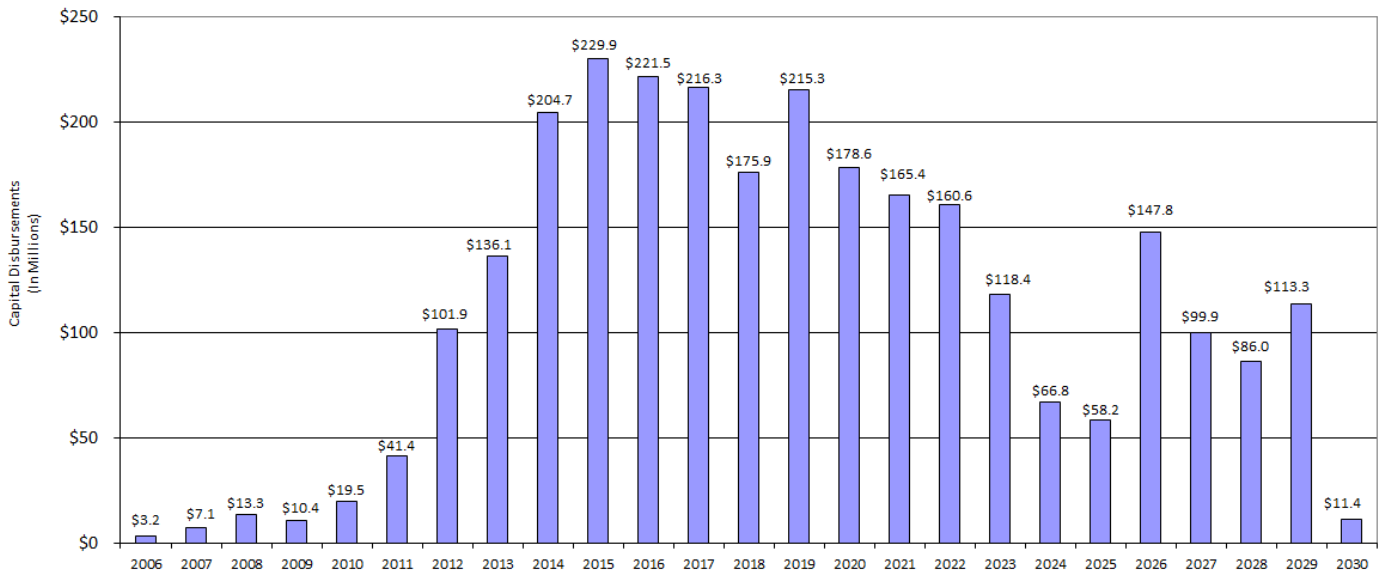
totaled \$278.1 million at the end of FY 2020. As detailed below, this includes \$90.2 million for rate stabilization fund. Over the next ten years, cash balances are projected to meet the Board-required reserve level, of 120 days of operating and maintenance expense budget or no less than \$125.5 million.

DC Clean Rivers Project

In December 2004, the Board reached agreement with the federal government on the proposed DC Clean Rivers Project LTCP and entered into a related consent decree. Lifetime capital costs for this project currently stands at approximately \$2.8 billion and this year’s approved ten-year plan includes \$1.03 billion of projected disbursements. Projected spending by fiscal year for the Clean Rivers Project is shown in the next chart.

In FY 2020, DC Water received federal funding of \$8.0 million for the Combined Sewer Overflow Long Term Control Plan Service Area. However, as the project spending increases over the years, so does the projected Clean Rivers Impervious Surface Area Charge (CRIAC) fee. If additional federal assistance is provided, the Clean Rivers IAC would increase at a slower pace than this ten-year plan proposal assumes. As noted earlier, this plan assumes jurisdictional contributions, for joint use Projects, to the Clean Rivers Project under the IMA of 7.1 percent beginning in FY 2011. Please see section IV for more details on the Clean Rivers IAC.

Clean Rivers CSO LTCP Disbursements by Fiscal Year



Cash balances totaled \$278.1 million at the end of FY 2020. As detailed below, this includes \$90.24 million for rate stabilization. Over the next ten years, cash balances are projected to meet the Board-required reserve level, of 120 days of operating and maintenance budget or no less than \$125.5 million.

DC Water’s operating reserve includes the following components:

FY 2020 Year - End Cash (\$ in thousands)

Board-Adopted Operating Reserves (120 Days of O&M)	
60 Day Operating Reserve (Indenture Required)	\$ 52,422
Renewal & Replacement Reserve (Indenture Required)	35,000
Undesignated Reserve	38,078
Total Operating Revenue	\$ 125,500
Other Reserves	
Rate Stabilization Fund Reserve	\$ 90,244
DC Insurance Reserve	1,000
Total Other Reserve	\$ 91,244
Total Reserves	
Cash in Excess of Reserves ⁽¹⁾	\$ 61,327
Total Cash Position ⁽¹⁾	\$ 278,071

(1) Excludes Debt Service Reserve Funds

- **Indenture-Required Operating Reserve** - This reserve is required by DC Water’s bond indenture and is equivalent to two months' operations and maintenance expenses from the prior year, or approximately \$52.4 million in FY 2020.
- **Renewal & Replacement Reserve** - In FY 2018 the Board reaffirmed the amount of \$35 million in the financing policy. In 2018, Independent Financial Consultant reviewed R&R Reserves and recommended to maintain it at \$35 million. The recommendations were presented to the Board for review and approval. The reserve level will be reviewed every five years by DC Water’s independent rate consultants in conjunction with the indenture-required assessment of the physical condition of the system.

- **Undesignated Reserve** - After allocating portions of the operating and maintenance reserve to the reserves listed above, the amount that remains (approximately \$38.1 million for FY 2020) is DC Water's undesignated reserve and is available for other contingencies.

DC Water has other reserves that are available for very specific circumstances:

- **Rate Stabilization Fund (RSF)** - Consistent with the Board's financial policies and as envisioned in the bond indenture, this fund is to be established to mitigate large annual rate increases. This year's plan reflects continued use of the rate stabilization fund, which totaled \$90.2 million as of September 2020. The year-end RSF balance is projected at \$87.7 million for FY2021 and \$77.2 million for FY2022. Future deposits to the rate stabilization fund will be determined annually based on financial performance in that fiscal year and updated ten-year capital and operating forecasts. The current plan anticipates \$77.2 million available at the end of FY 2022 – 2030.
- **Debt Service Reserve Funds** - The supplemental bond indenture associated with the Series 1998 senior lien bonds requires DC Water to maintain a debt service reserve fund. This reserve which is in addition to the 120 days operating and maintenance reserve, is held by DC Water's trustee and can only be used if net revenues are insufficient to meet the next debt service payment. DC Water earns interest on this reserve that is included in other operating revenue and is used to offset annual debt service payments. The amount of interest earnings that DC Water can retain on the debt service reserve fund is limited by federal arbitrage restrictions.



Approved FY 2022 Budgets

Section IV: RATES AND REVENUES

Times are challenging. We are sure you have some questions.

let's talk



2020 Virtual Town Hall Meeting

CEO and General Manager David L. Gadis

welcome customers!



let's talk

Water Infrastructure

Half installed before 1940 Median age is 80 years old



Expected service life is 100-120 years



1,300 miles of interconnected pipes



let's talk

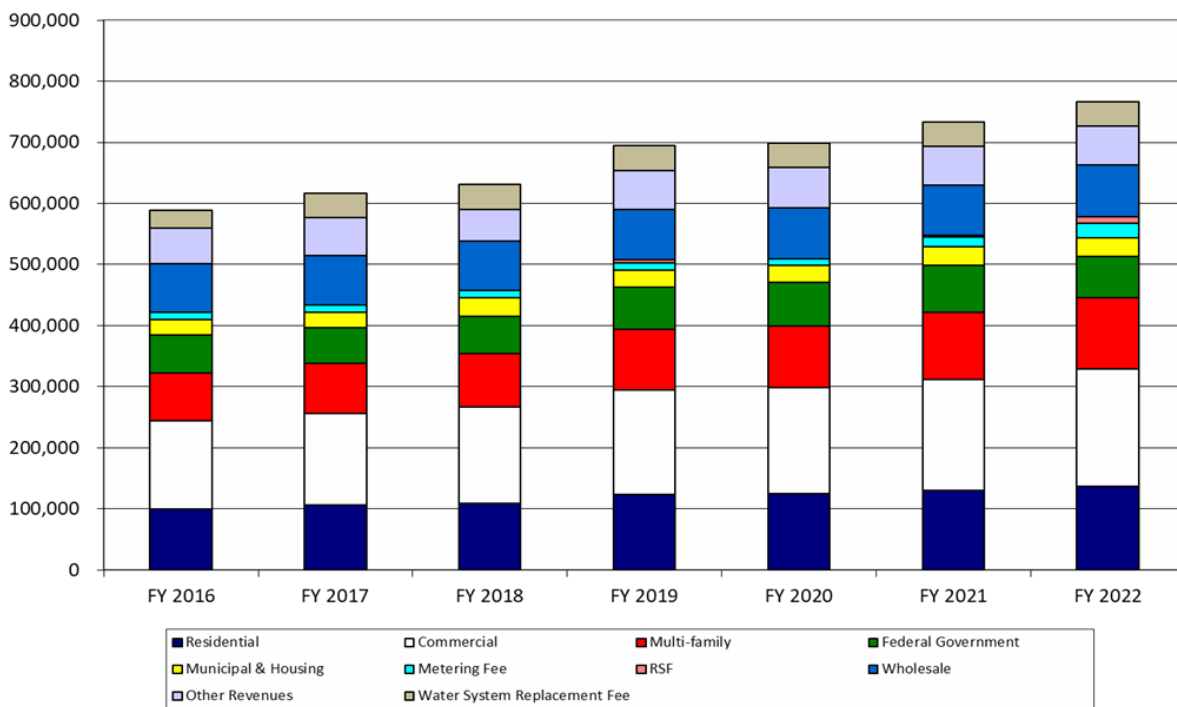
Rates and Fees

DC Water 2020 Virtual Town Hall Meeting



In order to provide continuous delivery of water and wastewater services, DC Water must ensure a reliable and predictable revenue stream that cover operating and maintenance (O&M) costs and meet or exceed all Board and other financial requirements. DC Water has a diverse customer base and thus receives cash receipts from a variety of sources. This diversity mitigates reliance on any single customer and provides a level of revenue stability.

Historical and Projected Cash Receipts (\$000's)



The COVID-19 has an impact on consumption and revenue. The original approved budget for FY 2021 assumed revenue of \$733.7 million from consumption of 32,436,000 Ccf. The current forecast is that the overall consumption will be lower by 7.4 percent at 30,025,915 Ccf as compared to original approved budget. The revenue projected in the revised budget is \$692.3 million. The impact of COVID-19 on revenue could be a shortfall of \$30 to \$60 million. The major assumptions are:

- Projected FY 2021 consumption decline of 2.4 million Ccf
- Assumed decline in consumption of Commercial, Federal and Municipal categories
- Assumed increase in consumption of Residential, Multi-family and DC Housing Authority
- Reconnected Residential customers and suspended disconnections for non-payment
- Suspended late fees. Assumed \$0.5 million per month decrease in revenue
- Suspended placing liens
- Partnered with District for the Emergency Relief to District customers
- Assumed \$1.0 million per month increase in delinquencies
- Assumed decrease in Permit Fees, Development Contractors Fees (water & sewer), Turn On/Turn Off Fee, Interest Earnings, System Availability Fee and Waste Hauling Disposal Fees
- For FY 2022 and beyond, projected that the Commercial consumption decline would continue

Historical and Projected Operating Cash Receipts (\$000's)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
	Actual	Actual	Actual	Actual	Actual	Revised	Revised
Residential	100,032	106,417	109,135	123,866	122,774	118,771	129,062
Commercial	144,355	149,991	158,021	170,764	161,824	156,067	170,209
Multi-family	77,566	82,238	86,431	99,573	112,286	111,501	123,523
Sub-Total Residential, Commercial and Multi-family	321,953	338,646	353,587	394,203	396,884	386,339	422,794
Federal Government (1)	62,989	57,540	62,100	68,163	71,954	79,082	81,339
District Government	15,988	17,628	21,362	17,356	18,067	16,502	18,668
D.C. Housing Authority	8,772	8,560	8,704	11,136	10,998	12,265	12,592
Transfer from Rate Stabilization Fund	-	-	-	6,000	-	2,500	10,500
Water System Replacement Fee (WSRF)	30,287	40,522	40,896	40,660	41,456	39,717	39,717
Metering Fee	11,479	11,566	11,745	11,613	11,829	15,405	24,083
Total Retail	451,467	474,462	498,394	549,130	551,188	551,810	609,693
IMA Wastewater Charges	71,970	72,931	71,080	72,029	69,020	71,543	74,226
Potomac Interceptor Wastewater Charges	7,814	8,205	9,942	10,087	10,136	10,167	10,443
Total Wholesale	79,784	81,136	81,022	82,116	79,157	81,710	84,669
District Stormwater Revenue (2)	944	1,025	1,247	1,503	1,143	1,000	1,000
Misc. Rev. (e.g. water tap installation, fire hydrant usage, etc.)	33,703	37,748	26,881	35,020	47,017	27,513	28,105
Washington Aqueduct Debt Service Revenue for Falls Church & Arling	193	193	193	193	193	193	193
Interest Income (including interest on Bond Debt Service Reserve Fu	1,253	1,676	2,200	3,392	4,582	2,291	3,437
System Availability Fee (SAF)	-	-	-	2,006	5,271	7,000	7,700
Transfer from DC PILOT/ROW Fund	-	-	-	-	-	-	-
DC Contribution of 50% PILOT Fund to DCW	-	-	-	-	-	-	-
Right-of-Way Fee	5,100	5,100	5,100	5,100	5,100	5,100	5,100
PILOT Fee	16,885	15,677	16,136	15,976	16,446	15,644	16,488
Total Other	58,078	61,419	51,757	63,191	79,752	58,742	62,023
Total Operating Cash Receipts	589,329	617,017	631,173	694,437	710,097	692,262	756,385

- (1) Historical actuals are presented on revenue basis. Projected amounts shown are billed revenues. Actual Federal receipts are a combination of current year projected revenues and prior year adjustments, which are presented as reserve items. See Section III for further explanation.
- (2) Reflects District stormwater fee revenue that will fund DC Water's share of District stormwater permit compliance activities, and will not be funded through DC Water's retail rates or other DC Water revenue sources. See Section III for further explanation.

CUSTOMER CATEGORIES AND ACCOUNTS

As of September 30, 2020, DC Water had 126,143 active, metered water and wastewater accounts. In addition, there are 6,333 separate accounts that are billed only for impervious surface. DC Water’s customers are classified as retail (residential, multi-family and non-residential) and wholesale customers only. However, within the retail customer class, DC Water tracks receipts and associated consumption at a more detailed level in order to analyze trends and service characteristics. Retail customers’ characteristics can be viewed in six groups: residential, multi-family, commercial, federal, DC Municipal and Housing Authority.

FY 2020 revenue receipts are actual as of September 30, 2020.

In FY 2011, a study of the demand characteristics of DC Water customers was undertaken to determine if additional customer classes should be defined for the purpose of cost allocation. Review of 12 months of data (May 2010 to April 2011) revealed, (among other things) that there is a difference in peaking characteristics between many of the customer groups. Generally, the federal customers have the highest peaking factor, with commercial customers having the next highest peaking factor and municipal, residential, multi-family and Housing Authority customers having the lowest peaking factor. Segmentation of water customers is typically done by class-based peak use characteristics with the higher peaking customers allocated more of the system costs (primarily driven by electricity and system capacity costs).

This information helped to inform an analysis of alternative rate structures within the FY 2012 Cost of Service Study (COS). Among the alternatives reviewed, the study reviewed different volumetric rates by customer class/category based on the different demands they place on the system. Differentiation could be based on water peaking characteristics or discharge strength contributions (wastewater). While it was recommended that additional analysis be undertaken in for any further consideration of discharge strength differentiation, management recommended that a new customer class, “Multi-Family”, be created to acknowledge the similarity of peaking characteristics with other residential customers, yet provide transparency between single family and multi-family residential units. (Multi-Family residential facilities will continue to be defined as those facilities with 4 or more residential units.) The new Multi-family class has been effective from October 1, 2013. The three customer classes are defined as follows:

Residential – a customer whose premises is a single-family dwelling unit used for domestic purposes, whether as a row, detached or semi-detached structure, or as a single dwelling unit within an apartment building, or as a single dwelling unit within a condominium, or as a single dwelling unit within a cooperative housing association, where each unit is served by a separate service line and is individually metered and used for domestic purposes; or a multi-family structure or development of less than four (4) single-family, apartment, condominium, or cooperative housing association dwelling units where all the units are used for domestic purposes and served by a single service line that is master metered; excluding a premises operated as a nursing home, dormitory or transient housing business, including, but not limited to a bed and breakfast, hotel, motel, inn, boarding house or rooming house.

Multi-Family – a customer whose premises is a multi-family structure or development (such as an apartment, condominium, or cooperative housing association) used for domestic purposes, with four or more single-family, apartment, condominium, or cooperative housing association residential dwelling units served by the same service line that is master metered; excluding a premises operated as a nursing home, dormitory or transient housing business, including, but not limited to a bed and breakfast, hotel, motel, inn, boarding house or rooming house.

Non-residential – all customers not within either the residential or multifamily class including customers whose premises is comprised of one or more units that is not used for domestic purposes and all units are served by the same service line that is master metered.

In FY 2015, a COS was conducted by Independent Financial Consultants. These recommendations were incorporated in the FY 2016 rate proposal, and were approved by the Board. These are summarized below:

- New class-based rate structure including Lifeline rate
- Based on similar peaking ratios, District of Columbia Housing Authority (DCHA) category moved to Multi-family class

In FY 2018, a COS was conducted by Independent Financial Consultants, which provided several recommendations that were incorporated in the FY 2019 rate proposal, and were approved by the Board.

- A reallocation of the costs associated with the Clean Rivers Impervious Area Charge (CRIAC) to the sewer utility results in a reduction in the CRIAC and an increase in the sewer volumetric charge.
- The revenue collected from the Water System Replacement Fee (WSRF), originally designed to fund the annual costs of 1 percent of DC Water’s water service line renewal and replacement program, has been used in its entirety to offset the water utility’s revenue requirements, resulting in a decrease to all water volumetric charges.
- Although these two reallocations cause shifts in the cost structure, and subsequent rates, DC Water customers will see only minimal changes to their bills

In FY 2020, DC Water conducted a Cost of Service Study (COS) to align the COS with the multi-year rate proposals, therefore both will be done every two years going forward. Previously, Cost of Service study was conducted every three years. The COS consist of three components: i) revenue sufficiency analysis – to ensure that the revenues cover the costs that DC Water incurs; ii) cost of service analysis/rate equity – to ensure that the rates are equitably recovering the costs of service provided to customers; and alternative rate structure analysis – to ensure that DC Water meets its priority pricing objectives. The results of the COS support the multi-year rate, charges and fee proposals for FY 2021 and FY 2022.

In FY 2020, an Independent Review of Rate Structure and Customer Assistance Programs was conducted to review and benchmark DC Water’s rates, rate structure and Customer Assistance Programs (CAP) to peer utilities. The findings of the study concurred that DC Water’s current customer class structure, monthly water lifeline threshold of 4 Ccf, ERU basis for recovering the CRIAC charge, CAP bill discount and temporary assistance programs are consistent with industry standards for ratemaking

Residential, commercial and multi-family receipts are projected to decrease in FY 2021 by approximately \$10.5 million, or 2.7 percent, over the FY 2020 level due to:

- Board-approved volumetric retail rate (water and sewer) increase of 9.9 percent, effective October 1, 2020
- Board-approved Clean Rivers Project CRIAC rate decreased from \$20.94 in FY 2020 to \$19.52 per ERU in FY 2021
- Impact of COVID-19, projected 2.4 million CCF or 7.4 percent decline in consumption in FY 2021 Revised Budget as compared to original approved budget.
- In FY 2020, DC Water’s collections on its retail receivables was impacted due to COVID-19, with accounts receivable over 90 days at \$17.9 million as of September 30, 2020, which is \$7.3 million higher than FY 2019. DC Water will continue its aggressive collection efforts
- The customer assistance program reduces projected revenues by approximately \$2.4 million

Residential, commercial and multi-family customers:

- In FY 2021, residential customers include 106,656 accounts that comprise 17.2 percent of the total operating revenues. Given the large number of individual account holders who are in residential, it is unlikely that any one customer will have a major impact on the DC Water cash receipts.
- Multi-family customers house 4 or more units within one building with a master meter. In FY 2021, there are 8,414 accounts that comprise of 16.1 percent of the total operating revenues.

The commercial group of customers includes a number of nationally recognized universities and regional hospitals, national associations, lobbying firms, major law firms and hotels. This group has 8,985 accounts and will comprise of 22.5 percent of the projected FY 2021 operating revenues. In FY 2022, they will comprise of 22.5 percent of the fiscal year operating revenue.

FY 2021 projections for Residential, Multi-Family and Commercial customers reflect a decrease of \$10.5 million, or 2.7 percent from FY 2020 due primarily to proposed retail rate increase of 9.90 percent (combined water and sewer volumetric rates), a decrease of \$1.42 monthly ERU fee for the Clean Rivers IAC and substantial decline in consumption due to COVID-19. For FY 2022, the revenue increase is projected at \$36.5 million or 9.4 percent over FY 2021 due to the projected rate increase of 7.8 percent and a decrease of \$1.12 monthly ERU for CRIAC. In FY 2022, 1.0 percent conservation over originally projected FY 2021 consumption has been assumed except for commercial where 15 percent decline is assumed. In FY 2023 and onwards, one percent decrease in consumption has been assumed due to conservation. However, it is projected that the commercial consumption decline of 15 percent will continue beyond FY 2022.

The Federal customers’ revised FY 2021 receipts are projected to total \$79.1 million; an increase of \$7.1 million, or 9.9 percent over FY 2020. In FY 2022, Federal revenues are projected to be \$81.3 million or 10.8 percent of the total operating revenues. The projected federal revenues will be higher by \$7.1 million or 9.9 percent in FY 2021 due to estimated rate and consumption assumptions provided under the federal billing policies. It may be noted that in order to reduce costs, the federal government issued an executive order to federal agencies to reduce water and electricity consumption, coupled with the federal telework and commuting act to reduce footprint in the District, transfer of federal properties and large metering issues at restricted federal properties. In FY 2022, Federal receipts are projected to increase by \$2.3 million or 2.9 percent.

Under existing federal billing legislation, federal billings are prepared on an estimated basis eighteen months in advance of the start of the fiscal year (e.g., the FY 2021 billing was prepared in April 2019), and are based on the current consumption estimates and projected rate increases as included in the current ten-year plan. These estimates are then reconciled with actual consumption and rate increases, and an adjustment is made in the subsequent year's billing (e.g., the reconciliation of FY 2021 estimated vs. actual consumption and rate increases will be included in the FY 2024 billing, to be prepared in April 2022.) Federal revenues in the ten-year plan are presented on a revenue basis, net of any adjustments for prior year reconciliations which are accounted for as reserve items. Consistent with this methodology, revised FY 2021 federal revenues reflect the final billing sent to the federal government in April 2019 net of the adjustment for the prior year (FY 2018) reconciliation. The Authority serves many facilities of the federal government as well as the District of Columbia. The largest federal accounts include General Services Administration, U.S. Congress, the Smithsonian Institution, Department of the Navy, National Park Service and the Department of Defense in both DC and VA.

Municipal & D.C. Housing Authority – FY 2021 receipts from the District of Columbia government and the District of Columbia Housing Authority are projected at \$28.8 million, a decrease of \$0.3 million or 1.0 percent below FY 2020. In 2022, receipts from these organizations are projected to total \$31.3 million, an increase of \$2.5 million, or 8.7 percent, mainly due to increases in retail volumetric rates.

- The municipal customer group includes 524 accounts under the authority of the District of Columbia government. This includes offices and facilities for various government agencies and activities such as education, regulatory affairs and general government operations. This group will comprise of 2.4 percent of the FY 2021 operating budget, and 2.5 percent of the proposed FY 2022 budget.
- The D.C. Housing Authority has multiple accounts that include public housing at various facilities throughout the District of Columbia. They have 1,077 accounts. Their annual billings make up only 1.8 percent of the FY 2021 cash receipts and 1.7 percent of the proposed FY 2022 cash receipts .

Wholesale customer revenue - FY 2021 revenues are projected at \$81.7 million, an increase of \$2.6 million or 3.2 percent over FY 2020. In FY 2022, the Wholesale revenues are projected to increase by \$3.0 million or 3.6 percent to \$84.7 million. DC Water provides wholesale wastewater treatment services to User Jurisdictions at the Blue Plains Plant. The wholesale customers' share of operating costs at Blue Plains and other multi-jurisdictional use facilities (MJUFs) are recovered in accordance with the Blue Plains Intermunicipal Agreement of 2012, effective April 3, 2013, (which replaces Blue Plains Intermunicipal Agreement of 1985), the Potomac Interceptor Agreements and the Loudoun County Sanitation Authority Agreement (as discussed in more detail in "THE SYSTEM – The Wastewater System"), and are based on actual costs of operating and maintaining the plant and the collection facilities, prorated to each User Jurisdiction based on its respective actual share of wastewater flows. The User Jurisdiction's share of capital costs is based on each User Jurisdiction's share of capacity allocations in the Plant. Both operating and capital payments are made on a quarterly basis. Capital-related charges are billed quarterly with payments due on the 15th day of the second month following the end of the quarter. The operating and maintenance related charges are billed annually by mid-October and payments are due on November, February, May and August. Receipts are projected to be 11.8 percent, and 11.2 percent of total receipts in

FY 2021 and FY 2022 respectively. In FY 2017, DC Water began billing our wholesale customers for the operating and maintenance costs of MJUFs, which include twelve interceptors and four pumping stations that carry suburban wastewater to the Blue Plains Plant. Following each fiscal year, the Authority prepares a reconciliation that determines the actual costs and each wholesale customer’s appropriate share of such costs. Adjustments are then billed or credited to the wholesale customers in the first quarter of the subsequent fiscal year. The wholesale customers include: Washington Suburban Sanitary Commission (WSSC), Loudoun County, VA, Fairfax County, VA and a group of small customers of the Potomac Interceptor (PI). The PI customers are comprised of Dulles International Airport (MWAA), National Park Service, Department of Navy and the Town of Vienna.

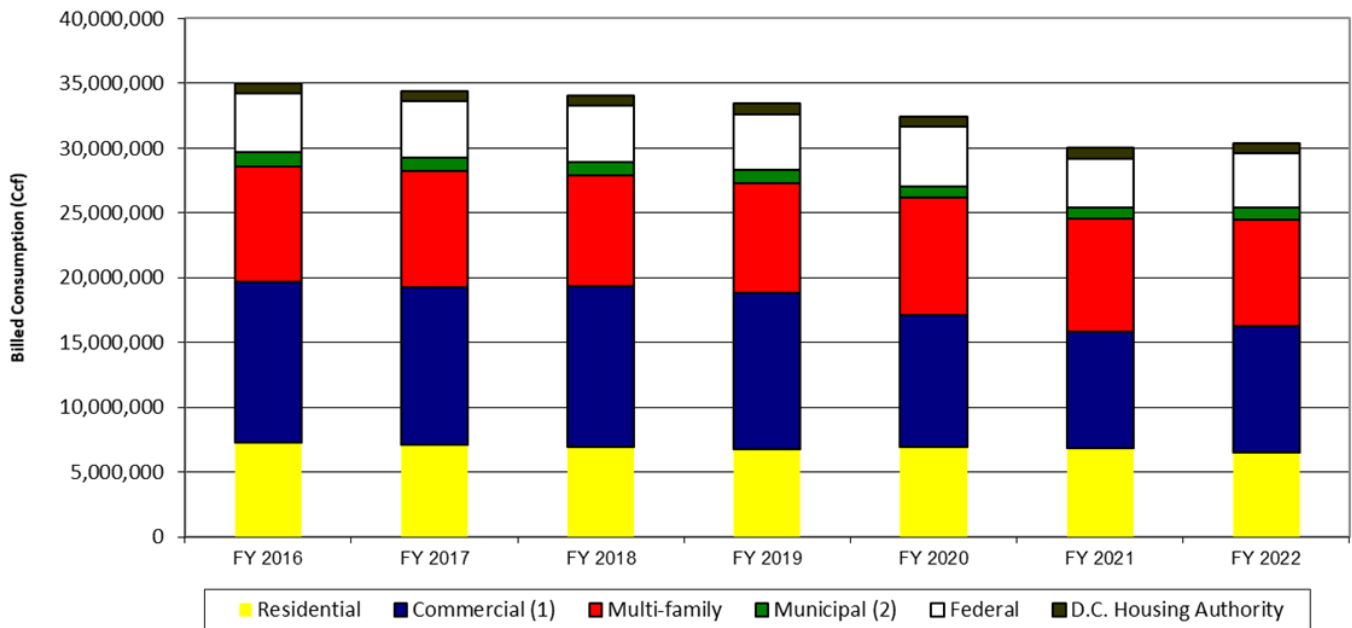
CONSUMPTION

While wholesale customers pay for their proportional share of wastewater services, retail customers are billed based upon metered consumption. Therefore, variations in consumption have a direct impact upon DC Water retail rates. The consumption for DC retail customers declined by 1.8 percent in FY 2019. Given the uncertainty of the current economy as well as the federal government’s goal to close some neighboring federal facilities and implement a number of conservation best practices over the next few years, the original revenue projections assumed a 1.5 percent decline in FY 2020 over FY 2019 actual, 1.5 percent decline in FY 2021 and 1 percent decline in FY 2022 and beyond. However, due to impact of COVID-19, the consumption forecast was updated in the 2021 Revised Budget.

Assumptions for reduced consumption due to impact of COVID-19 are:

- 2.4 million Ccf or 7.4 percent decline in consumption in FY 2021 Revised Budget as compared to original approved budget
- For the first six months of FY 2021, a 25 percent decline in consumption (versus budget) for Commercial customers, a 20 percent decline for Municipal customers, and a 15 percent decline for Federal customers
- For the next six months of FY 2021, a 20 percent decline in consumption for the Commercial category, a 15 percent decline for Municipal, and 10 percent decline for Federal customers
- A four percent increase in consumption for Residential, six percent for Multi-family, and three percent DC Housing Authority
- For FY 2022 and beyond, projected that the Commercial consumption of 15 percent would continue

Historical and Projected Billed Consumption (Ccf)



Historical and Projected Billed Consumption (Ccf)

	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Projected	FY 2022 Projected
Residential	7,262,184	7,108,543	6,961,844	6,793,773	6,980,738	6,855,680	6,526,000
Commercial (1)	12,440,516	12,144,071	12,353,040	12,073,263	10,154,277	9,007,050	9,780,100
Multi-family	8,889,754	9,013,474	8,574,676	8,461,956	9,017,482	8,702,600	8,128,000
Municipal (2)	1,110,717	993,799	1,024,775	1,002,306	897,857	842,975	964,000
Federal	4,493,362	4,335,937	4,339,051	4,287,024	4,587,318	3,807,000	4,209,000
D.C. Housing Authority	761,401	765,900	800,225	811,671	794,434	810,610	779,000
	<u>34,957,934</u>	<u>34,361,724</u>	<u>34,053,611</u>	<u>33,429,993</u>	<u>32,432,106</u>	<u>30,025,915</u>	<u>30,386,100</u>

- (1) Reflects consumption at Commercial facilities and selected facilities at Soldiers' Home.
- (2) Reflects consumption at District of Columbia Government facilities and DC Water facilities
- (3) Ccf - hundred cubic feet or 748 gallons

COST OF SERVICE STUDIES:

In FY 2010, DC Water’s Independent Financial Consultants performed a Cost of Service (COS) Study to include objectives from senior staff on prioritizing DC Water’s pricing objectives. One of the objectives noted was the Class-Based Volumetric Differentiation.

In FY 2011, a Customer Segmentation Study was performed to identify classes of customers for the purpose of rate-setting, planning, supply management and cost analysis among others. Typically, this classification is based on: A) general service characteristics, and B) demand patterns. Each class is assumed to have some- what different needs and progressively higher demands than the previous class. Most water utilities typically have three principal classes of customers: A) Residential, B) Commercial, and C) Industrial. DC Water has two customer classes: A) Residential and B) Non-Residential.

Furthermore, the FY 2012 Cost of Service Study identified several customer categories that demonstrated a reasonable level of differentiation in terms of peak usage. The customer classes identified included A. Residential, B. Multi-family and C. Non-residential. DC Water added a new class of customer, Multi-family effective October 1, 2014.

In FY 2015, DC Water successfully completed its Cost of Service Study (COS). This study is undertaken every three years to review and certify DC Water’s water and wastewater volumetric rates, Clean Rivers Impervious Surface Area Charge (CRIAC) and other DC Water fees and charges to ensure that revenues are sufficient to recover projected revenue requirements, that Board rate setting policies are followed, and that rates are allocated equitably.

DC Water expanded the COS to include alternative rate structure analysis that would more effectively meet DC Water’s highest priority pricing objectives:

- Lifeline Rates
- Classed-based Volumetric Rates
- Water System Replacement Fee (WSRF)
- System Availability Fee (SAF)

In FY 2018, a Cost of Service Study (COS) was conducted by Independent Financial Consultants, which provided several recommendations that were incorporated in the FY 2019 rate proposal, and were approved by the Board.

- A reallocation of the costs associated with the Clean Rivers Impervious Area Charge (CRIAC) to the sewer utility results in a reduction in the CRIAC and an increase in the sewer volumetric charge.
- The revenue collected from the Water System Replacement Fee (WSRF), originally designed to fund the annual costs of 1 percent of DC Water’s water service line renewal and replacement program, has been used in its entirety to offset the water utility’s revenue requirements, resulting in a decrease to all water volumetric charges.

- Although these two reallocations cause shifts in the cost structure, and subsequent rates, DC Water customers will see only minimal changes to their bills.

In FY 2020, DC Water conducted a Cost of Service Study (COS) to align the COS with the multi-year rate proposals, therefore both will be done every two years going forward. Previously, Cost of Service study was conducted every three years. The COS consist of three components: i) revenue sufficiency analysis – to ensure that the revenues cover the costs that DC Water incurs; ii) cost of service analysis/rate equity – to ensure that the rates are equitably recovering the costs of service provided to customers; and iii) alternative rate structure analysis – to ensure that DC Water meets its priority pricing objectives. The results of the COS support the multi-year rate, charges and fee proposals for FY 2021 and FY 2022.

In FY 2020, an Independent Review of Rate Structure and Customer Assistance Programs was conducted to review and benchmark DC Water’s rates, rate structure and Customer Assistance Programs (CAP) to peer utilities. The findings of the study concurred that DC Water’s current customer class structure, monthly water lifeline threshold of 4 Ccf, ERU basis for recovering the CRIAC charge, CAP bill discount and temporary assistance programs are consistent with industry standards for ratemaking.

Lifeline Rate

The lifeline rate allows for the first 4 Ccf of Single Family Residential (SFR) water use to reflect baseline usage by residential customers without peaking costs. The lifeline water rate provides an economic benefit to low-volume Residential customers, while spreading the cost of peaking to high-volume Residential customers.

Class-based Rate Structure

The Independent Financial Consultants analyzed rate differentiation based on the peaking demands of each customer class. They also analyzed consumption patterns to better understand how customers use water and how their use of water may inform selection of an optimized rate structure. Based upon the analysis of the peak demand of different customer classes as well as affordability considerations, the Board approved establishing class-based water volumetric rates for Residential, Multi-family and Non-residential customers effective from October 1, 2015 (FY 2016). The class-based water volumetric rates for FY 2020 to FY 2022 are listed below:

Water Volumetric	Class-Based (w/ lifeline)		
	FY 2020	FY 2021	FY 2022
Residential - 0-4 Ccf	\$3.06	\$3.49	\$3.63
Residential - >4 Ccf	\$4.10	\$4.50	\$4.74
Multi-Family / DC Housing	\$3.54	\$3.96	\$4.15
Non-Residential	\$4.25	\$4.65	\$4.91

Water System Replacement Fee (WSRF)

Effective October 1, 2015 (FY 2016), DC Water modified its existing rate structure and implemented a new meter-based Water System Replacement Fee (WSRF) in order to recover the cost of the 1 percent renewal and replacement program for water service lines. It is anticipated that the Water System Replacement Fee (WSRF) will generate approximately \$39.7 million per year from fiscal years 2021 through 2030. The fee is based upon meter size and average flow. DC Water’s low income CAP customers receive a 100 percent credit for this fee.

Effective October 1, 2017 (FY 2018), DC Water amended the Water System Replacement Fee (WSRF) regulations to add rules and procedures for a Multi-family WSRF adjustment; amend the Customer Classifications to clarify the definitions for Residential, Multi-family and Non-Residential customers to include cooperative housing associations and other clarifications; and amend the definitions set forth in Chapter 41 to define the terms Condominium, Cooperative Housing Association, and Dwelling Unit used in the Customer Classification regulations .

Meter Size (inches)	Meter Register Type	Monthly Water System Replacement Fee
5/8"	Single Register	\$ 6.30
3/4"	Single Register	\$ 7.39
1"	Single Register	\$ 9.67
1"x1.25"	Single and Multiple Register	\$ 15.40
1.5"	Single Register	\$ 41.35
2"	Single and Multiple Register	\$ 83.75
3"	Single and Multiple Register	\$ 232.13
4"	Single and Multiple Register	\$ 561.02
6"	Single and Multiple Register	\$ 1,292.14
8"	Single Register	\$ 5,785.51
8"x2"	Multiple Register	\$ 1,899.60
8"x4"x1"	Multiple Register	\$ 2,438.35
10"	Single and Multiple Register	\$ 6,679.65
12"	Single and Multiple Register	\$ 6,679.65
16"	Single Register	\$ 6,679.65

The following terms are defined:

Condominium – means real estate, portions of which are designated for separate ownership and the remainder of which is designated for common ownership solely by the owners of the portions designated for separate ownership, provided the undivided interests in the common elements are vested in the unit owners.

Cooperative Housing Association – means an association, whether incorporated or unincorporated, organized for the purpose of owning and operating residential real property, the shareholders or members of which, by reason of their ownership of a stock or membership certificate, a proprietary lease or other evidence of membership, are entitled to occupy a dwelling unit pursuant to the terms of a proprietary lease or occupancy agreement.

Dwelling Unit – any habitable room or group of rooms with kitchen and bathroom facilities forming a single unit located within a building or structure, which is wholly or partially used or intended to be used for living, sleeping and the preparation and consumption of meals by human occupants, and is under the control of and for the use of the occupant.

Multi-Year Rates

DC Water moved to a multi-year rate proposal in FY 2016 covering the period FY 2017 and FY 2018. The second time that DC Water had adopted a multi-year rate proposal was in FY 2018 covering the period FY 2019 and FY 2020. The FY 2019 rates became effective from October 1, 2018. On March 5, 2020, DC Water’s Board adopted a multi-year rate proposal for a third time covering the period FY 2021 and FY 2022.

The benefits of multi-year rates include:

- Greater revenue certainty
- Increased budget discipline
- Better alignment between revenues and expenditures

System Availability Fee (SAF)

Many utilities have implemented a fee, assessed to new development (or redevelopment) to recover the investment in available system capacity. On June 17, 2016, DC Water’s Board approved a new System Availability Fee (SAF) to be effective from January 1, 2018. All Residential Customers with meters 1 inch or smaller will use the same set of fees. All Residential Customers with meters larger than 1”, and all Multi-Family and Non-Residential Customers will have SAF based on their meter size.

The System Availability Fee is assessed for all new buildings, structures or properties under development and properties under redevelopment. For properties under redevelopment, DC Water will determine the net System Availability Fee by determining the property's proposed capacity requirements and applying a credit for the capacity of accounts being removed from the system. However, if the associated credit for capacity removed is equal to or greater than the future System Availability Fee, the net System Availability Fee shall be zero. Properties under redevelopment shall not receive a credit for accounts that are inactive for more than 12 months.

DC Water has determined that implementing the System Availability Fee (SAF) regulations on the effective date of January 1, 2018 could present significant fiscal impacts to the District's New Communities Initiative, which includes redevelopment, one for one replacement and/or augmentation, of affordable housing units. On March 1, 2018, the DC Water Board considered comments received during the SAF public comment period and agreed to; 1) Extend the System Availability Fee (SAF) effective date from January 1, 2018 to June 1, 2018 for DCRA Construction Permit Applicants and federal facilities new water and sewer connections and renovation or redevelopment projects for existing connections to the District's potable water and sanitary sewer systems based on the SAF meter size in accordance with the following fee schedule and requirements; 2) Revised the DC Water guidance document used to determine the SAF meter size from DC Water Standard Details and Guideline Masters to DC Water's Sizing Instructions and Worksheets; 3) Added procedures and requirements to receive credits for Affordable Housing Units (AHU) development and redevelopment; 4) Clarified the requirements for projects submitted prior to the effective date of June 1, 2018 and approved by June 1, 2019; 5) Added formulas to clarify how the SAF is calculated with the SAF credit, AHU credit and Net AHU credit; 6) Clarified requirements for Payment Plan Agreement; 7) Properties under redevelopment shall not receive a credit for accounts that are inactive for more than 24 months.

Effective June 1, 2018, DCRA Construction Permit Applicants and federal facilities shall be assessed a System Availability Fee (SAF) for new water and sewer connections and renovation or redevelopment projects for existing connections to the District's potable water and sanitary sewer systems based on the SAF meter size in accordance with the following fee schedule and requirements:

- (a) Residential customers shall be charged a System Availability Fee based on the SAF meter size as listed below:

SAF Meter Size (inches)	Water System Availability Fee	Sewer System Availability Fee	Total System Availability Fee
5/8"	\$ 1,135	\$ 2,809	\$ 3,944
3/4"	\$ 1,135	\$ 2,809	\$ 3,944
1"	\$ 1,135	\$ 2,809	\$ 3,944
1"x1.25"	\$ 2,047	\$ 5,066	\$ 7,113
1.5"	\$ 5,491	\$ 13,591	\$ 19,082
2"	\$ 11,125	\$ 27,536	\$ 38,661

- (b) Multi-Family and all Non-Residential customers shall be charged a System Availability Fee based on the SAF meter size as listed below:

SAF Meter Size (inches)	Water System Availability Fee	Sewer System Availability Fee	Total System Availability Fee
1" or smaller	\$ 1,282	\$ 3,173	\$ 4,455
1"x1.25"	\$ 2,047	\$ 5,066	\$ 7,113
1.5"	\$ 5,491	\$ 13,591	\$ 19,082
2"	\$ 11,125	\$ 27,536	\$ 38,661
3"	\$ 32,500	\$ 80,442	\$ 112,942
4"	\$ 83,388	\$ 206,394	\$ 289,782
6"	\$ 229,246	\$ 567,408	\$ 796,654
8"	\$ 229,246	\$ 567,408	\$ 796,654
8"x2"	\$ 229,246	\$ 567,408	\$ 796,654
8"x4"x1"	\$ 229,246	\$ 567,408	\$ 796,654
10"	\$ 229,246	\$ 567,408	\$ 796,654
12"	\$ 229,246	\$ 567,408	\$ 796,654
16"	\$ 229,246	\$ 567,408	\$ 796,654

The following terms are defined:

Development – the construction of a premises, building or structure that establishes a new water and/or sewer connection.

Redevelopment – the renovation or alteration of a premises, building or structure or reconstruction of a property that increases or decreases the water supply demand or drainage, waste, and vent (DWV) system load. Redevelopment shall not include the up-sizing of a water service or sewer lateral to comply with the D.C. Construction Codes Supplement, provided the water supply demand and DMV system load remain the same.

System Availability Fee – A one-time fee assessed to a property owner of any premises, building or structure to recover the cost of system capacity servicing all metered water service and sanitary sewer connections and renovation or redevelopment projects that require an upsized meter service connection to the District’s potable water system. The fee is assessed based on the peak water demand, excluding fire demand, for new meter water service connection and renovation or redevelopment projects that increase the peak water demand and associated SAF meter size for the property.

Affordable Housing Unit (AHU) – A housing unit that is offered for rent or sale for residential occupancy and as a result of a federal or District subsidy, incentive or benefit, and is made available and affordable to households whose income limit requirements are established by the federal or District program or agency or the Council for the District of Columbia.

Force Majeure Event – an event arising from causes beyond the control of DC Water or the control of any entity controlled by DC Water, which results in the closure of DC Water facilities.

Customer Metering Fee

The Metering Fee was established in 2003 to recover automated metering infrastructure capital costs. In 2012 the Metering Fee was reviewed and adjusted as part of the Cost of Service Study to include capital costs and a small increment of direct Customer Service cost associated with meter maintenance. Many utilities recover operating costs associated with both metering and billing in a fixed meter-based charge. The 2020 cost of service study adopted this more common industry approach by allocating some additional water costs to a Customer Service/Meters classification. The new cost recovery pool is divided by equivalent system meters to determine the cost for residential meter (5/8” or 3/4”) then scale that up to reflect charges as meter size increases. As a result, cost recovery is shifted to the Metering Fee and away from the volumetric rate. DC Water chose to mitigate impacts by phasing in this methodology change over 2 years ending with FY2022 rates. The changes in Metering Fee are summarized below.

- In FY2019, the Metering Fee recovered \$11.6 million
 - In FY2003, established Metering Fee at \$2.01 for 5/8” meter
 - In FY2011, increased Metering Fee to \$3.86 for 5/8” meter
 - Originally fee amount set to cover the capital costs of the original Automated Meter Infrastructure (AMI) system and meter purchase and installation (debt service) plus about \$4 million of Customer Service costs

- The 2020 Cost of Service Study recommended recovering \$24.1 million in FY 2022, consistent with independent rate review recommendation
 - Includes costs associated with metering and billing
 - Customer assistance, shutoff/restore, and leak adjustment, etc. remain in the volumetric charges
 - Proposes FY2021 recovers \$15.4 million, all the debt service and coverage plus about half of the full Customer Service O&M allocation (\$4.96 for a 5/8" meter)
 - Proposed FY2022 fee adds the additional half of Customer Service allocation for a total of about \$24.1 million (\$7.75 for a 5/8" meter)

Customer Metering Fees

Meter Size	FY 2020	FY 2021	FY 2022
5/8"	\$ 3.86	\$ 4.96	\$ 7.75
3/4"	\$ 4.06	\$ 5.22	\$ 8.16
1"	\$ 4.56	\$ 5.86	\$ 9.16
1x1.25"	\$ 4.83	\$ 6.21	\$ 9.70
1.5"	\$ 6.88	\$ 8.85	\$ 13.82
2"	\$ 7.54	\$ 9.69	\$ 15.14
2x1/2"	\$ 8.00	\$ 10.28	\$ 16.07
2x5/8"	\$ 8.00	\$ 10.28	\$ 16.07
3"	\$ 76.98	\$ 98.92	\$ 154.56
3x5/8"	\$ 77.94	\$ 100.16	\$ 156.49
3x3/4"	\$ 77.94	\$ 100.16	\$ 156.49
4"	\$ 137.37	\$ 176.52	\$ 275.81
4x3/4"	\$ 138.15	\$ 177.52	\$ 277.38
4x1"	\$ 138.15	\$ 177.52	\$ 277.38
4x2"	\$ 138.15	\$ 177.52	\$ 277.38
4x2x5/8"	\$ 181.04	\$ 232.64	\$ 363.49
6"	\$ 268.14	\$ 344.56	\$ 538.37
6x1"	\$ 272.70	\$ 350.42	\$ 547.52
6x1x1/2"	\$ 272.70	\$ 350.42	\$ 547.52
6x1/2"	\$ 323.09	\$ 415.17	\$ 648.70
6x3x3/4"	\$ 323.09	\$ 415.17	\$ 648.70
6x3"	\$ 323.09	\$ 415.17	\$ 648.70
8"	\$ 323.29	\$ 415.42	\$ 649.10
8x2"	\$ 323.29	\$ 415.42	\$ 649.10
8x4x1"	\$ 358.26	\$ 460.36	\$ 719.31
10"	\$ 317.91	\$ 408.51	\$ 638.30
10x2"	\$ 403.62	\$ 518.65	\$ 810.38
10x6x1"	\$ 403.62	\$ 518.65	\$ 810.38
10x6"	\$ 403.62	\$ 518.65	\$ 810.38
12"	\$ 329.66	\$ 423.61	\$ 661.89
12x6"	\$ 329.66	\$ 423.61	\$ 661.89
16"	\$ 349.45	\$ 449.04	\$ 701.62

Clean Rivers IAC Credit:

In FY 2016, DC Water’s Board asked management to evaluate and propose recommendations for expansion of the Customer Assistance Program (CAP) to include fees assessed for the Clean Rivers Impervious Surface Area Charge (CRIAC). The staff evaluated the three options for CRIAC credit: (i) Dollar credit, (ii) ERU credit, and (iii) percent of CRIAC credit (25%, 50%, 75%). Based on the detailed analysis, the management made recommendation to the Board to expand Customer Assistance Program (CAP) to low-income customers to include CRIAC credit in their monthly bills. On March 2, 2017, the Board approved the expansion of the Customer Assistance Program for eligible single-family residential accounts and individually metered accounts to include a fifty percent (50%) credit off of the monthly billed Clean Rivers Impervious Area Charge. The CRIAC became effective May 1, 2017. On March 5, 2020, DC Water’s Board adopted a proposal to increase the maximum CRIAC IAC credit from 50% to 75%, effective October 1, 2020.

Clean Rivers Impervious Area Charge (CRIAC)

In September 2018, DC Water formed the 19-member Stakeholder Alliance (DCWSA) to provide independent advice and a diversity of viewpoints to DC Water Management on a variety of programs and policies; increase customer education by providing DC Water with new opportunities for outreach; and propose to DC Water ways to continue effective and efficient long-term public involvement with improved communication tools.

DCWSA conducted several meetings to discuss the Clean Rivers Impervious Area Charge (CRIAC) and options to mitigate the rapidly increasing CRIAC. Some of the possible criteria included: 1) equitableness; 2) administrative feasibility; 3) revenue neutrality; 4) legal challenges and defensibility, 5) executable; and 6) adheres to industry practice.

The DC Water's Department of Engineering and Technical Services (DETS) proposed two methodologies for shifting cost from the CRIAC to sewer volumetric rate. The two methodologies that were calculated: 1) 18 percent Shift – calculated based on an average of pollutants concentrations in sanitary wastewater, stormwater runoff and Combined Sewer Overflow (CSO); and 2) 37 percent Shift – calculated based on volume of sanitary wastewater, stormwater runoff and CSO. The 18 percent shift calculation and methodology has a lot more variation in the pollutant concentrations depending on the data used and the time of year. Management determined that the 37 percent Shift volumetric methodology has a greater justification, more easily defended and could be phased-in .

However, based on meetings with the Stakeholders Alliance (SA) and discussions with the customer groups, an 18 percent CRIAC shift to sewer volumetric rate was proposed for FY 2020 in order for the rates and charges to be fair and equitable for all customers .

After considering all possible criteria and customer impacts, the Board agreed to a proposal shifting 37 percent cost from the CRIAC to sewer volumetric rate to be phased-in; 18 percent in FY 2020, 28 percent in FY 2021 and 37 percent in FY 2022, effective October 1, 2019.

Clean Rivers Impervious Area Charge Incentive Program Discount

On October 1, 2013, DC Water's Board established the Clean Rivers Area Incentive Program Discount for stormwater best management practices, which provided a 4 percent maximum incentive discount off the chargeable CRIAC for customers that installed certain eligible stormwater best management practices that reduce the amount of stormwater runoff generated from a property.

The general public and Stakeholder Alliance (DCWSA) voiced concerns that the Clean Rivers Area Program Discount 4 percent maximum incentive for stormwater was too low and did not incentivize customers to install best management practices.

DC Water's management analyzed and evaluated the Clean Rivers Area Program Discount historical data and determined that is was feasible to increase the CRIAC incentive discount for customers that installed certain eligible stormwater best management practices.

On April 4, 2019, DC Water's Board adopted a proposal to increase the maximum CRIAC incentive discount from 4 percent to 20 percent, effective October 1, 2019

The Board has approved the following changes in the rates and fees for rate making to be effective from October 1, 2020.

- Water volumetric rates:
 - Residential customers: “Consumption of 0 – 4 Ccf” - water rate increase of \$0.43 per Ccf, {\$0.58 per 1,000 gallons} from \$3.06 per Ccf to \$3.49 per Ccf, {\$4.67 per 1,000 gallons}
 - Residential customers: “Consumption greater than 4 Ccf” - water rate increase of \$0.40 per Ccf, {\$0.54 per 1,000 gallons} from \$4.10 per Ccf to \$4.50 per Ccf, {\$6.02 per 1,000 gallons}
 - Multi-family customers: water rate increase of \$0.42 per Ccf, {\$0.56 per 1,000 gallons} from \$3.54 per Ccf to \$3.96 per Ccf, {\$5.29 per 1,000 gallons}
 - Non-Residential customers: water rate increase of \$0.40 per Ccf, {\$0.54 per 1,000 gallons} from \$4.25 per Ccf to \$4.65 per Ccf, {\$6.22 per 1,000 gallons}
- Sewer rate increase of \$0.88 per Ccf, {\$1.17 per 1,000 gallons} for all classes of customers from \$8.89 per Ccf to \$9.77 per Ccf, {\$13.06 per 1,000 gallons}
- Monthly Clean Rivers Impervious Area Charge (CRIAC) decrease of \$1.42 from \$20.94 per ERU to \$19.52 per ERU
- Clean Rivers Impervious Area Charge (CRIAC) six-tier residential rates structure is shown in the table below:

Tiers	Residential Impervious Area Range	ERU
Tier 1	100 – 600 sq ft	0.6 ERU
Tier 2	700 – 2,000 sq ft	1.0 ERU
Tier 3	2,100 – 3,000 sq ft	2.4 ERU
Tier 4	3,100 – 7,000 sq ft	3.8 ERU
Tier 5	7,100 – 11,000 sq ft	8.6 ERU
Tier 6	11,100 sq ft and more	13.5 ERU

- Monthly Customer Metering Fee increase of \$1.10 from \$3.86 to \$4.96 for a 5/8” meter size. The Customer Metering fee varies by size
- The Water System Replacement Fee (WSRF) recovers the cost of 1 percent renewal and replacement program for water service lines. There will be no increase in WSRF. The WSRF varies with meter size. WSRF for 5/8” meter size is \$6.30
- PILOT and Right-of-Way fee – These fees are proposed to increase to recover the full cost of the PILOT and Right-of-Way fees charged to DC Water by the District of Columbia
 - Increase of \$0.03 in the PILOT fee, {\$0.04 per 1,000 gallons} to \$0.54 per Ccf, {\$0.72 per 1,000 gallons}
 - There is no increase in the Right-of-Way (ROW) fee, which remains same at \$0.19 per Ccf, {\$0.25 per 1,000 gallons}
- These changes increased the typical residential customer’s total monthly bill by \$6.90 or 6.6 percent

The Board has approved the following changes in the rates and fees for rate making to be effective from October 1, 2021:

- Water volumetric rates:
 - Residential customers: “Consumption of 0 – 4 Ccf” - water rate increase of \$0.14 per Ccf, {\$0.18 per 1,000 gallons} from \$3.49 per Ccf to \$3.63 per Ccf, {\$4.85 per 1,000 gallons}
 - Residential customers: “Consumption greater than 4 Ccf” - water rate increase of \$0.24 per Ccf, {\$0.32 per 1,000 gallons} from \$4.50 per Ccf to \$4.74 per Ccf, {\$6.34 per 1,000 gallons}
 - Multi-family customers: water rate increase of \$0.19 per Ccf, {\$0.26 per 1,000 gallons} from \$3.96 per Ccf to \$4.15 per Ccf, {\$5.55 per 1,000 gallons}
 - Non-Residential customers: water rate increase of \$0.26 per Ccf, {\$0.34 per 1,000 gallons} from \$4.65 per Ccf to \$4.91 per Ccf, {\$6.56 per 1,000 gallons}
- Sewer rate increase of \$0.87 per Ccf, {\$1.16 per 1,000 gallons} for all classes of customers from \$9.77 per Ccf to \$10.64 per Ccf, {\$14.22 per 1,000 gallons}
- Monthly Customer Metering Fee increase of \$2.79 from \$4.96 to \$7.75 for a 5/8” meter size. The Customer Metering fee varies by size
- Monthly Clean Rivers Impervious Area Charge (CRIAC) decrease of \$1.12 from \$19.52 per ERU to \$18.40 per ERU
- The Water System Replacement Fee (WSRF) recovers the cost of 1 percent renewal and replacement program for water service lines. There will be no increase in WSRF. The WSRF varies with meter size. WSRF for 5/8” meter size is \$6.30
- PILOT and Right-of-Way fee – These fees are proposed to increase to recover the full cost of the PILOT and Right-of-Way fees charged to DC Water by the District of Columbia
 - Increase of \$0.02 in the PILOT fee, {\$0.03 per 1,000 gallons} to \$0.56 per Ccf, {\$0.75 per 1,000 gallons}
 - There is no increase in the Right-of-Way (ROW) fee, which remains same at \$0.19 per Ccf, {\$0.25 per 1,000 gallons}
- These changes increased the typical residential customer’s total monthly bill by \$7.40 or 6.7 percent

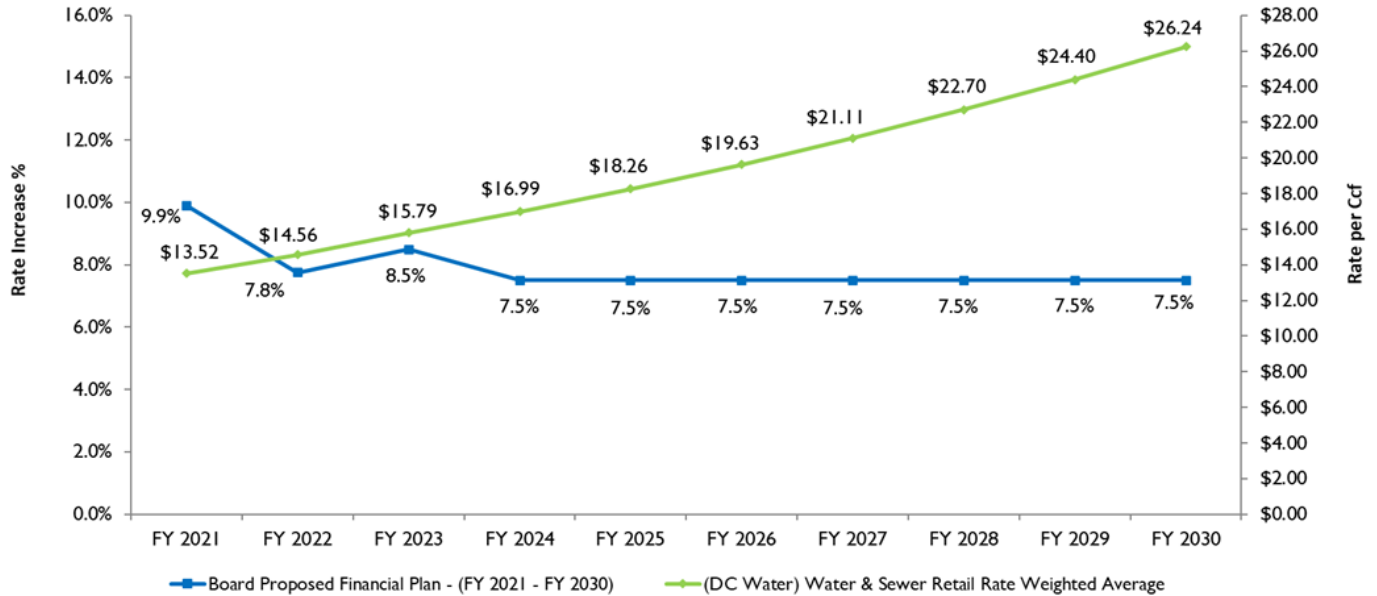
The ten-year projected water and sewer rate increases under this year’s plan (FY 2021 – FY 2030) total 78.7 percent driven primarily by capital spending for DC Water’s \$5.43 billion capital improvement program.

Primary spending in the ten-year capital plan includes: DC Clean Rivers Project (CSO LTCP), Lead Meter Replacement Project, Nitrification Reactor/Sedimentation - 20 year rebuild Project, as well as various on-going water distribution systems and wastewater treatment infrastructure improvements.

Based on feedback from the new Stakeholder Alliance and discussions with customers about the Clean Rivers Impervious Area Charge (CRIAC) that funds the Clean Rivers Program, there was a proposal for FY 2020 to shift 18 percent of the costs for the Clean Rivers program from the CRIAC to the sewer volumetric rate. This would increase to 28 percent in FY 2021 and 37 percent in FY 2022. This was based on an assessment that, on average, 37 percent of the volume in the new tunnels is from wastewater. The proposal to shift CRIAC to volumetric was adopted by the Board.

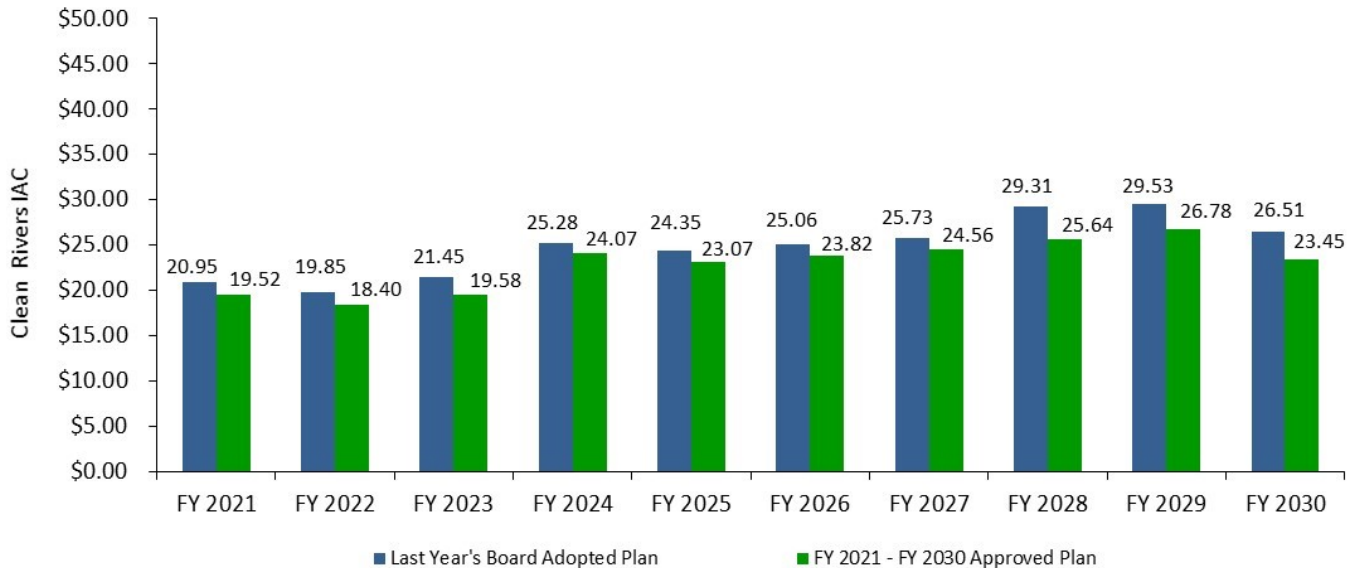
The public outreach and comment process for the rate proposal for FY 2021 and FY 2022 occurred between March and August 2020. With the approval of the rates by DC Water Board, these changes would increase the typical residential customer’s monthly bill by \$6.90 or 6.6 percent in FY 2021 and \$7.40 or 6.7 percent in FY 2022 as shown on page IV–28.

PROJECTED RETAIL WATER & SEWER RATE CHANGES FY 2021 – FY 2030



- 1) Rates shown above reflect weighted water and sewer rates for Residential customer category
- 2) In FY 2021 approved water and sewer rate increase of \$1.30 per Ccf, (\$1.74 per 1,000 gallons)
 - Combined water and sewer rate increases from \$12.22 to \$13.52 per Ccf
- 3) In FY 2022 approved water and sewer rate increase of \$1.04 per Ccf, (\$1.39 per 1,000 gallons)
 - Combined water and sewer rate increases from \$13.52 to \$14.56 per Ccf
- 4) Rate increase of 9.9 percent for FY 2021 and 7.8 percent for FY 2022

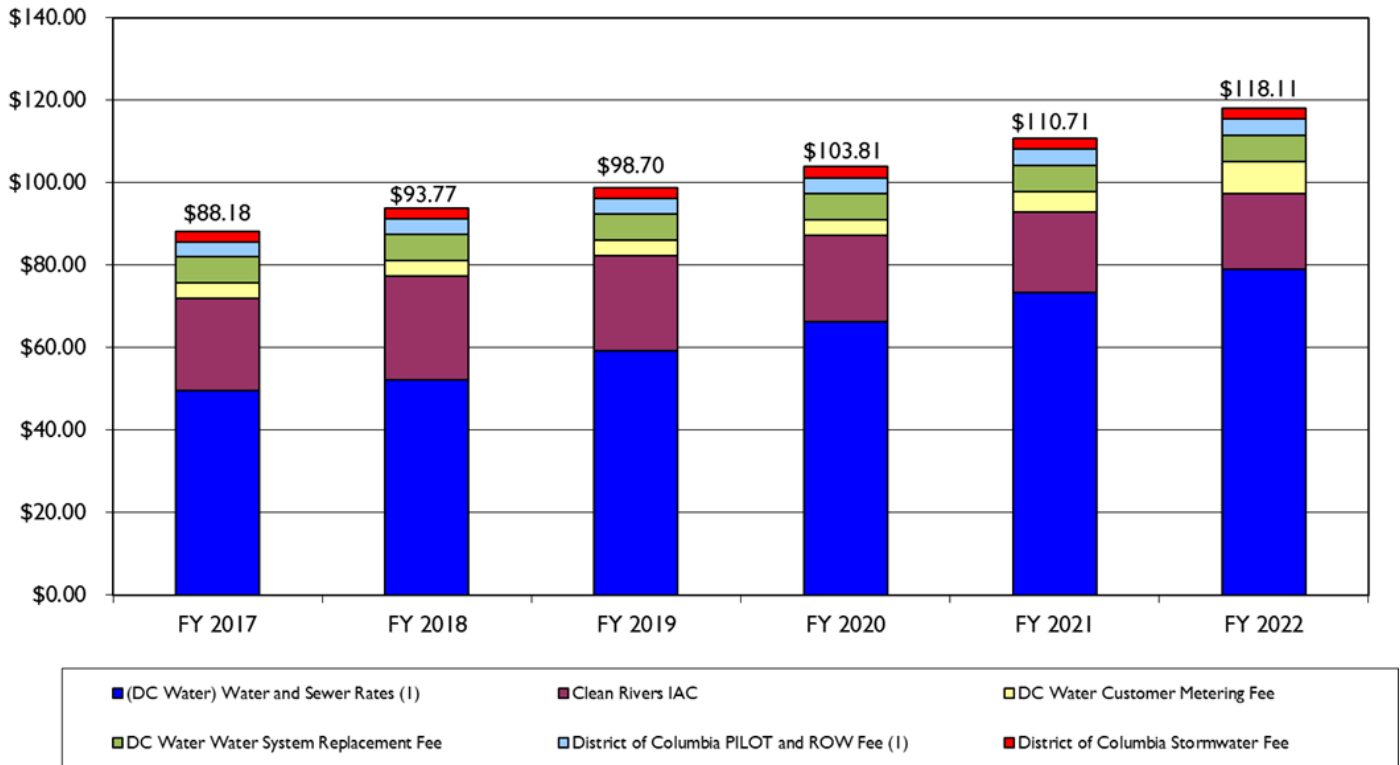
PROJECTED MONTHLY CLEAN RIVERS IMPERVIOUS SURFACE AREA CHARGE (CRIAC) CHANGES



- The projected charges displayed in the chart above are primarily driven by anticipated debt service costs necessary to support the thirty year \$2.8 billion Clean Rivers Project, which includes the federally mandated CSO-LTCP and the nine-minimum controls program
- The annual Clean Rivers Project costs for the average Tier 2 residential customer (700 – 2,000 sq. ft. of impervious area) is projected to increase from \$220.80 in FY 2022 to \$281.40 in FY 2030
- The proposed CRIAC shift to sewer volumetric with 18 percent in FY 2020, 28 percent in FY 2021 and 37 percent in FY 2022 and beyond was recommended because it balances infrastructure investment with growth in rates. The shift is based on an assessment that on average 37 percent of volume in the tunnels is from wastewater. With the proposed shift the overall household charges increase by 6.6 percent in FY 2021 and 6.7 percent in FY 2022. The gradual shift helps avoid rate shock to customers. The CRIAC for FY 2021 is projected to decrease from \$20.94 to \$19.52 per ERU, per month and to \$18.40 per ERU per month for FY 2022

AVERAGE RESIDENTIAL CUSTOMER MONTHLY BILL

FY 2017 – FY 2022



- (1) Assumes average monthly consumption of 5.42 Ccf, or 4,054 gallons
 - FY 2022 cost per gallon is a little over \$0.01 (water and sewer rates only)

AVERAGE RESIDENTIAL CUSTOMER MONTHLY BILL

FY 2017 – FY 2022

	Units	FY 2017	FY 2018	FY 2019	FY 2020	Approved FY 2021	Approved FY 2022
DC Water Water and Sewer Retail Rates ⁽¹⁾	Ccf	\$ 49.63	\$ 52.13	\$ 59.18	\$ 66.24	\$ 73.30	\$ 78.92
DC Water Clean Rivers IAC ⁽²⁾	ERU	22.24	25.18	23.00	20.94	19.52	18.40
DC Water Customer Metering Fee	5/8"	3.86	3.86	3.86	3.86	4.96	7.75
DC Water Water System Replacement Fee ⁽⁴⁾	5/8"	6.30	6.30	6.30	6.30	6.30	6.30
Subtotal DC Water Rates & Charges		\$ 82.03	\$ 87.47	\$ 92.34	\$ 97.34	\$ 104.08	\$ 111.37
Increase / Decrease		\$ 4.26	\$ 5.44	\$ 4.87	\$ 5.01	\$ 6.73	\$ 7.29
District of Columbia PILOT Fee ⁽¹⁾	Ccf	\$ 2.61	\$ 2.66	\$ 2.71	\$ 2.76	\$ 2.93	\$ 3.04
District of Columbia Right-of-Way Fee ⁽¹⁾	Ccf	0.87	0.97	0.98	1.03	1.03	1.03
District of Columbia Stormwater Fee ⁽³⁾	ERU	2.67	2.67	2.67	2.67	2.67	2.67
Subtotal District of Columbia Charges		\$ 6.15	\$ 6.30	\$ 6.36	\$ 6.46	\$ 6.63	\$ 6.74
Total Amount Appearing on DC Water Bill		\$ 88.18	\$ 93.77	\$ 98.70	\$ 103.81	\$ 110.71	\$ 118.11
Increase / Decrease Over Prior Year		\$ 4.33	\$ 5.59	\$ 4.92	\$ 5.11	\$ 6.90	\$ 7.40
Percent Increase in Total Bill		5.2%	6.3%	5.3%	5.2%	6.6%	6.7%

(1) Assumes average monthly consumption of 5.42 Ccf, or (4,054 gallons)

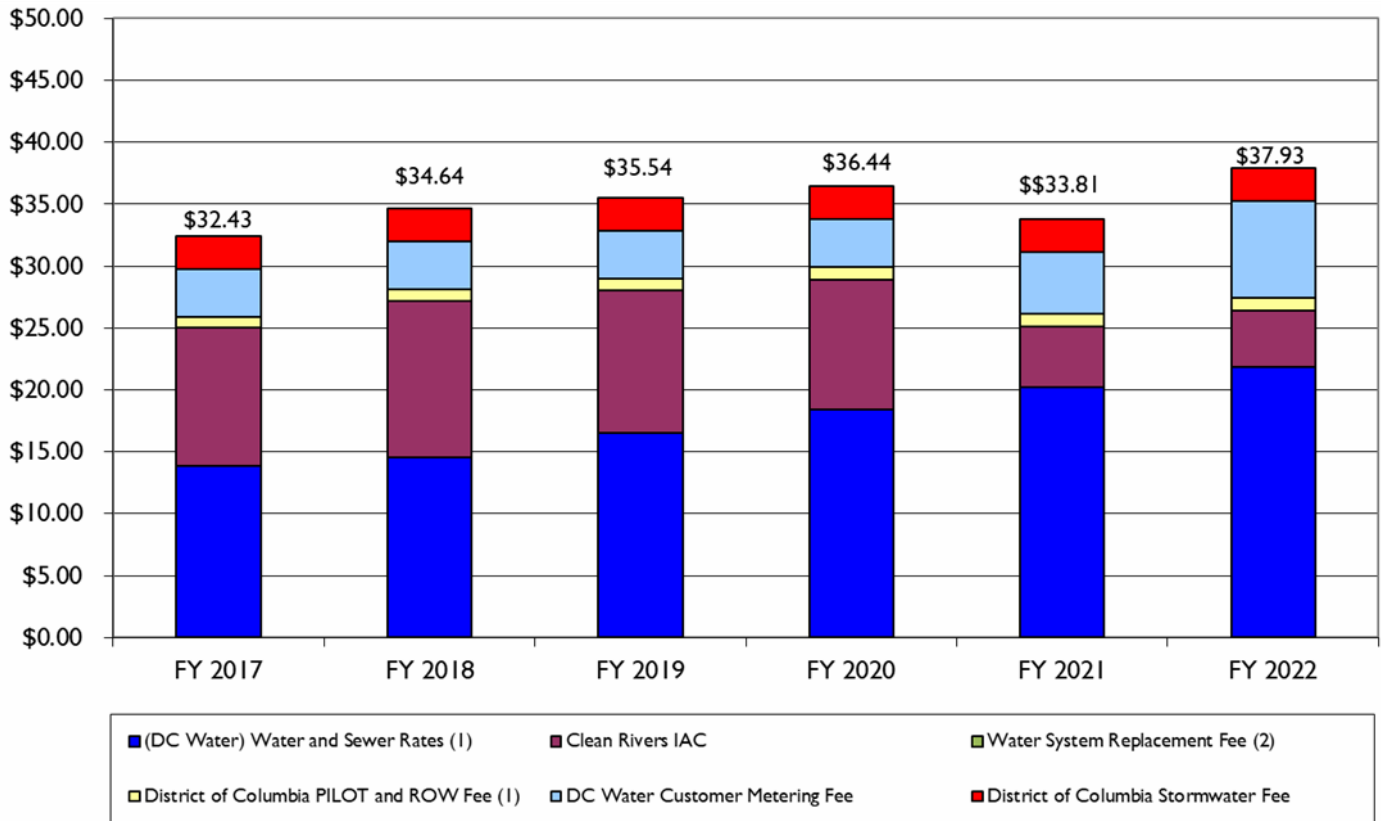
(2) Assumes average 1 Equivalent Residential Unit (ERU)

(3) District Department of the Environment stormwater fee of \$2.67 effective November 1, 2010

(4) DC Water "Water System Replacement Fee" of \$6.30 for 5/8" meter size effective October 1, 2015

AVERAGE CAP CUSTOMER MONTHLY BILL

FY 2017 – FY 2022



- 1) Assumes average monthly consumption of 5.42 Ccf, or 4,054 gallons
 - FY 2021 & FY 2022 cost per gallon is a little over \$0.01 (water and sewer rates only)
- 2) Assumes 100 percent discount for Water System Replacement Fee (WSRF) to CAP customers, therefore, WSRF is not shown in the above graph
- 3) Assumes 75 percent credit for Clean Rivers Impervious Area Charge (CRIAC) to CAP customers

AVERAGE CAP CUSTOMER MONTHLY BILL

FY 2017 – FY 2022

	Units	FY 2017	FY 2018	FY 2019	FY 2020	Approved FY 2021	Approved FY 2022
DC Water Water and Sewer Retail Rates ⁽¹⁾	Ccf	\$ 49.63	\$ 52.13	\$ 59.18	\$ 66.24	\$ 73.30	\$ 78.92
DC Water Clean Rivers IAC	ERU	22.24	25.18	23.00	20.94	19.52	18.40
DC Water Customer Metering Fee	5/8"	3.86	3.86	3.86	3.86	4.96	7.75
DC Water Water System Replacement Fee	5/8"	6.30	6.30	6.30	6.30	6.30	6.30
Subtotal DC Water Rates & Charges		\$ 82.03	\$ 87.47	\$ 92.34	\$ 97.34	\$ 104.08	\$ 111.37
Increase / Decrease		\$ 4.26	\$ 5.44	\$ 4.87	\$ 5.01	\$ 6.73	\$ 7.29
District of Columbia PILOT Fee ⁽¹⁾	Ccf	\$ 2.61	\$ 2.66	\$ 2.71	\$ 2.76	\$ 2.93	\$ 3.04
District of Columbia Right-of-Way Fee ⁽¹⁾	Ccf	0.87	0.97	0.98	1.03	1.03	1.03
District of Columbia Stormwater Fee ⁽⁴⁾	ERU	\$ 2.67	2.67	2.67	2.67	2.67	2.67
Subtotal District of Columbia Charges		\$ 6.15	\$ 6.30	\$ 6.36	\$ 6.46	\$ 6.63	\$ 6.74
Total Amount		\$ 88.18	\$ 93.77	\$ 98.70	\$ 103.81	\$ 110.71	\$ 118.11
Less: CAP Discount (4 Ccf per month) ^{(1), (2)}		(38.33)	(40.24)	(45.36)	(50.60)	(55.96)	(60.08)
Water System Replacement Fee (WSRF) ⁽³⁾		(6.30)	(6.30)	(6.30)	(6.30)	(6.30)	(6.30)
Clean Rivers IAC ⁽⁵⁾		(11.12)	(12.59)	(11.50)	(10.47)	(14.64)	(13.80)
Total Amount Appearing on DC Water Bill		\$ 32.43	\$ 34.64	\$ 35.54	\$ 36.44	\$ 33.81	\$ 37.93
Increase / Decrease Over Prior Year		\$ (8.50)	\$ 2.21	\$ 0.90	\$ 0.90	\$ (2.63)	\$ 4.12
CAP Customer Discount as a Percent of Total Bill		-63.2%	-63.0%	-64.0%	-64.9%	-69.5%	-67.9%

- (1) Assumes average monthly consumption of 5.42 Ccf, or (4,054 gallons)
- (2) Expansion of CAP program in FY 2009 assumes discount to first 4 Ccf of Water and Sewer and to first 4 Ccf of PILOT and ROW in FY 2011
- (3) Assumes 100 percent discount for Water System Replacement Fee (WSRF) to CAP customers effective October 1, 2015
- (4) District Department of the Environment stormwater fee of \$2.67 effective November 1, 2010
- (5) Assumes 50 percent discount for FY 2020 and 75% discount for FY 2021 and FY 2022 for the Clean Rivers IAC

AVERAGE CAP2 CUSTOMER MONTHLY BILL

FY 2019 – FY 2022

	Units	FY 2019	FY 2020	Approved FY 2021	Approved FY 2022
DC Water Water and Sewer Retail Rates ⁽¹⁾	Ccf	\$ 59.18	\$ 66.24	\$ 73.30	\$ 78.92
DC Water Clean Rivers IAC	ERU	23.00	20.94	19.52	18.40
DC Water Customer Metering Fee	5/8"	3.86	3.86	4.96	7.75
DC Water Water System Replacement Fee	5/8"	6.30	6.30	6.30	6.30
Subtotal DC Water Rates & Charges		\$ 92.34	\$ 97.34	\$ 104.08	\$ 111.37
Increase / Decrease		\$ 4.87	\$ 5.01	\$ 6.73	\$ 7.29
District of Columbia PILOT Fee	Ccf	\$ 2.71	\$ 2.76	\$ 2.93	\$ 3.04
District of Columbia Right-of-Way Fee	Ccf	0.98	1.03	1.03	1.03
District of Columbia Stormwater Fee	ERU	2.67	2.67	2.67	2.67
Subtotal District of Columbia Charges		\$ 6.36	\$ 6.46	\$ 6.63	\$ 6.74
Total Amount		\$ 98.70	\$ 103.81	\$ 110.71	\$ 118.11
Less: CAP2 Discount (3 Ccf per month) ⁽²⁾		(31.98)	(35.85)	(39.78)	(42.81)
Clean Rivers IAC ⁽³⁾		(11.50)	(10.47)	(9.76)	(9.20)
Total Amount Appearing on DC Water Bill		55.22	57.49	61.17	66.10
Increase / Decrease Over Prior Year		\$	\$ 2.27	\$ 3.68	\$ 4.93
CAP Customer Discount as a Percent of Total Bill		-44.0%	-44.6%	-44.7%	-44.0%

(1) Assumes average monthly consumption of 5.42 Ccf, or (4,054 gallons)

(2) Expansion of CAP2 program in FY 2019 assumes discount to first 3 Ccf of Water and Sewer

(3) Expansion of CAP2 program in FY 2019 assumes 50 percent discount for the Clean Rivers IAC

AVERAGE CAP3 CUSTOMER MONTHLY BILL

FY 2019 – FY 2022

	Units	FY 2019	FY 2020	Approved FY 2021	Approved FY 2022
DC Water Water and Sewer Retail Rates ⁽¹⁾	Ccf	\$ 59.18	\$ 66.24	\$ 73.30	\$ 78.92
DC Water Clean Rivers IAC	ERU	23.00	20.94	19.52	18.40
DC Water Customer Metering Fee	5/8"	3.86	3.86	4.96	7.75
DC Water Water System Replacement Fee	5/8"	6.30	6.30	6.30	6.30
Subtotal DC Water Rates & Charges		\$ 92.34	\$ 97.34	\$ 104.08	\$ 111.37
Increase / Decrease		\$ 4.87	\$ 5.01	\$ 6.73	\$ 7.29
District of Columbia PILOT Fee	Ccf	\$ 2.71	\$ 2.76	\$ 2.93	\$ 3.04
District of Columbia Right-of-Way Fee	Ccf	0.98	1.03	1.03	1.03
District of Columbia Stormwater Fee	ERU	2.67	2.67	2.67	2.67
Subtotal District of Columbia Charges		\$ 6.36	\$ 6.46	\$ 6.63	\$ 6.74
Total Amount		\$ 98.70	\$ 103.81	\$ 110.71	\$ 118.11
Less: CAP3 Discount Clean Rivers IAC ⁽²⁾		(17.25)	(15.71)	(14.64)	(13.80)
Total Amount Appearing on DC Water Bill		81.45	88.10	96.07	104.31
Increase / Decrease Over Prior Year		\$ -	\$ 6.65	\$ 7.97	\$ 8.24
CAP Customer Discount as a Percent of Total Bill		-17.5%	-15.1%	-13.2%	-11.7%

(1) Assumes average monthly consumption of 5.42 Ccf, or (4,054 gallons)

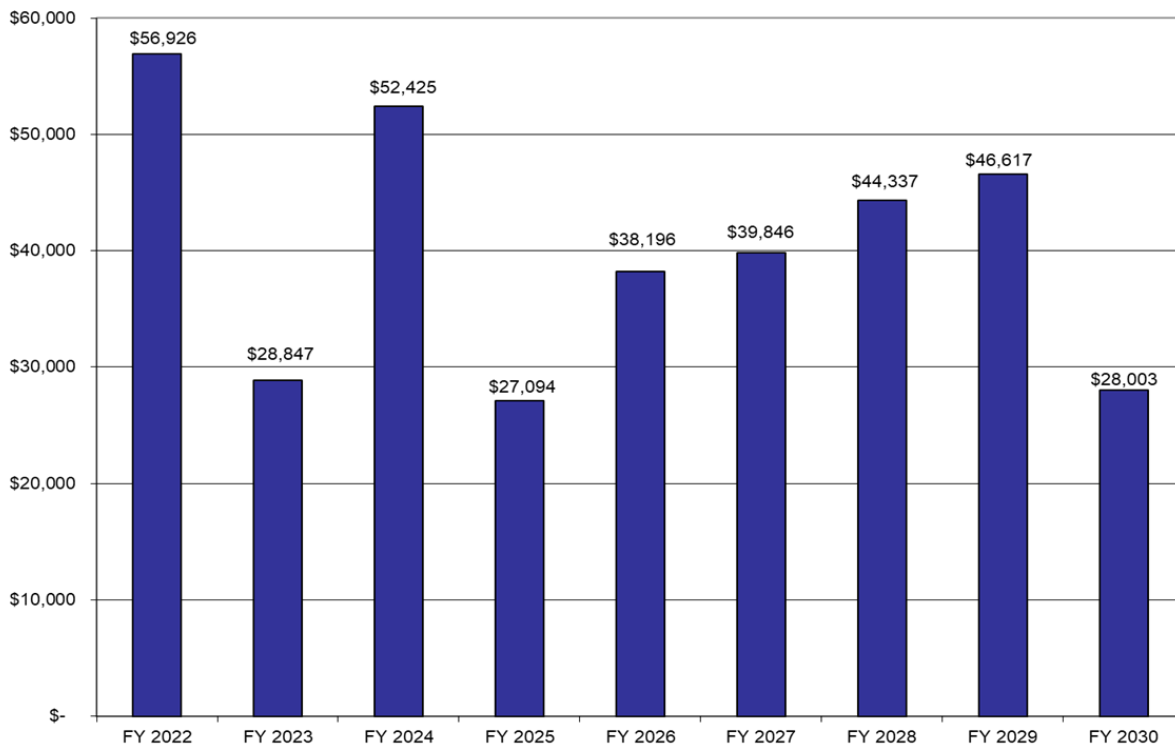
(2) Expansion of CAP3 program in FY 2019 assumes 75 percent discount for the Clean Rivers IAC

FY 2021 – FY 2030 FINANCIAL PLAN

As shown in the chart below, incremental increases in retail revenues are projected to range from \$27.1 million to \$56.9 million in FY 2022 – FY 2030, due to:

- Average annual debt service increase of 5.5 percent
- Average annual O&M increase of 3.4 percent
- Annual projected Payment-in-Lieu of Taxes (PILOT) and Right-of-Way (ROW) increases due to DC Government increasing costs of providing services to the District
- This year’s ten-year plan reflects increases in operating and maintenance and increases in debt service cost associated with DC Water’s Capital Improvement Program (CIP).

INCREMENTAL INCREASE IN REVENUES
FY 2022 – FY 2030
(\$000's)

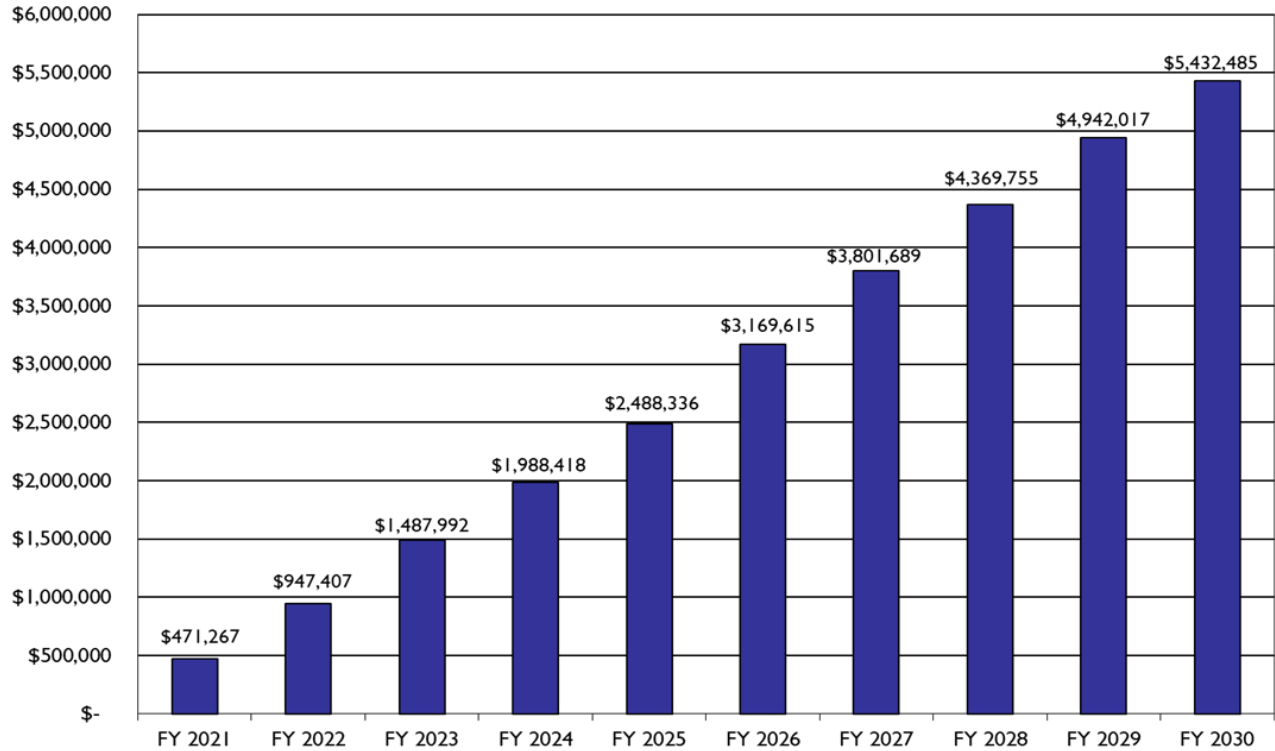


These costs would be recovered through:

- Proposed water and sewer rate increases of 7.8 percent in FY 2022 and 7.5 percent to 8.5 percent from FY 2023 to FY 2030
- Proposed Clean Rivers Impervious Surface Area Charge (CRIAC) revenues ranging from \$18.40 to \$23.45 per ERU per month
- Proposed DC PILOT fee increases of 2 percent in accordance with the current MOU dated September 4, 2014 to recover the amount of PILOT payment obligation to the District of Columbia
- The ROW fee will remain the same at \$5.1 million per annum in accordance with the current MOU signed on October 2, 2014 to recover the amount of ROW payment obligation to the District of Columbia
- Utilization of the Board-authorized Rate Stabilization Fund (RSF) to offset retail rate increases

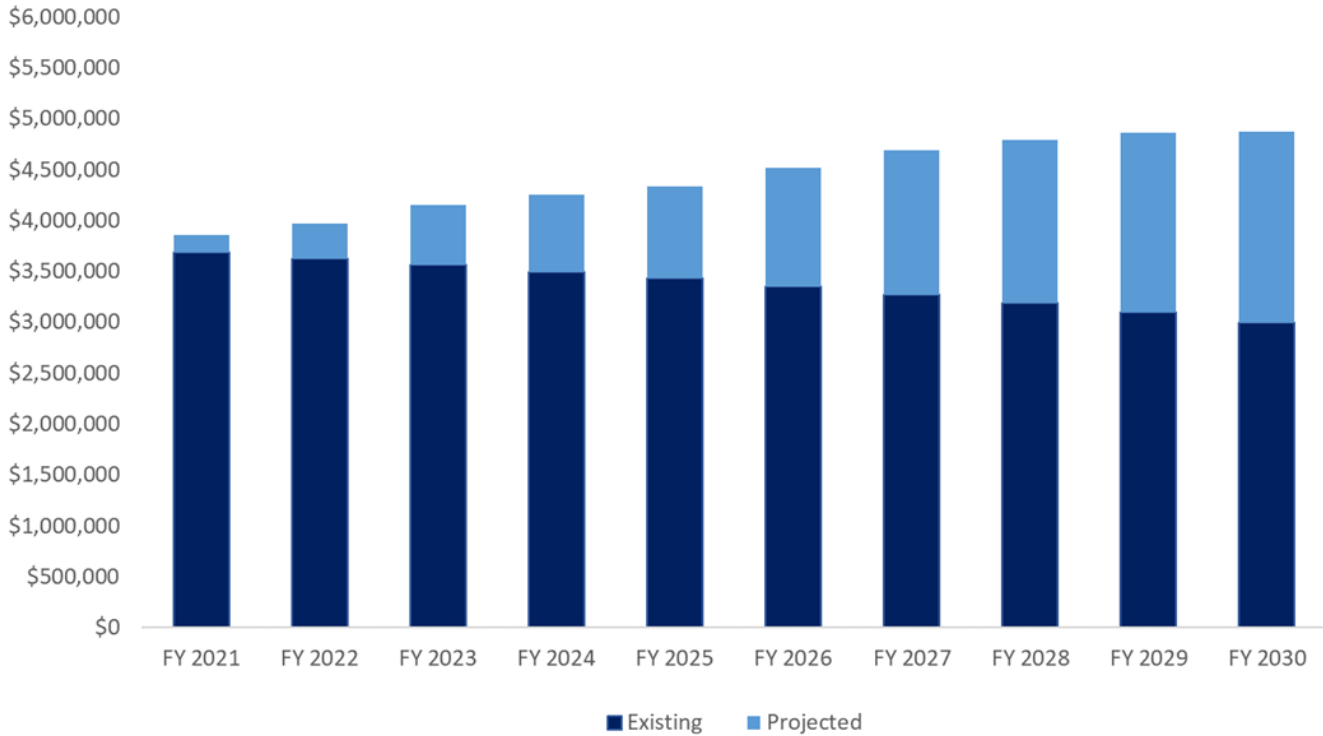
DC Water’s proposed rate increases are primarily required to fund increasing debt service costs from increased capital spending.

**CUMULATIVE CAPITAL SPENDING
FY 2021 – FY 2030
(\$000's)**



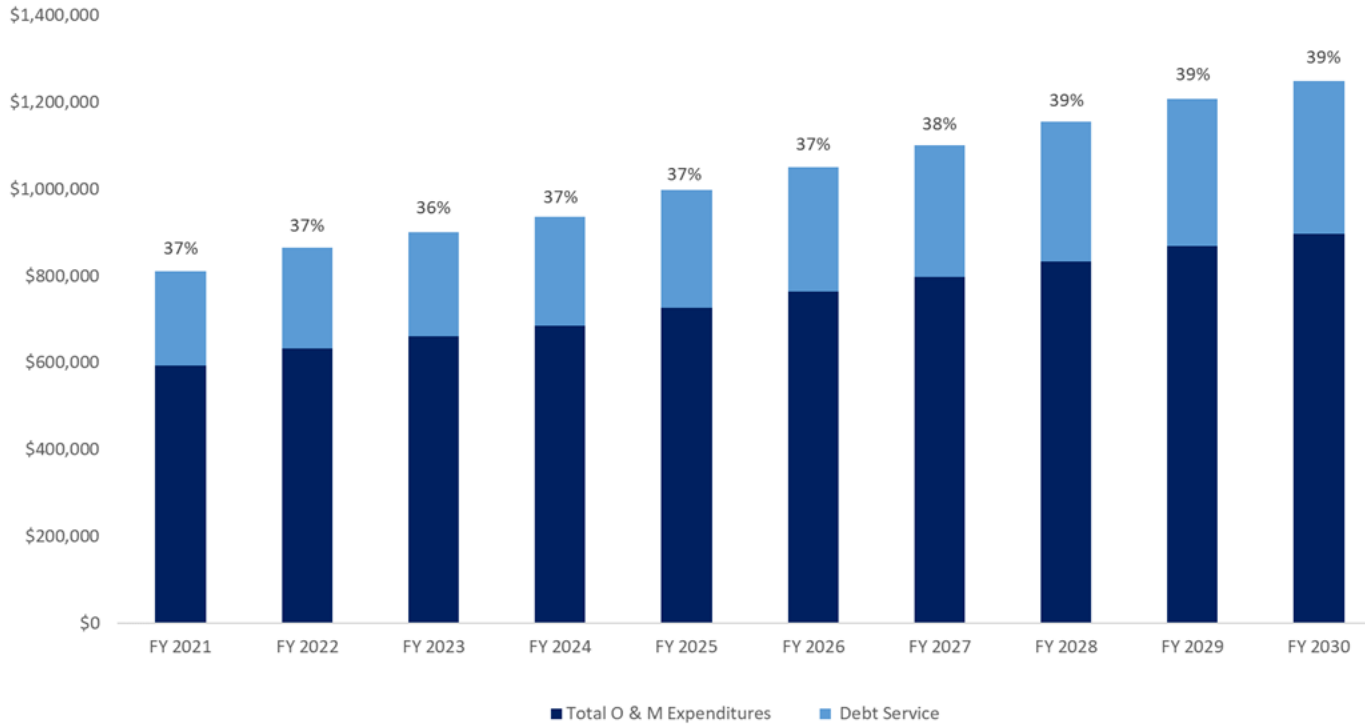
- DC Water’s ten-year capital improvement program totals \$5.43 billion, with annual spending ranging from \$471.3 million to \$681.3 million
- Once completed, the ten-year capital improvement project will double the book value of DC Water’s infrastructure
- The ten-year plan includes disbursements of the Clean Rivers Project (CSO LTCP), totaling nearly \$1.03 billion exclusive of nine minimum controls
- Water and sewer infrastructure continues to drive the ten-year Capital Improvement Plan from FY 2021 through FY 2030

NEW & EXISTING DEBT OUTSTANDING FY 2021 – FY 2030 (\$000's)

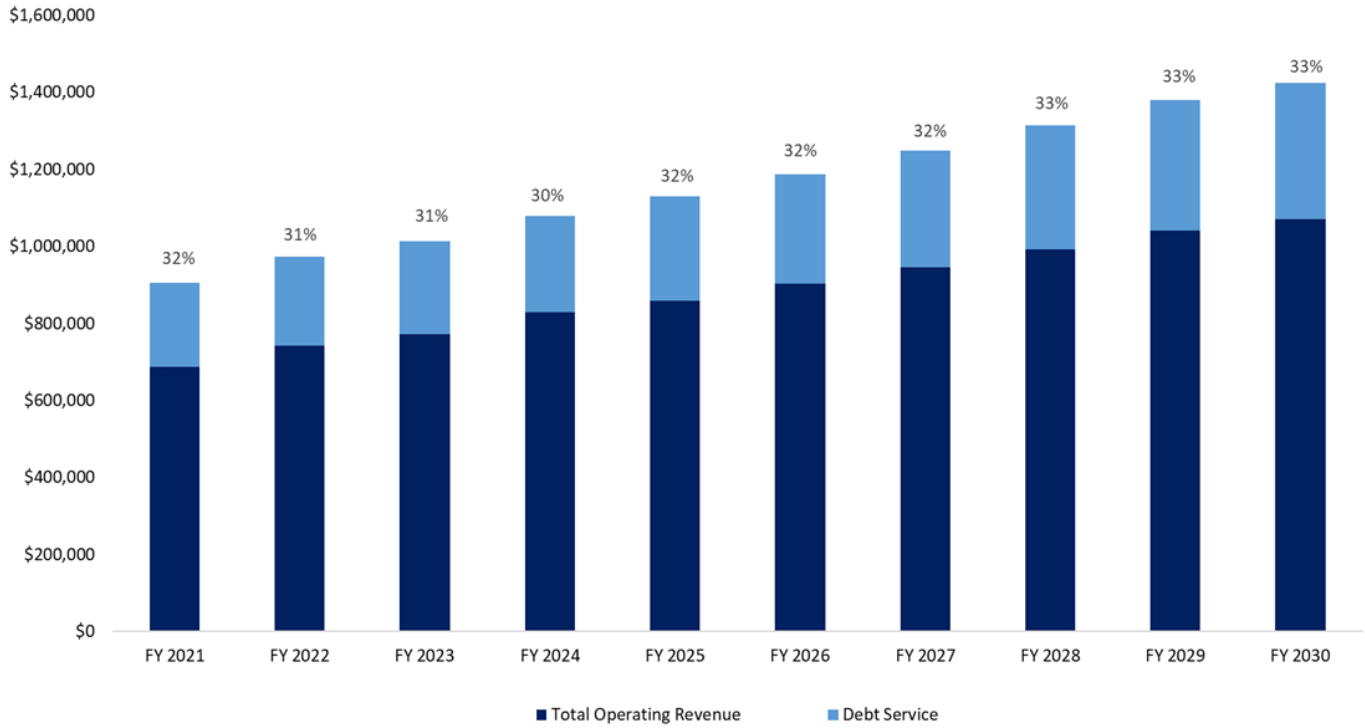


- The largest source of funding for DC Water’s capital program is debt
- Over the next ten years, DC Water will issue approximately \$1.9 billion in new debt (which includes the funding of reserves and costs of issuance), increasing total debt outstanding to \$4.9 billion at the end of FY 2030

DEBT SERVICE AS PERCENT OF TOTAL OPERATING & MAINTENANCE EXPENDITURES FY 2021 – FY 2030 (\$000's)



DEBT SERVICE AS PERCENT OF TOTAL OPERATING REVENUES FY 2021 – FY 2030 (\$'000's)



OPERATING & DEBT SERVICE EXPENDITURES

FY 2021 – FY 2030

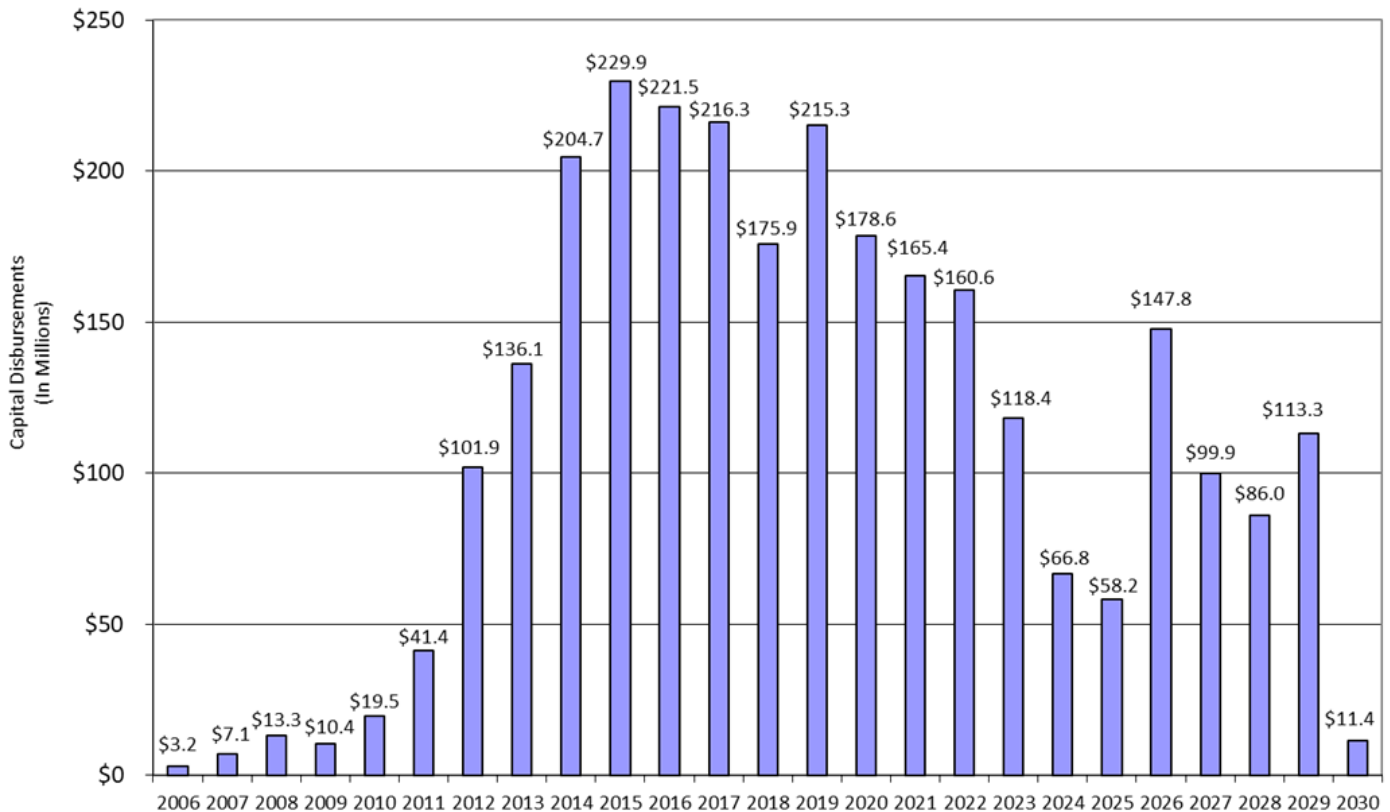
Over the ten-year period, total expenditures increase on average by 4.3 percent annually

DC Water’s proposed rate increases are primarily required to fund increasing debt service costs

- Operations and maintenance expenditures (excluding the payment-in-lieu of taxes and right-of-way fee) increase on average by only 3.4 percent annually
- Debt service expenditures grow at an annual average rate of 5.5 percent
- This year’s ten-year plan reflects increases in operating and maintenance and increases in debt service costs associated with DC Water’s Capital Improvement Program (CIP)

POTENTIAL IMPACT OF CSO LONG-TERM CONTROL PLAN ON RATES

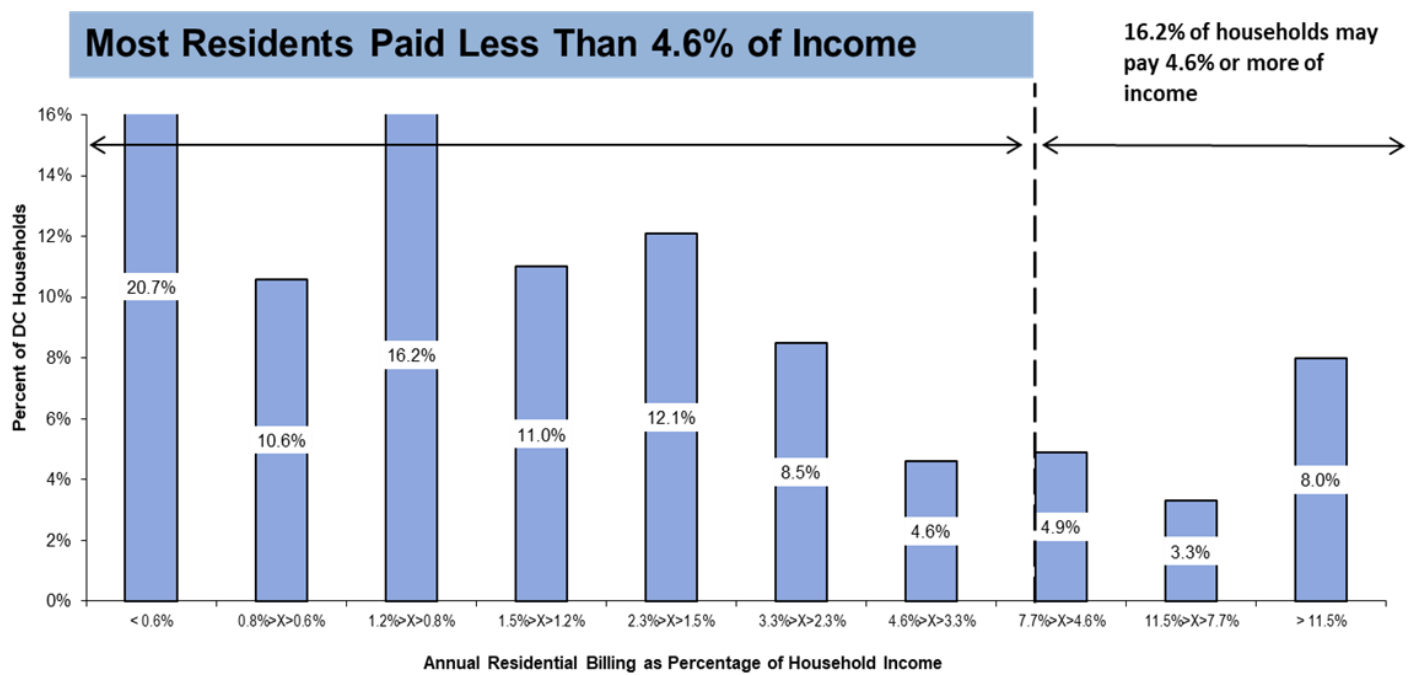
Clean Rivers CSO LTCP Disbursements by Fiscal Year

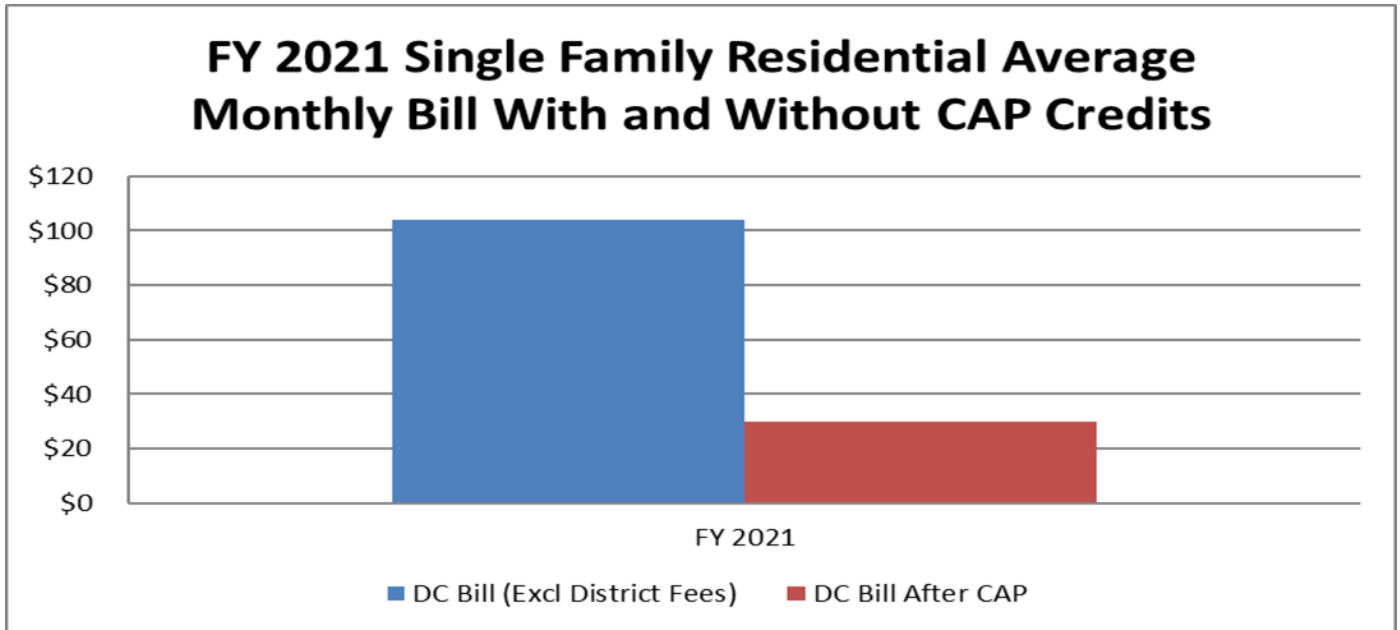


In December 2004, the Board reached an agreement with the federal government on the Clean Rivers Project (CSO-LTCP) and entered into a related consent decree. Actual and projected disbursements by fiscal year for the Clean Rivers Project are shown in the chart above and are the drivers for changes in the Clean Rivers Impervious Area Charge over the ten-year plan. Wholesale customers contribute 7.1 percent to the Clean Rivers Project. To mitigate impacts, DC Water continues to look for federal support for this program. As of September 30, 2020, \$268.8 million has been received through federal appropriations. Lifetime capital costs for the plan (exclusive of the nine – minimum controls program) total approximately \$2.8 billion, and this year’s proposed ten-year plan includes \$1.03 billion of projected Clean Rivers Project disbursements.

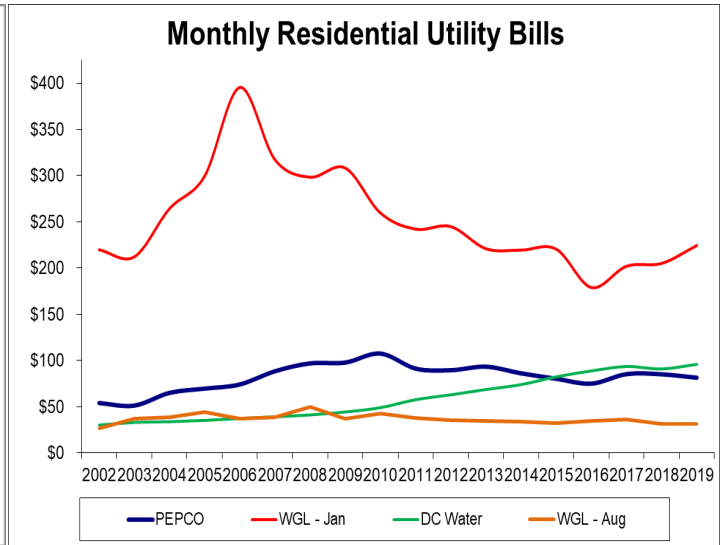
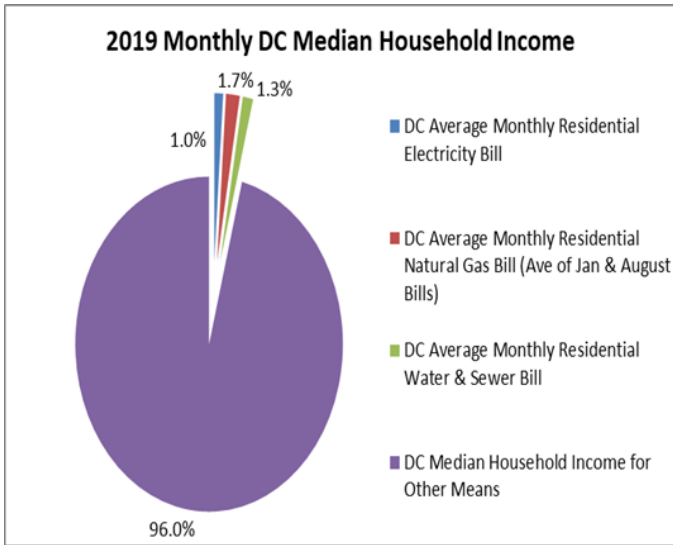
DC WATER CHARGES ARE STILL AFFORDABLE AND COMPETITIVE WITH OTHER MAJOR CITIES

- Median household income:** The average DC Water charges are less than 4.6% of income for 83.8% of the households in the District of Columbia. US EPA guidelines suggest that charges greater than 4% of median household income are typically viewed as a strain on household budgets (2% water + 2% sewer)
- Customer Assistance Programs** are in place to help eligible low income customers with their water/ sewer bills





- After CAP credits, a family of 4 at the 2021 Federal Poverty level spends 1.4 percent of income on DC Water Bills



Observation:

- DC Water’s average monthly residential water & sewer bill is about 1.3 percent of the total monthly household income for the median income family, which is lower, compared to the average monthly electricity and natural gas bill and at about the national average for urban populations

Observation:

- Average natural gas is higher than water & sewer bills

Assumption:

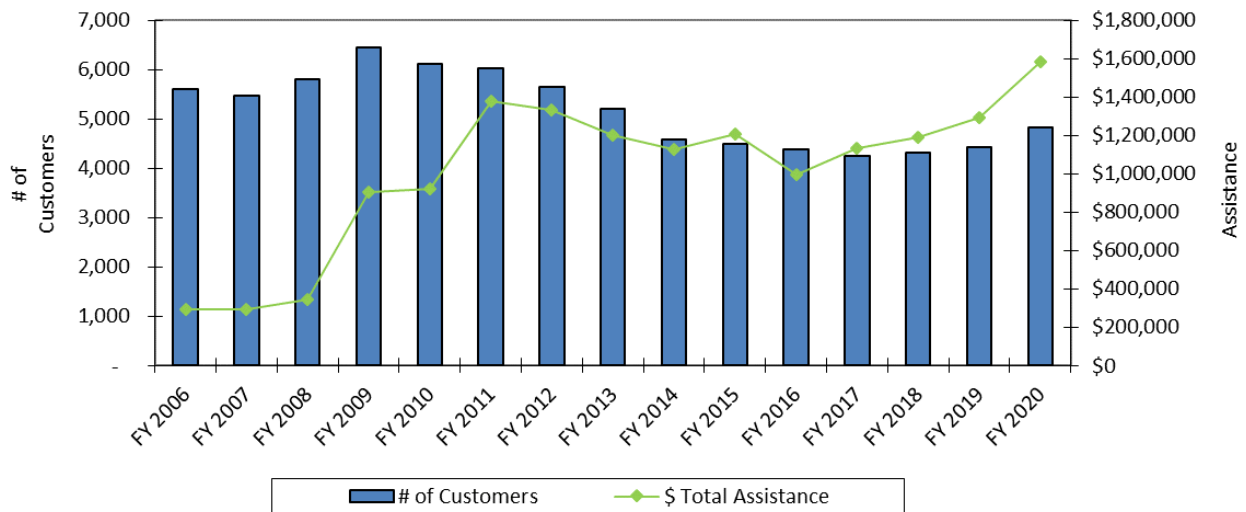
- Average DC customer is assumed to use
- 5.42 Ccf of water in 2019, 200 Therms of natural gas and 700 kWh of electricity per month in 2019

Source
 Electricity and Gas: DC Public Service Commission
 Water and Sewer: DC Water Assuming 5.42 Ccf, or 4,054 gallons consumption
 Median HH Income: US Census Bureau, American Community Survey 2019 1-Year Estimates

DC Water sponsors two programs to assist low income customers in paying their water bills:

- Customer Assistance Program (CAP):** The Authority implemented the CAP in 2001 providing a discount of 4 Ccf per months of water service for single family residential homeowners that meet income eligibility guidelines. In FY 2004, the Authority expanded the CAP to include tenants who meet the financial eligibility requirements and whose primary residence is separately metered by the Authority. In January 2009, the Authority further expanded the CAP to provide a discount of 4 Ccf per month of sewer services to eligible customers. In FY 2011, the discount was expanded to the first 4 Ccf associated with the PILOT/ROW fee in addition to the current discount provided on water and sewer services. In FY 2016, the CAP discount was expanded to include a 100 percent credit/discount for the Water System Replacement Fee (WSRF). In FY 2017, the Authority further expanded the CAP to include 50 percent discount for CRIAC. In FY 2018, the District of Columbia’s Budget Support Act authorized the Mayor to establish a financial assistance program to assist res- idential customers with incomes “not exceeding 100 percent of the area median income” with payment of CRIAC and to supplement the financial assistance programs implemented by DC Wa- ter. In FY 2020, the Board approved the increase in CRIAC discount for CAP customers from 50 percent to 75 percent effective from FY 2021. In FY 2019, CAP assisted over 4,436 customers and provided \$1,290,797 in discounts to low-income customers. In FY 2020, CAP assisted over 4,818 customers and provided \$1,584,808 in discounts to low-income customers.

Customer Assistance Program



The following terms are defined:

- **Customer Assistance Program (CAP)** – Existing program that uses LIHEAP (Low Income Home Energy Assistance Program) criteria to provide DC Water-funded discounts to low-income residential customers with incomes up to 60 percent of the State Median Income (SMI from Health and Human Services (HHS)). Eligible customers receive the first 4 Ccf of water and sewer services, PILOT and ROW, 100 percent discount for the Water System Replacement Fee (WSRF) and 50 percent discount for the CRIAC. On March 5, 2020, DC Water’s Board adopted a proposal to increase the maximum CRIAC IAC credit from 50 percent to 75 percent, effective October 1, 2020 (FY 2021).

- **Customer Assistance Program II (CAP2)** – In FY 2019, DC Water expanded the CAP program for low-income residential customers who do not qualify for CAP with household income up to 80 percent Area Median Income (AMI). Eligible customers receive a discount of up to 3 Ccf per month for water and sewer services and a 50 percent discount for CRIAC. On March 5, 2020, DC Water’s Board adopted a proposal to amend regulations to make the CAP2 program permanent.
In FY 2020, CAP2 assisted 681 customers and provided \$173,837 in discounts to low-income customers

- **Customer Assistance Program III (CAP3)** – New District-funded program to provide benefits to DC Water customers with household income greater than 80 percent and up to 100 percent Area Median Income (AMI) who do not qualify for CAP or CAP2. Eligible customers receive a 75 percent discount for CRIAC.
In FY 2020, CAP3 assisted 133 customers and provided \$25,863 in discounts

- **CRIAC (Clean Rivers Impervious Area Charge) Nonprofit Relief Program** – New District-funded program to provide CRIAC credits to nonprofit organizations as determined by the District Department of the Environment (DOEE). Eligible customers receive up to 90 percent discount for CRIAC.
In FY 2020, Nonprofit Relief Program assisted 189 non-profit organizations and provided \$1,028,753 in discounts.

- **Emergency Residential Relief Program (ERRP)** – District funded program where eligible households may receive bill assistance up to \$2,000 as a one-time emergency benefit.
In FY 2020, ERRP assisted 2,098 customers and provided \$884,388

New Customer Assistance Programs to Mitigate the Impact of COVID-19:

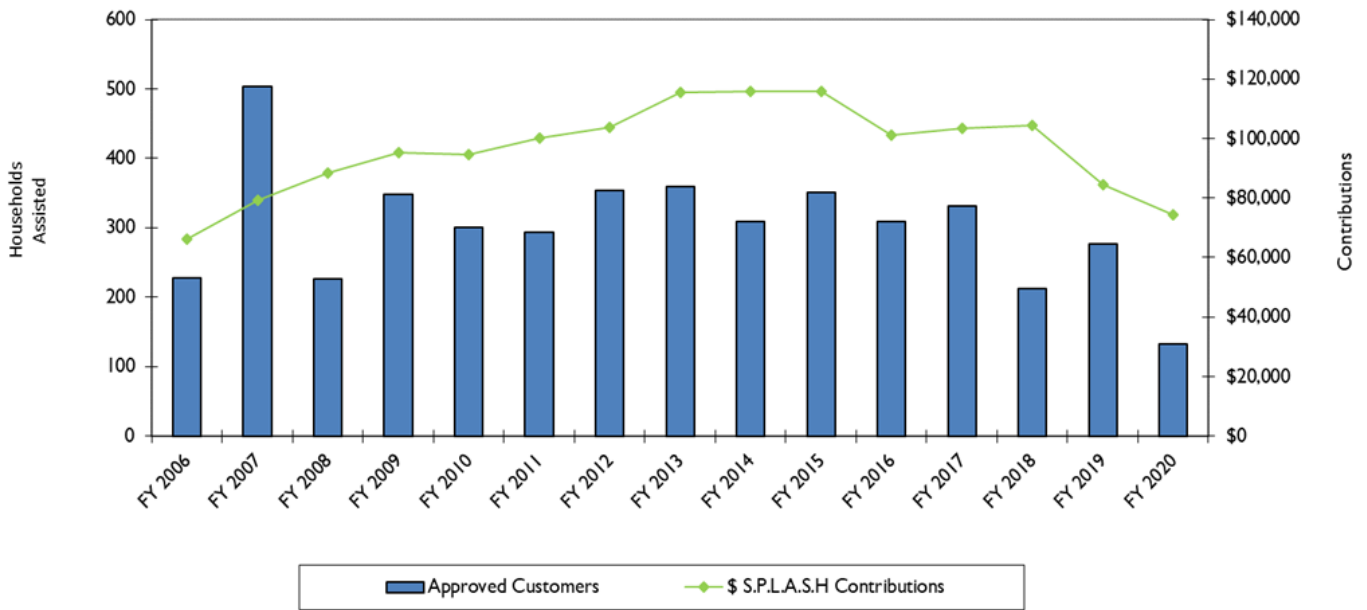
The Covid 19 pandemic impacted DC Water with declines in commercial, federal, and municipal consumption and increases in delinquencies which impacted revenue. In response, DC Water took several strategic and cost reduction initiatives. This included delaying non-critical purchases and activities and pausing some hiring as well as modifying operations to protect staff by arranging work from home for most employees. DC Water also assessed its critical infrastructure needs and balanced it to its revenue challenges and continued to invest in critical capital programs based on priority. Additionally, DC Water also took initiatives to help our customers during the pandemic by reconnecting customers previously disconnected for non-payment, waiving late fees, pausing placing liens, arranging payment plans, and partnering with the District for emergency assistance for those impacted by COVID-19.

On September 3, 2020, DC Water's Board of Director's adopted Resolution #20-65, where the Board approved directing \$15.0 million from the Authority's projected net cash surplus for FY 2020 to the Customer Assistance Program low-income customers:

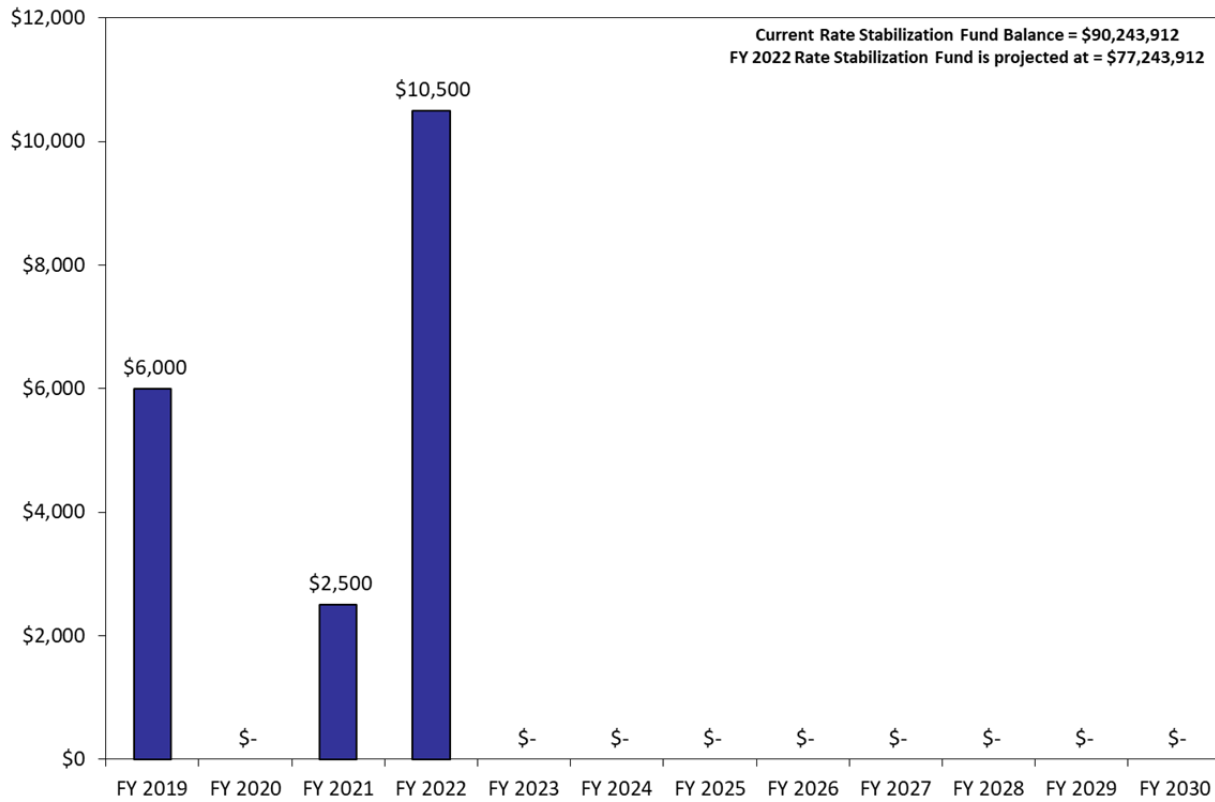
- (1) \$3.0 million to continue the Emergency Residential Relief Program in FY 2021 to provide one-time assistance to customers impacted by COVID; Assistance up to \$2,000 per residential customer;
- (2) \$7.0 million for a new program to provide one-time assistance to multi-family buildings where occupants have been negatively impacted by COVID and payment plans are established and adhered to; assistance amount to be determined and provided per affordable unit, and will be on matching basis;
- (3) \$5.0 million held for FY 2022 targeted assistance for customers in need

- Serving People by Lending a Supporting Hand (“S.P.L.A.S.H”):** The SPLASH program was implemented in FY 2001. Through the SPLASH program, DC Water offers assistance to families in need so that they can maintain critical water and sewer services until they get back on their feet. The program is administered by the Greater Washington Urban League. Every dollar received by DC Water is distributed to eligible customers. In FY 2020, SPLASH assisted 133 households and provided \$74,323 in contributions to low-income customers.

S.P.L.A.S.H Program



RATE STABILIZATION FUND USAGE FY 2021 - FY 2030 (\$'000's)



- At the end of FY 2020, DC Water’s rate stabilization fund (RSF) balance was \$90.24 million. As recommended to the Board, \$2.5 and \$10.5 million RSF will be utilized in FY 2021 and FY 2022 respectively to mitigate rate increases. No RSF is proposed to be utilized from FY 2023 to FY 2030. RSF will have a balance of \$77.24 million at the end of FY 2030.

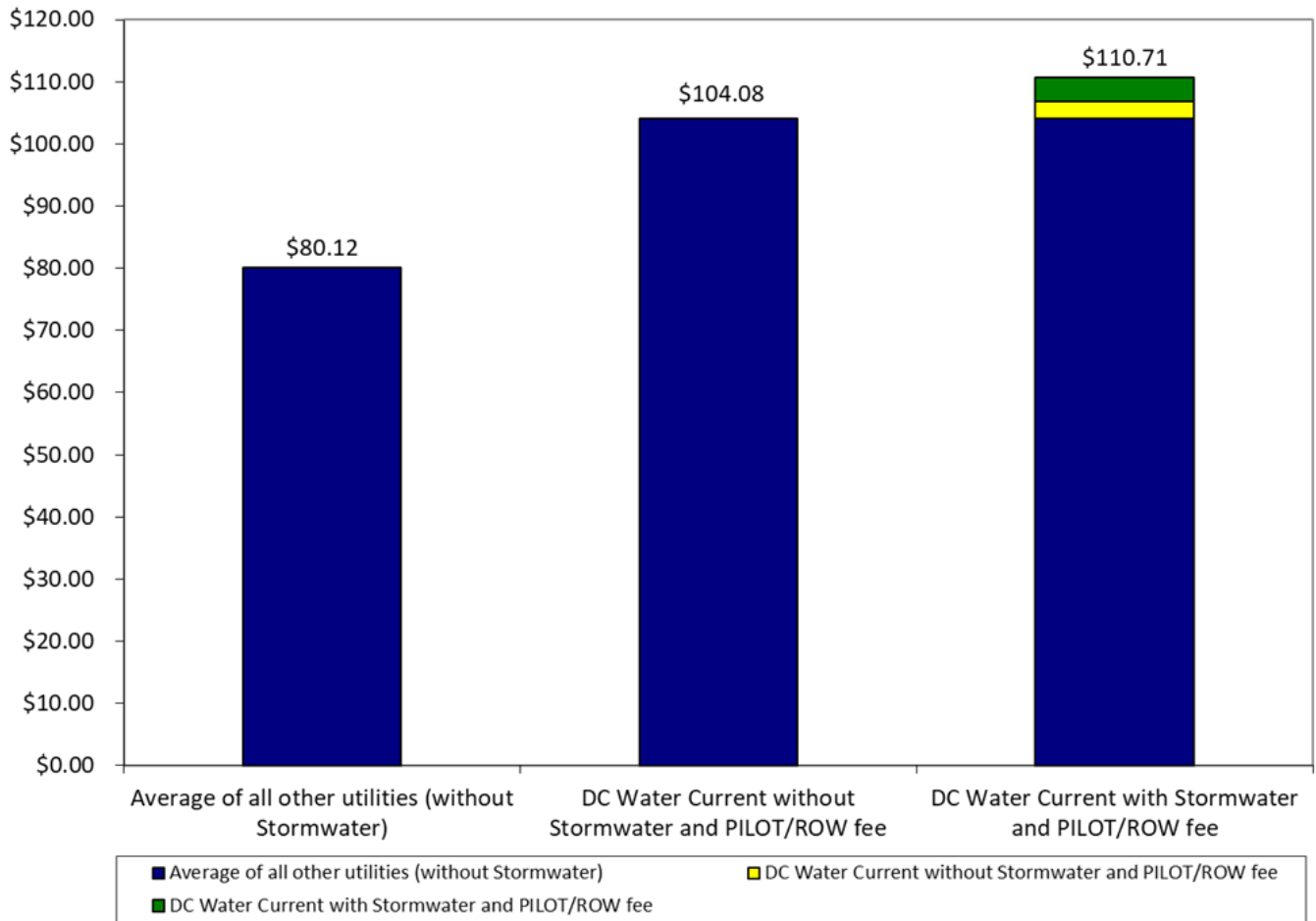
One method of assessing the affordability of residential rates is to calculate the portion of the Median Household Income that would be spent on typical water, wastewater, and stormwater bills and compare the results with the same calculation for other utilities. While no utilities are exactly alike, in the most recent rate survey conducted for DC Water in January 2021, DC Water’s charges for a single family residential customer as a percentage of median income, excluding District fees, were comparable to the average of other large and regional water and wastewater utilities.

The following charts provide DC Water combined water, sewer and stormwater charges for single family residential customers compared to: large CSO communities, other similar large jurisdictions and other regional jurisdictions. There are distinct differences between DC Water and other large and regional utilities. Some differences include:

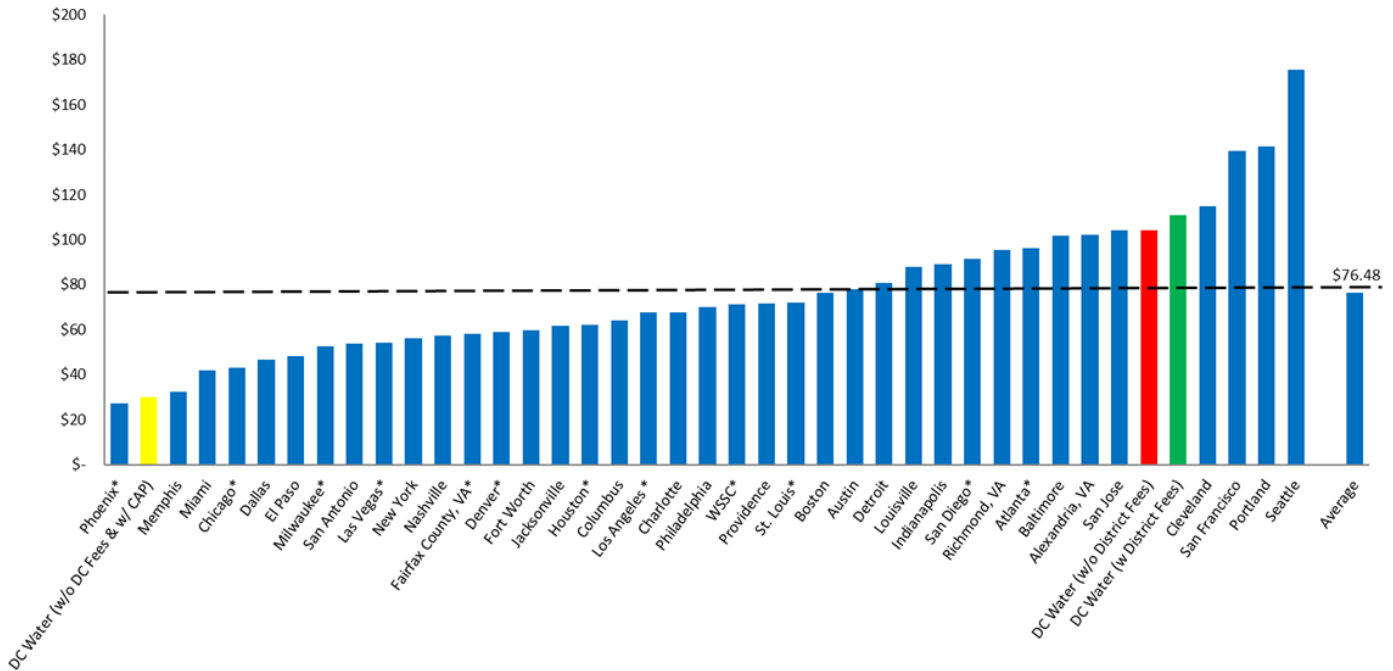
- Different patterns of water use (e.g., suburban jurisdictions can have different demands from urban centers)
- Revenues from taxes that reduce the revenues to be raised from water, sewer and stormwater rates (e.g., Arlington, Milwaukee, St. Louis, Atlanta, Chicago, etc.)
- Available undeveloped areas supporting high developer contributions for growth that can again reduce the revenues to be raised from water, sewer and stormwater rates (e.g., Fairfax County)
- Separate sewer systems in certain large jurisdictions and regional jurisdictions (e.g., Dallas)
- Differences in climate that may affect water supply or conservation needs (e.g., Seattle)
- Varying stages of completion of facilities to meet federal mandates (e.g., Atlanta and Boston have completed most of their major investments - the DC Clean Rivers Project is in progress at this time)

DC WATER’S RETAIL RATES ARE COMPARABLE TO OTHER UTILITIES

**DC Water’s Current FY 2021 Monthly Residential Bill
vs.
Average Monthly Bill of Other Utilities in Effect Winter 2021**



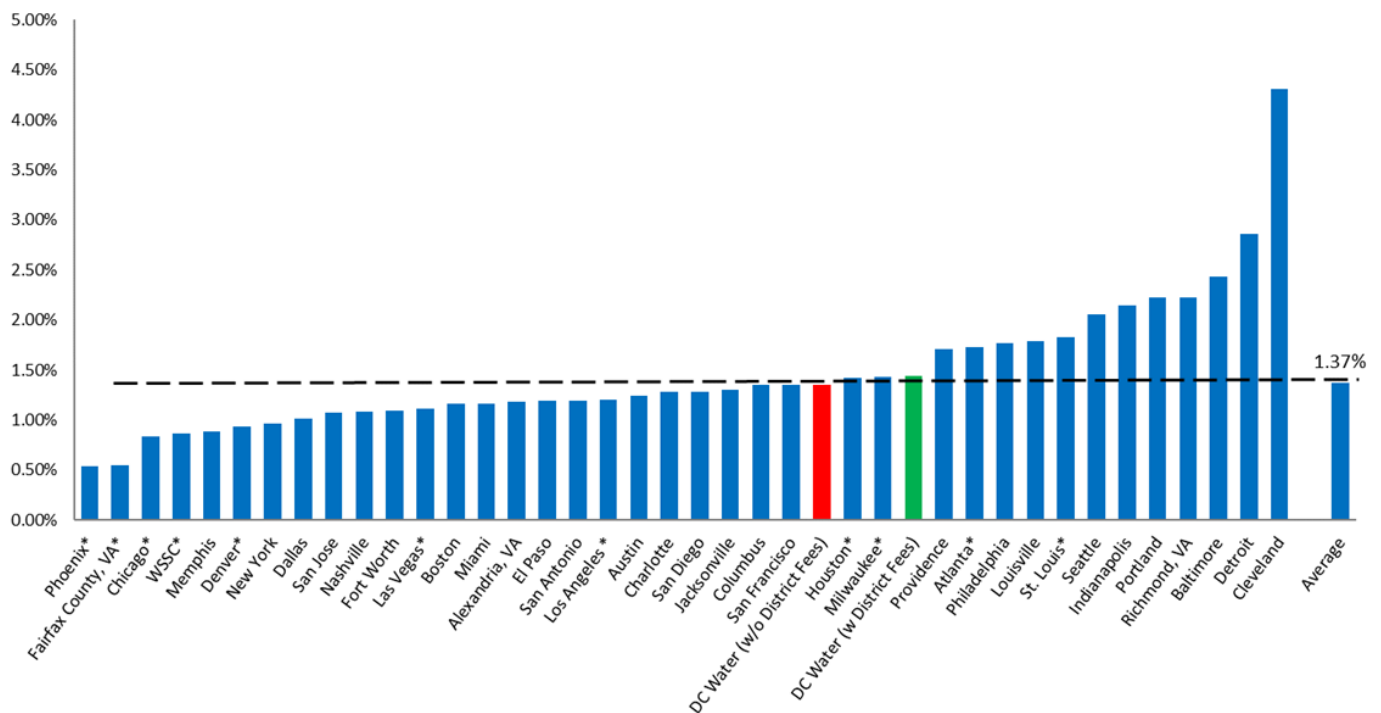
DC Water Retail Rates Compared to Other Large Utilities (Based on Rates in effect Winter 2021)



- (1) Assumes average residential consumption of 5.42 Ccf, or 4,054 gallons, per month. Ccf = hundred cubic feet, or 748 gallons
- (2) Reflects rates and fees in place as of January 1, 2021. The Authority's rate includes the PILOT/ROW fee totaling \$0.73 per Ccf (effective October 1, 2020) and the DOEE residential stormwater rate of \$2.67 per ERU per month.
- (3) Some cities use property tax revenue or other revenues to pay for part of the cost of water, wastewater, or stormwater services, as indicated by * in the graph above. In such situations, the user charge will not reflect the full cost of water, wastewater or stormwater services.

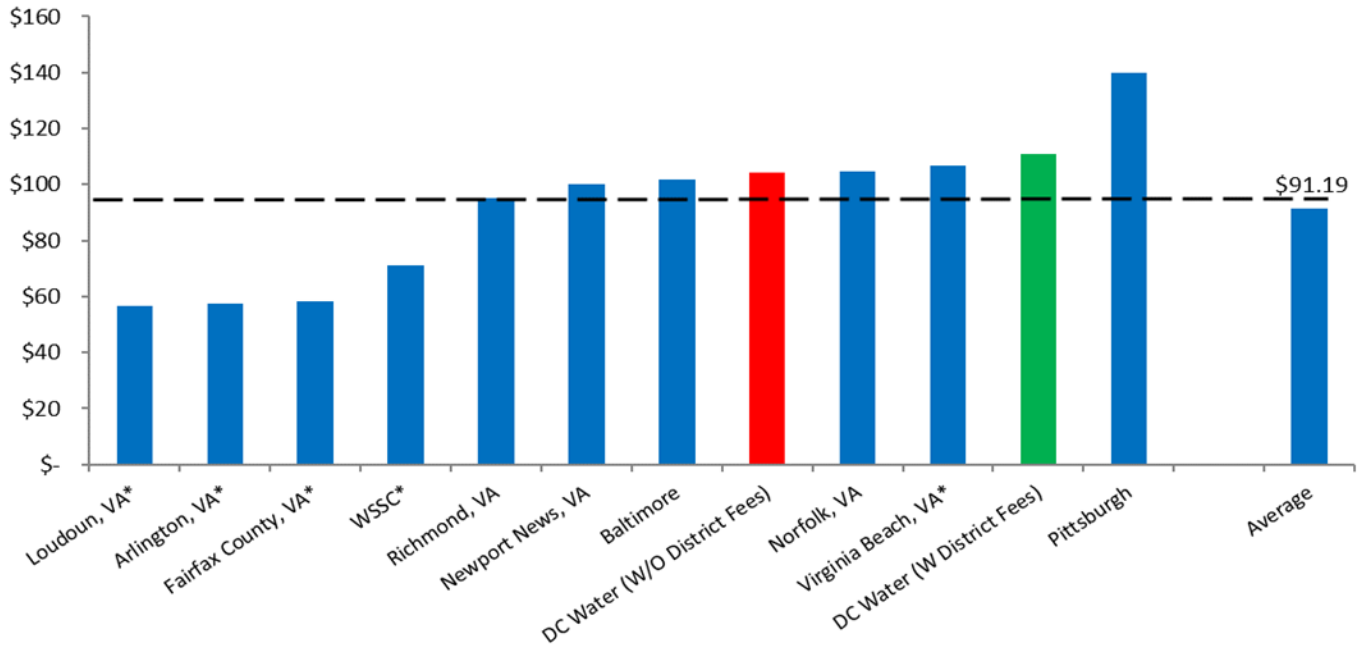
In the chart below, DC Water current charges rank at the median for bill comparison purposes for water and wastewater services compared to a select group of large, regional and CSO utilities, but well within US EPA guidance of 4 percent.

Single Family Residential (SFR) Monthly Bill as % of Median Household Income - Large National Utilities (Based on Rates in effect Winter 2021)



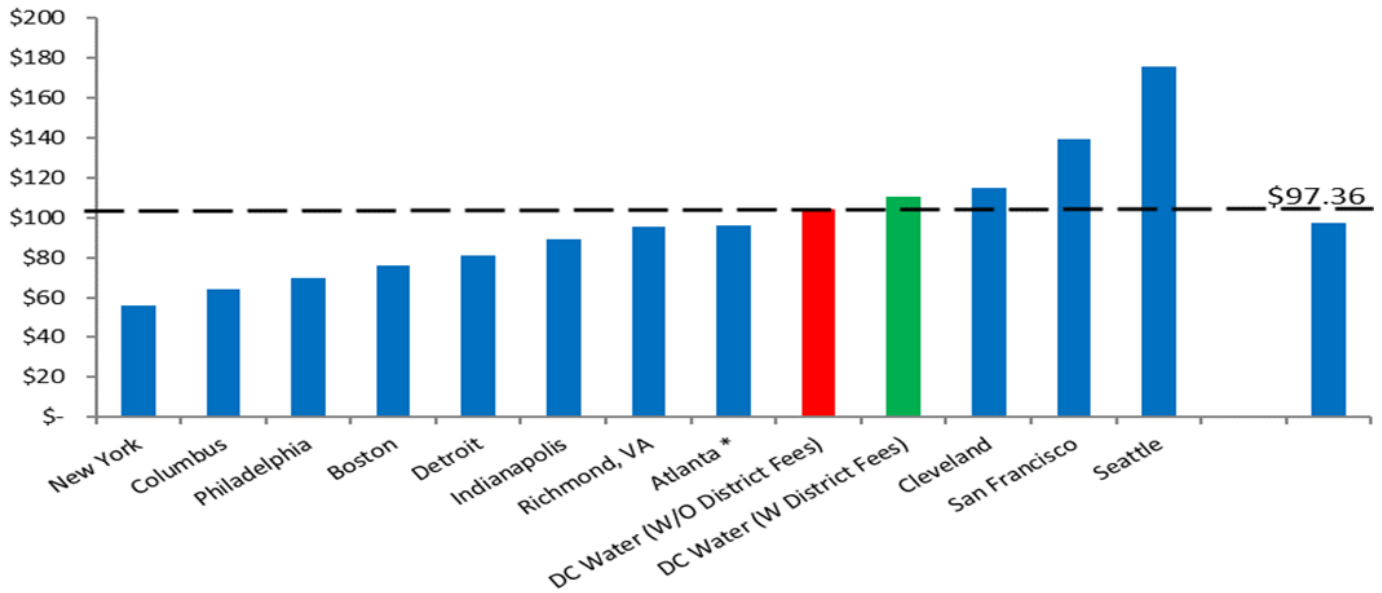
- 1) Assumes average residential consumption of 5.42 Ccf, or 4,054 gallons, per month. Ccf = hundred cubic feet, or 748 gallons
- 2) Reflects rates and fees in place as of January 1, 2021. The Authority's rate includes the PILOT/ROW fee totaling \$0.73 per Ccf (effective October 1, 2020) and the DOEE residential stormwater rate of \$2.67 per ERU per month. Some cities use property tax revenue or other revenues to pay for part of the cost of water, wastewater, or stormwater services, as indicated by * in the graph above. In such situations, the user charge will not reflect the full cost of water, wastewater or stormwater services.

DC Water Retail Rates Compared to Regional Utilities (Based on Rates in effect Winter 2021)



- 1) Assumes average residential consumption of 5.42 Ccf, or 4,054 gallons, per month. Ccf = hundred cubic feet, or 748 gallons
- 2) Reflects rates and fees in place as of January 1, 2021. Some cities use property tax revenue or other revenues to pay for part of the cost of water, wastewater, or stormwater services, as indicated by * in the graph above. In such situations, the user charge will not reflect the full cost of water, wastewater or stormwater services.

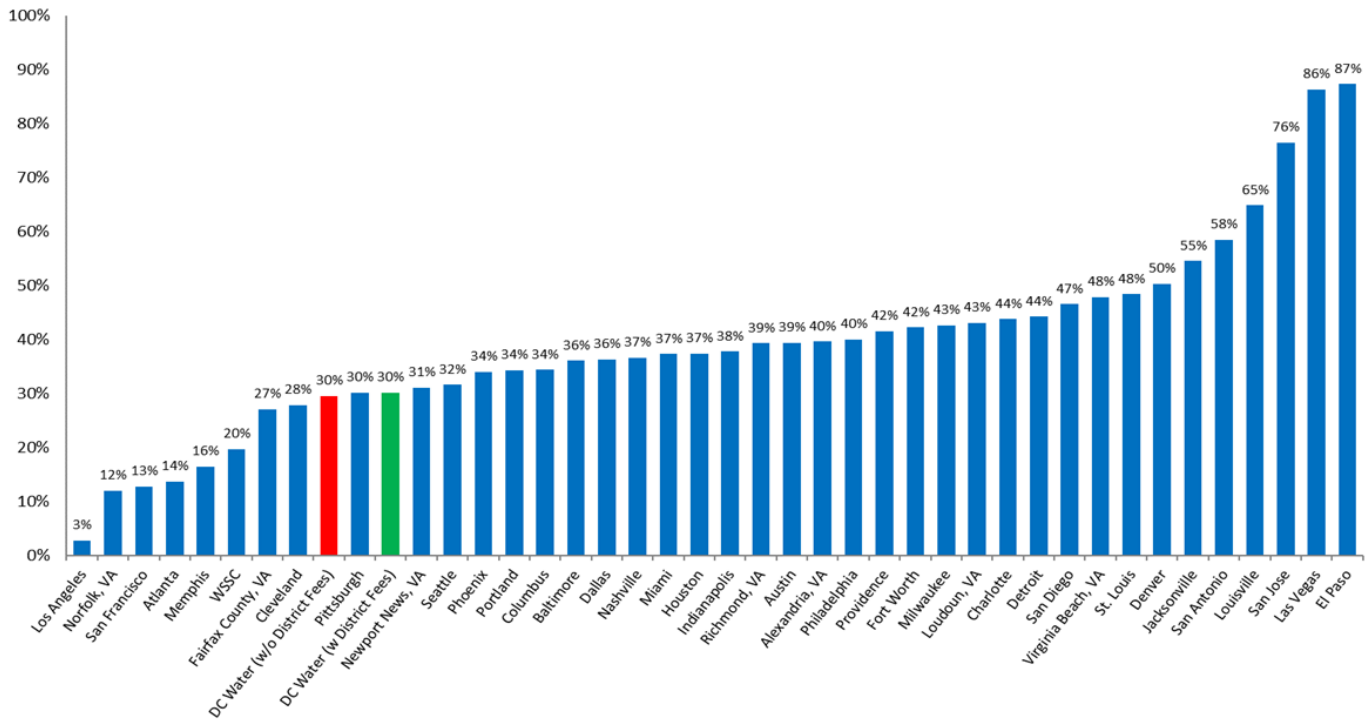
DC Water Compared to CSO Communities (Based on Rates in effect Winter 2021)



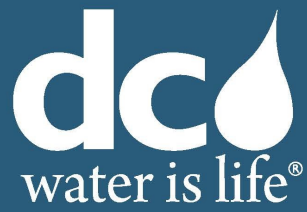
- 1) Assumes average residential consumption of 5.42 Ccf, or 4,054 gallons, per month. Ccf = hundred cubic feet, or 748 gallons.
- 2) Reflects rates and fees in place as of January 1, 2021. The Authority's rate includes the PILOT/ROW fee totaling \$0.73 per Ccf (effective October 1, 2020) and the DOEE residential stormwater rate of \$2.67 per ERU per month.
- 3) Most CSO communities have implemented double digit rate increases to recover CSO-LTCP costs
- 4) Increases do not reflect other available dedicated taxes or state funding potentially available to some agencies
- 5) Chart reflects SFR monthly bill utilities with CSO programs without offsets to user charges

Fixed charges are a small component of the DC Water monthly bill and is less than median for large utilities. This provides the customer more opportunities to impact monthly bills through water conservation.

Fixed Charge as % of Total Single-Family Residential Bills in Large Cities (Based on Rates in effect Winter 2021)



- 1) User Charges are based upon information provided by the identified cities and standardized assumptions regarding water consumption, wastewater discharge, stormwater drainage area and other factors. Actual charges in each city will vary in accordance with local usage patterns. Some cities bill for sewer use on the basis of winter consumption which could affect sewer billings if a customer’s use was not uniform throughout the year. Sewer charges include stormwater charges in those cities where separate stormwater fees are assessed. Some cities use property tax revenue or other revenues to pay for the part of the cost of water, wastewater, or stormwater services. In such situations, the user charges will not reflect the full cost of water, wastewater or stormwater services.
- 2) DC Water rate schedule was effective October 1, 2020. Whereas, charges for all cities reflect rate schedules in effect January 1, 2021
- 3) DC Water PILOT and ROW fees are split between variable water charges and variable sewer charges
- 4) DC Water charges include the stormwater charges of the District
- 5) CSO/Stormwater charges may cover the cost of CSO abatement facilities in those cities with combined sewers; such charges can also cover the cost of stormwater-related facilities and services



Approved FY 2022 Budgets
Section V: CAPITAL PROGRAMS



Water main break / sinkhole response

(\$ in thousands)

FY 2020 Actual	FY 2021 - FY 2030 Disbursement Plan										10-Yr Total	Lifetime Budget
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030		
\$345,858	\$471,267	\$476,140	\$540,585	\$500,427	\$499,918	\$681,280	\$632,075	\$568,067	\$572,262	\$490,468	\$5,432,489	\$12,133,115



Bryant Street Pump Station



DC Water Headquarters



Blue Plains

Overview

DC Water’s Capital Improvement Program (CIP) supports the continuation of major capital asset investment in programs and projects that will upgrade the water distribution and sewer system as well as maintain compliance with federal mandates, and improve the efficiency of operations. The CIP includes all mandated projects, rehabilitation of assets required to meet permit and other regulatory requirements, and projects to meet the immediate needs necessary to maintain existing service levels.

The CIP is presented on two different basis; the ten-year disbursement plan and lifetime budget.

- Ten-Year Disbursement Plan** – This category represents the actual cash disbursements “cash out of the door” for each project, excluding contingencies. It provides a more realistic approach and basis for forecasting the anticipated level of rate increases, as well as, timing for pursuing capital financing. In addition, the ten-year disbursement plan includes projected completion dates, program management, and in-house labor costs.
- Lifetime Budget** – The “lifetime” budget, reflects historical spending prior to, during, and beyond the current ten-year period, including in-house labor. Lifetime budgets represent projects active during the ten-year period, and are the primary area of focus in budget development and day-to-day monitoring. In addition to “active” projects, the lifetime budget includes projects for which all activities have been completed during the previous fiscal year and are listed as “closed” in the CIP. Closed projects are dropped from the CIP in the next fiscal year, and new projects are continuously added, as needed, each fiscal year.

Detailed information on the projects can be found online at www.dewater.com

CIP Development and Approval Process

DC Water’s capital budget review process begins each year in the spring. The Department of CIP Infrastructure Management conducts a review of major accomplishments, priorities, status of major projects, and emerging regulatory and related issues impacting the capital program. The review process is a collaborative effort, and involves departments with responsibility for managing the operations of DC Water services and capital projects; staff from the department of Finance; and members of the Executive Team. The CIP is integrated into DC Water’s ten-year financial plan; and is the primary driver of DC Water’s projected rate increases over the ten-year planning period.

This review process spans over several months and culminates with the presentation of the CIP to DC Water’s Board of Directors’ Environmental Quality and Operations; Finance and Budget; and DC Retail Water and Sewer Rates Committees typically in January. The operating budgets, capital improvement program, and ten-year financial plan were adopted by the full Board on April 1, 2021.

After adoption by the Board of Directors, DC Water is required to submit its annual operating and ten-year capital budgets to the Mayor and the District of Columbia Council for review and comment. However, neither has the power to change DC Water’s annual budgets. The District of Columbia includes DC Water’s budgets in their submission to Congress.

Capital Authority Request

Capital authority represents the amount of Congressionally-authorized funding that DC Water can use to administer its capital program. Sufficient authority is required to be in place prior to contracts being executed. Actual commitments within the service areas may vary up or down for a particular year. However, they are “not to exceed the total” FY 2022 – FY 2030 capital authority request in the amount of \$5.0 billion.

It should be noted that the execution of contracts require the approval of the CEO and General Manager, as Contracting Officer, or his delegee. Major projects and contracts valued at \$1 million or more, require DC Water Board approval.

Capitalization Policy

DC Water’s capitalization policy determines how expenditures will be recognized and accounted. DC Water matches the financing of an asset to its projected useful life and the policy determines how projects will be financed.

DEFINITION:

- Capital Project – an average life of 30 years and is financed with long-term debt
- Capital Equipment – has a life of at least three years, is financed with short-term debt or cash, an individual component cost of \$5,000 or more. The cost of capital equipment purchases that are part of a clearly identified capital program can be aggregated. In which case, capitalize all cost relating to the capital program at the project level regardless of the individual component amount.

The following guidelines are used to categorize items as either capital equipment or an operating expense.

Expenditure Type	Financial Treatment	Definition
Rehabilitation		
Enhancement	Capitalize	Addition/replacement of a sub-component of an asset, to improve the “attributes” of the asset. This will include all such work as valve replacement or replacement of a section of a pipe.
Refurbishment	Capitalize	Expenditure on an asset that creates a material extension to the Estimated Operating Life (EOL) of the asset. This is distinct from maintenance work, which is carried out to ensure that an asset is able to perform its designated function for its normal EOL. An example of refurbishment would be pipe lining and pipe grouting.
Rebuild	Capitalize	Expenditures to reconstruct, renovate, remodel, remake or reassemble an asset or infrastructure after it has been damaged or destroyed. An example of a rebuild is a valve rehabilitation, reconstruction of the valve elements
Replacement	Capitalize	Expenditure to replace substantially all of an asset. An example is replacement and installation of a new pipe including the ensuing disinfection applications and all associated activities relating to the replacement
Repair	Expense	Expenditure on an asset that maintains or restores the design functionality or attributes of an asset, enabling the asset to perform its intended function during its EOL. Examples of these will include service line repairs such as clamp application on service pipes, bolt application/replacement/adjustment, small scale chemical applications such as use of dechlorinating tablets, meter shut off valve, curb stop, small service line repairs that does not involve replacement nor meter housing, high pressure jet vacuum or any other obstruction removal methodology
Maintenance	Expense	Scheduled and recurring costs for the continued performance of an asset

(\$ in thousands)

FY 2020 Actual	FY 2021 - FY 2030 Disbursement Plan												Lifetime Budget
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-yr Total		
NON PROCESS FACILITIES	\$10,016	\$12,725	\$21,321	\$22,204	\$6,350	\$5,262	\$3,066	\$844	\$0	\$0	\$109,776	\$210,031	
Facility Land Use	\$38,004	\$12,725	\$21,321	\$22,204	\$6,350	\$5,262	\$3,066	\$844	\$0	\$0	\$109,776	\$210,031	
Subtotal	\$38,004	\$12,725	\$21,321	\$22,204	\$6,350	\$5,262	\$3,066	\$844	\$0	\$0	\$109,776	\$210,031	
WASTEWATER TREATMENT	\$14,810	\$32,187	\$43,326	\$57,315	\$49,011	\$72,645	\$95,707	\$98,920	\$84,012	\$82,419	\$643,359	\$1,250,842	
Liquid Processing	\$18,011	\$13,638	\$27,701	\$28,147	\$38,830	\$50,636	\$29,432	\$16,268	\$25,231	\$21,468	\$269,362	\$491,232	
Plantwide	\$12,340	\$17,255	\$24,181	\$33,068	\$19,981	\$16,672	\$6,487	\$10,504	\$12,838	\$28,595	\$195,344	\$929,651	
Solids Processing	\$7,401	\$842	\$2,529	\$1,129	\$0	\$0	\$2,206	\$1,861	\$11,665	\$23,293	\$50,926	\$803,410	
Enhanced Nitrogen Removal Facilities	\$78,992	\$63,922	\$97,737	\$119,659	\$107,822	\$139,953	\$133,832	\$127,553	\$133,746	\$155,775	\$1,158,991	\$3,475,135	
Subtotal	\$178,557	\$160,582	\$118,360	\$66,803	\$58,231	\$147,834	\$99,877	\$86,036	\$113,315	\$11,436	\$1,027,910	\$2,760,365	
COMBINED SEWER OVERFLOW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
DC Clean Rivers Program	\$5,407	\$4,694	\$8,238	\$11,158	\$18,986	\$9,787	\$4,931	\$5,378	\$11,278	\$15,209	\$95,066	\$218,708	
Combined Sewer Program Management	\$170,842	\$165,276	\$126,598	\$77,962	\$77,216	\$157,621	\$104,808	\$91,414	\$124,593	\$26,645	\$1,122,976	\$2,979,072	
Combined Sewer Overflow Program	\$0	\$33	\$188	\$1,511	\$2,773	\$1,191	\$1,792	\$1,970	\$1,709	\$260	\$11,427	\$18,025	
Storm Local Drainage Program	\$818	\$1,315	\$837	\$866	\$526	\$875	\$843	\$1,084	\$1,287	\$935	\$9,217	\$10,788	
Storm On-Going Program	\$1,770	\$7,314	\$5,535	\$1,877	\$2,400	\$2,627	\$2,136	\$4,279	\$1,755	\$5,497	\$38,443	\$62,809	
Storm Pumping Facilities	\$164	\$429	\$591	\$653	\$506	\$604	\$318	\$385	\$306	\$236	\$4,192	\$14,179	
Stormwater Program Managemet	\$95	\$137	\$58	\$202	\$123	\$0	\$0	\$0	\$0	\$0	\$615	\$1,510	
Stormwater Trunk/Force Sewers	\$2,587	\$9,228	\$7,209	\$5,109	\$6,328	\$5,297	\$5,089	\$7,718	\$5,057	\$6,928	\$63,894	\$121,310	
Subtotal	\$5,931	\$9,228	\$7,209	\$5,109	\$6,328	\$5,297	\$5,089	\$7,718	\$5,057	\$6,928	\$63,894	\$121,310	
SANITARY SEWER	\$621	\$694	\$16,374	\$29,071	\$33,030	\$58,298	\$64,514	\$37,628	\$30,750	\$32,132	\$305,405	\$512,171	
Sanitary Collection System	\$8,517	\$13,381	\$12,358	\$14,453	\$13,200	\$13,576	\$13,988	\$14,395	\$14,850	\$15,289	\$138,757	\$198,935	
Sanitary On-Going Projects	\$497	\$2,076	\$4,358	\$6,831	\$10,669	\$8,852	\$12,329	\$8,188	\$30,468	\$31,299	\$145,894	\$251,721	
Sanitary Pumping Facilities	\$1,810	\$7,728	\$8,099	\$9,132	\$8,070	\$10,519	\$9,589	\$8,680	\$6,311	\$5,783	\$81,361	\$196,108	
Sanitary Program Management	\$12,341	\$24,562	\$48,905	\$49,421	\$64,121	\$88,169	\$112,328	\$80,843	\$55,668	\$49,521	\$641,557	\$936,759	
Interceptor/Trunk Force Sewers	\$23,786	\$75,437	\$94,116	\$126,383	\$130,552	\$182,891	\$214,243	\$166,734	\$138,047	\$134,024	\$1,312,973	\$2,095,695	
Subtotal	\$23,786	\$75,437	\$94,116	\$126,383	\$130,552	\$182,891	\$214,243	\$166,734	\$138,047	\$134,024	\$1,312,973	\$2,095,695	
WATER	\$16,509	\$68,528	\$82,740	\$71,899	\$89,272	\$82,322	\$85,853	\$87,095	\$87,109	\$84,434	\$785,895	\$1,502,345	
Water Distribution Systems	\$3,954	\$6,179	\$5,908	\$5,869	\$5,963	\$5,396	\$5,428	\$5,666	\$5,739	\$5,390	\$57,613	\$243,956	
Lead Free DC Program	\$12,825	\$12,126	\$12,480	\$13,457	\$15,287	\$14,390	\$16,670	\$17,818	\$18,000	\$19,000	\$153,502	\$212,590	
Water On-Going Projects	\$297	\$1,328	\$5,045	\$10,281	\$3,947	\$5,814	\$2,395	\$4,495	\$215	\$2,571	\$42,827	\$72,646	
Water Pumping Facilities	\$359	\$1,016	\$152	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,181	\$33,933	
DDOT Water Projects	\$4,514	\$4,521	\$3,056	\$2,498	\$4,724	\$9,333	\$7,967	\$6,841	\$2,611	\$3,602	\$54,718	\$155,760	
Water Storage Facilities	\$3,263	\$3,550	\$4,873	\$4,193	\$2,762	\$4,354	\$5,689	\$8,380	\$5,157	\$5,157	\$51,981	\$125,733	
Water Service Program Management	\$41,721	\$75,362	\$100,209	\$111,118	\$122,534	\$122,944	\$126,693	\$129,781	\$118,831	\$120,155	\$1,147,717	\$2,346,963	
Subtotal	\$308,415	\$419,678	\$426,797	\$463,435	\$450,803	\$613,968	\$587,731	\$524,044	\$520,274	\$443,526	\$4,916,327	\$11,228,206	
CAPITAL PROJECTS	\$24,371	\$36,207	\$36,019	\$28,578	\$33,103	\$33,103	\$33,103	\$33,103	\$33,103	\$33,103	\$336,036	\$336,036	
CAPITAL EQUIPMENT	\$13,073	\$15,382	\$13,324	\$37,903	\$8,414	\$16,012	\$34,208	\$11,240	\$10,919	\$18,885	\$180,125	\$180,125	
WASHINGTON AQUEDUCT	\$37,443	\$51,589	\$49,343	\$74,513	\$36,992	\$49,115	\$67,312	\$44,344	\$51,988	\$46,942	\$516,161	\$516,161	
ADDITIONAL CAPITAL PROGRAMS	\$3,443	\$49,343	\$49,343	\$74,513	\$36,992	\$49,115	\$67,312	\$44,344	\$51,988	\$46,942	\$516,161	\$516,161	
LABOR	\$345,858	\$471,267	\$476,140	\$540,585	\$500,427	\$681,280	\$632,075	\$568,067	\$572,262	\$490,468	\$5,432,489	\$12,133,115	
TOTAL CAPITAL BUDGETS	\$345,858	\$471,267	\$476,140	\$540,585	\$500,427	\$681,280	\$632,075	\$568,067	\$572,262	\$490,468	\$5,432,489	\$12,133,115	



Capital Improvement Program

(\$ in thousands)

Prioritization Schedule

The Authority evaluates and prioritizes capital projects based on a specific criteria. These criterias are fundamental in developing a CIP based on demonstrated needs and are set forth in the following table and described below.

Approximately 19 percent of the current CIP ten-year disbursements are for large regulatory mandates which includes the Clean Rivers Project. As we progress closer to the completion of the mandated projects, DC Water is able to increase investments in upgrading its aging water and sewer infrastructure, starting FY 2023 and beyond.

	MEASURE OF PRIORITY									
	1A		2A	2B	2C	2D	3A		3B	
	Mandates		Health & Safety	Board Policy	Potential Failure	High Profile Good Neighbor	Good Engineering High Payback		Good Engineering Lower Payback	
	Agreements, Regulatory standards, Court orders, Issues and Permits requirements, Stipulated Agreements, Etc.		Required to address Public Safety	Undertaken as a result of the Board's commitment to outside agencies	Related to Facilities in danger of failing, or critical to meeting permit requirements	Address Public concerns	Need to fulfill Mission and upgrade Facilities		Lower priority Projects	
FY 2021	\$170,417	36%	\$7,791	\$76,575	\$37,106	\$1,689	\$107,677	23%	\$70,013	\$471,267
FY 2022	\$160,270	34%	\$16,498	\$70,078	\$32,087	\$233	\$126,413	27%	\$70,562	476,140
FY 2023	\$118,064	22%	\$42,291	\$79,481	\$29,317	\$403	\$145,800	27%	\$125,229	540,585
FY 2024	\$67,097	13%	\$4,969	\$57,844	\$39,023	\$1,588	\$175,715	35%	\$154,191	500,426
FY 2025	\$58,499	12%	\$7,416	\$67,563	\$42,883	\$1,312	\$182,509	37%	\$139,737	499,918
FY 2026	\$147,834	22%	\$22,248	\$60,258	\$51,330	\$714	\$241,608	35%	\$157,289	681,280
FY 2027	\$99,877	16%	\$25,742	\$61,311	\$44,187	\$352	\$224,563	36%	\$176,042	632,075
FY 2028	\$86,036	15%	\$9,822	\$63,142	\$28,722	\$202	\$198,325	35%	\$181,818	568,067
FY 2029	\$113,315	20%	\$1,271	\$68,984	\$29,780	\$215	\$176,513	31%	\$182,184	572,263
FY 2030	\$11,436	2%	\$3,632	\$69,615	\$33,382	\$2,571	\$166,956	34%	\$202,876	490,468
Total	\$1,032,845		\$141,678	\$674,851	\$367,816	\$9,279	\$1,746,079		\$1,459,940	\$5,432,489
% of Total	19.0%		2.6%	12.4%	6.8%	0.2%	32.1%		26.9%	

(\$ in thousands)

FY 2020 Actual	FY 2021 - FY 2030 Disbursement Plan										LifETIME Budget	
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030		10-Yr Total
\$10,016	\$38,004	\$12,725	\$21,321	\$22,204	\$6,350	\$5,262	\$3,066	\$844	\$0	\$0	\$109,776	\$210,031



Main Pumping Station



DC Water Headquarters



Fleet Maintenance Facility

Overview

The Non Process Facilities Service Area accommodates projects approved under the Non Process Facilities Master Plan (NPFMP) and related improvements necessary to support DC Water activities and critical operations. The goals of this CIP are the same as those in the NPFMP, which are designed to:

- Optimize efficient use of existing DC Water land and facilities
- Introduce state-of-the-art material management technologies that will enhance inventory security, storage, distribution, and transportation
- Implement Green Strategies and Sustainable Design within DC Water infrastructure and facility planning
- Maximize flexibility throughout DC Water facilities for future treatment needs, distribution system operations, and innovative opportunities

PROGRAM AREAS

Facility Land Use – The primary objective of this service area is to implement the NPFMP, and to ensure that we are meeting the health & hygiene needs of our workforce while efficiently maintaining facilities for our operations. Projects that generally improve DC Water’s facilities do not represent a core process area within DC Water’s mission, but they directly contribute to the health and well-being of our employees and visitors. Some of the projects included in this program are:

- **Headquarters Building** – The DC Water Administrative Headquarters Building, located next to the historic Main Pumping Station, is DC Water’s most sustainable construction project ever. The Headquarters anchor DC Water’s new publicly-accessible campus along the Anacostia River. By relocating nonessential personnel in FY 2019 from the Blue Plains industrial campus, DC Water preserved what little remaining space exists – an irreplaceable commodity – for future process improvements if required by permit or desired for innovation.
- **Floatable Debris Dock Replacement** – The existing docks are more than 25 years old and need to be replaced. The replacement slips (at least five) and associated new piles will allow flexibility and maneuverability of the boats, overcome the existing draft challenges of the river bottom, and most importantly, create safe conditions for the staff and their operations. Future improvements include the installation of a new boat ramp and updated fencing and lighting to further improve the efficiencies of skimmer boat operations.
- **Main & O Redevelopment Efforts** – This project relocates Sewer and Fleet Operations from the Main & O Campus in order to accommodate the redevelopment plans for the District of Columbia in and around the Navy Yard. Costs associated with the acquisition of new land and construction of new facilities will be paid by the District of Columbia, with completion targets of FY 2022 for both the Fleet Facility, and Sewer Facility.
- **Renovations to Blue Plains Central Operations Facility** – The 2013 NPFMP called for utilizing the Central Operations Facility as the operations center for Blue Plains as originally intended, consolidating all Engineering staff except Clean Rivers. In addition to efficiently organizing the space vacated by Administrative personnel now located at Headquarters Building, this project consists of identifying a range of potential tasks, such as structural/building envelope analysis, energy efficiency and resiliency upgrades, and improved space planning and document storage that will modernize and improve operations at the facility.
- **Renovations to Bryant Street Campus** – The 2013 NPFMP required the development of improved spaces for our Water Operations and expanding critical functions through the development of a proper Emergency Operations Center (EOC), while maintaining the Bryant Street Pump Station’s historic character. In addition to efficiently organizing the space vacated by personnel now located at HQO, this project consists of identifying a range of potential tasks, such as structural/building envelope analysis, energy efficiency and resiliency upgrades, and improved space planning and document storage that will modernize and improve operations at the Bryant Street campus.

- **Non-Process Heating, Ventilation, and Air Conditioning (HVAC) and Roofing Projects** – This project is meant to holistically address some of the HVAC and roofing/building envelope challenges that exist throughout DC Water facilities. This will include undertaking proper analysis of our needs given the characterization of the space (occupied versus non-occupied for example) and then developing remediation and renovation plans as identified by the assessment. The initial analysis is coming from the Blueprint Health & Hygiene initiative, and then we will look to implement a proactive plan moving forward taking into account the proper lifecycle costs of these assets to ensure that our facilities meet the needs of our operations and workforce.

ACCOMPLISHMENTS

- The Headquarters Building is a finalist for following 2021 awards:
 - Architizer A+ Awards for Architecture + New Technology
 - United States Green Building Council (USGBC) National Capital Region Community Leader Project
- The design stage for the new Fleet Service Facility and Sewer Services Field Operations Center has been completed for both projects, which are currently under construction with completion anticipated in FY 2022.
- DC Water is in the schematic design / program development phase for the renovations of Central Operations Facility and Bryant Street. Bryant Street planning is advancing with interactions with State Historic Preservation Office (SHPO) and an ongoing Determination of Eligibility for the Distribution Building and the warehouse at 200 Bryant Street. Central Operations Facility work has been pushed back to support COVID pandemic related reductions.
- Facilities is working in coordination with Procurement on a new A/E basic ordering agreement contract for program management, design and construction management services to support land use and non-process capital projects. The new non-process facilities program management consultant has been selected and approved by the Board. The Facilities department continues to work with the Procurement department to get the new agreement executed.
- Floor plans have been created for the renovation of Supply Building number one (SB-1) at Blue Plains to support designer construction cost estimating and the creation of full design documents for bidding purposes. SB-1 will be the new home for the Facilities Department making room for the Department of Maintenance Services to move their shops under one roof at the Central Maintenance Facility.

OPERATIONAL IMPACT OF MAJOR CAPITAL PROGRAMS

Headquarters Building – This new building is LEED® Platinum Class A certified, and incorporated environmentally sustainable features used to capture onsite rainfall for irrigation and non-potable water needs inside the facility. Additionally, alternative energy will be supplied by an innovative sewer heat recovery system that will lower operating cost.

Non Process Facilities

(\$ in thousands)

FACILITY LAND USE		Start	Status	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion	
DS	New Headquarters Building	2008	Ongoing	\$6,608	\$1,220	\$10	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,240	\$76,400	2023	
DJ	Water System Laboratory Facilities	2006	Ongoing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$646	2022	
HE	Bryant Street Pump Station Building Mod.	2018	Ongoing	\$336	\$363	\$1,183	\$1,695	\$6,224	\$2,354	\$0	\$0	\$0	\$0	\$0	\$11,819	\$14,370	2025	
HF	Fort Reno Pump Station	2020	Ongoing	\$0	\$266	\$31	\$1,115	\$1,294	\$0	\$0	\$0	\$0	\$0	\$0	\$2,706	\$2,950	2024	
HH	Main & O Redevelopment Efforts	2015	Ongoing	\$2,902	\$30,435	\$5,304	\$146	\$8	\$0	\$0	\$0	\$0	\$0	\$0	\$35,893	\$50,130	2024	
HJ	Central Operations Facility Renovation	2019	Ongoing	\$170	\$2,082	\$1,260	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,342	\$7,214	2022	
HK	CMF Renovations And Consolidation	2020	Ongoing	\$0	\$357	\$1,226	\$311	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,894	\$4,920	2023	
NZ	Floatable Debris Dock Replacement	2020	Ongoing	\$0	\$884	\$108	\$1,671	\$1,929	\$298	\$355	\$1	\$0	\$0	\$0	\$5,246	\$5,402	2027	
RV	Non-Process Area - HVAC And Roofing Projects	2020	Ongoing	\$0	\$1,310	\$1,322	\$2,218	\$2,922	\$2,798	\$1,876	\$1,636	\$774	\$0	\$0	\$14,856	\$15,000	2028	
SA	Anacostia Pump Station - Field Ops East	2025	New	\$0	\$50	\$44	\$0	\$0	\$142	\$398	\$1,290	\$70	\$0	\$0	\$1,994	\$2,000	2028	
SB	Bryant Street Parking Modifications	2024	New	\$0	\$89	\$101	\$0	\$170	\$758	\$2,633	\$139	\$0	\$0	\$0	\$3,890	\$4,000	2027	
SC	Main & O Seawall Restoration (Phase 2, HQO)	2020	New	\$0	\$531	\$1,600	\$4,730	\$5,082	\$0	\$0	\$0	\$0	\$0	\$0	\$11,943	\$12,000	2024	
SD	Main PS Building Modifications - Historic Restoration	2021	New	\$0	\$418	\$536	\$9,425	\$4,575	\$0	\$0	\$0	\$0	\$0	\$0	\$14,954	\$15,000	2024	
TOTAL FACILITY LAND USE BUDGETS				\$10,016	\$38,004	\$12,725	\$21,321	\$22,204	\$6,350	\$5,262	\$3,066	\$844	\$0	\$0	\$109,776	\$210,031		
TOTAL NON PROCESS FACILITIES BUDGETS				\$10,016	\$38,004	\$12,725	\$21,321	\$22,204	\$6,350	\$5,262	\$3,066	\$844	\$0	\$0	\$0	\$109,776	\$210,031	

(\$ in thousands)

FY 2020 Actual	FY 2021 - FY 2030 Disbursement Plan										Lifetime Budget	
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030		10-Yr Total
\$48,987	\$78,992	\$63,922	\$97,737	\$119,659	\$107,822	\$139,953	\$133,832	\$127,553	\$133,746	\$155,775	\$1,158,991	\$3,475,135



Blue Plains Advanced Wastewater



Secondary Sedimentation



Nitrification Reactors

Overview

Capital projects in the Wastewater Treatment Service Area are required to rehabilitate, upgrade or provide new facilities at Blue Plains to ensure that it can reliably meet its National Pollutant Discharge Elimination System (NPDES) permit requirements and produce a consistent, high-quality dewatered biosolids product. DC Water’s current NPDES permit is effective from August 26, 2018 through August 25, 2023. This permit requires wastewater treatment to a level that meets one of the most stringent NPDES discharge permits in the United States.

Wastewater flows in from the District of Columbia, Montgomery and Prince George’s Counties in Maryland, and Fairfax and Loudoun counties in Virginia. Blue Plains Advanced Wastewater Treatment Plant treats an annual average of 290 million gallons per day (MGD) and has a design capacity of 384 MGD, with a peak design capacity to treat more than 555 MGD. An additional 225 MGD can be treated utilizing the Wet Weather Treatment Facility at Blue Plains.

PROGRAM AREAS

Liquid Processing – Projects in this program area encompass upgrading and rehabilitating facilities involved in handling flows from the sanitary and combined sewer systems. These flows progress sequentially through the Plant processes and ultimately discharge the treated effluents into the Potomac River.

Plantwide – This program provides for upgrading, rehabilitating, or installing support systems and facilities that are required for both the liquid processing and solids processing programs.

Solids Processing – Biosolids processing involves reductions in volume along with treatment to meet applicable federal, state and local requirements for beneficial reuse of biosolids. Treatment is provided by a system of processing facilities that include gravity thickening of primary sludge, floatation thickening of the biological waste sludge produced by the secondary and nitrogen removal processes, pre-dewatering of blended thickened solids by centrifuge, pretreatment of solids by thermal hydrolysis, anaerobic digestion, and final dewatering of Class A biosolids by belt filter press.

Enhanced Nitrogen Removal Facilities – Provides for new facilities and upgrades to existing facilities needed at Blue Plains to meet the total nitrogen discharge limit assigned to DC Water. In addition to expansion of existing nitrification and denitrification processes, this program includes a new wet weather treatment facility that simultaneously treats combined stored sewage and reduces the peak flow through the biological treatment system. The necessary facilities to meet the current NPDES permit are in operation. However, close out activities continued into fiscal year 2021 and an expansion will be required in the future to treat future increases in influent load to the Plant.

ACCOMPLISHMENTS

- Ongoing construction of Raw Wastewater Pumping Station 2 – The pump station delivers wastewater from the wastewater collection system to the east preliminary treatment processes at Blue Plains. This project updates aging electrical equipment, both replacing equipment that is beyond its useful life and relocating sensitive electronic equipment to a less corrosive environment to reduce the rate of deterioration of the equipment. Several replaced pumps have been placed in service.
- Ongoing construction of Floodwall Segment C at Blue Plains. This is one of five segments that once completed, will protect the wastewater treatment plant from river levels up to the 500-year flood elevation with sufficient freeboard to protect against storm surge as well.
- Ongoing construction for replacement of Filter Influent Pumps 1-10. These pumps deliver nitrified and denitrified effluent to the filtration process at Blue Plains, which removes solids and phosphorus to meet permit limits.
- Ongoing construction for Gravity Thickener Upgrades. This project includes upgrading 10 gravity thickeners as well as the primary sludge de-gritting systems and associated electrical and instrumentation and control systems.
- Ongoing construction to replace thirteen influent screens. This equipment screens all the wastewater influent to Blue Plains and removes rags and objects upstream of critical treatment processes protecting equipment and performance effectiveness.
- Completed construction of hauled waste receiving station at the East Preliminary Treatment Process. This station provides a redundant location to receive hauled waste at Blue Plains.
- Completed design of Final Reclaimed Effluent Pump Station Upgrade. The Reclaimed Final Effluent (RFE) pump system is the source of water for the Process Service Water system (PSW) at Blue Plains. The project upgrades equipment for reliability as well as increasing capacity to meet the demand of facilities that have been added to the wastewater treatment plant in recent years.

ACCOMPLISHMENTS CONTINUED

- Completed design of Transfer Trip and Stuck Breaker at Blue Plains. In support of the resiliency strategic program, the Electrical & Mechanical Design group is working with Pepco to restart a project to establish back up feeders to our existing feeders to Blue Plains. This will improve reliability and reduce outage restoration if there is trouble with an existing feeder.

OPERATIONAL IMPACT OF MAJOR CAPITAL PROGRAMS

Liquid Processing Program – Projects in this program enable DC Water to continue to produce excellent quality effluent into the Potomac River and meet NPDES permit requirements.

Plantwide Projects Program – Significant projects in this program upgrade the power distribution system at Blue Plains and include investment in power monitoring and control. This new equipment will be used to optimize the distributed energy system, which includes an on-site solar generation and a combined heat and power plant.

LIQUID PROCESSING

	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
A2 Liquid Processing Program Management	\$270	\$0	\$0	\$4,088	\$5,546	\$3,193	\$4,927	\$6,675	\$7,099	\$7,761	\$2,202	\$39,491	54,648	2035
B6 Primary Sedimentation Tank Covers	\$0	\$0	\$0	\$0	\$0	\$0	\$646	\$1,017	\$137	\$2,168	\$2,620	\$6,588	43,598	2032
B7 Primary Sedimentation Tank Odor Scrubblers	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,433	\$1,456	\$2,640	\$5,529	45,870	2032
BC Headworks Influent Structures	\$413	\$2,571	\$83	\$2,780	\$6,170	\$3,632	\$388	\$0	\$0	\$0	\$0	\$15,624	16,960	2026
BG Dual Purpose Rehabilitation	\$2	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7	32,250	2021
BP Grit Chamber Facilities Phase II	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-	2021
BQ Grit and Screenings and Primary	\$867	\$2,068	\$2,336	\$7,205	\$21,366	\$8,790	\$0	\$0	\$0	\$0	\$0	\$41,765	50,320	2025
BR Nitrification/Denitrification Facility	\$581	\$129	\$1,392	\$1,757	\$194	\$100	\$20	\$0	\$0	\$0	\$0	\$3,592	54,568	2026
BT Filtration/Disinfection Facility Phase II	\$95	\$5	\$0	\$143	\$73	\$952	\$1,295	\$122	\$0	\$0	\$0	\$2,590	24,018	2027
BV Raw Wastewater Pump Station No. 2 Upgrades	\$5,868	\$3,338	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,338	46,870	2021
I4 Grit Removal Facilities - 20 Year Rebuild	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,314	\$9,312	\$16,390	\$28,016	52,500	2033
I5 Raw Water Pump Stations I & 2 - 20 Year Rebuild	\$0	\$0	\$0	\$26	\$879	\$768	\$9,569	\$10,766	\$1,706	\$0	\$0	\$23,714	29,000	2028
I7 Primary Treatment - 20 Year Rebuild	\$0	\$0	\$0	\$95	\$402	\$2,637	\$3,637	\$13,845	\$20,310	\$8,702	\$0	\$49,628	54,600	2029
IY Effluent Filter Upgrade	\$962	\$1,971	\$11,852	\$11,258	\$12,543	\$20,485	\$28,743	\$20,612	\$12,642	\$1,921	\$5,392	\$127,419	167,099	2031
IZ Replace/Upgrade Influent Screens	\$461	\$7,890	\$5,287	\$0	\$0	\$0	\$0	\$260	\$2,723	\$2,264	\$6,551	\$24,975	81,476	2033
J2 Replace/Upgrade Primary Treatment Mechanisms	\$107	\$338	\$3,257	\$5,734	\$5,181	\$3,510	\$1,042	\$77	\$1,034	\$3,050	\$1,703	\$24,926	27,627	2031
J6 Deammonification Project	\$0	\$0	\$0	\$34	\$405	\$275	\$1,618	\$931	\$0	\$0	\$0	\$3,263	3,503	2027
JC Secondary East and West - 20 Year Rebuild	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$559	\$6,462	\$16,422	\$20,596	\$44,039	96,000	2034
LC Effluent Disinfection Upgrades	\$0	\$0	\$0	\$1	\$769	\$79	\$481	\$4,301	\$1,538	\$0	\$0	\$7,169	8,011	2028
LF Nitrification Reactor/Sedimentation - 20 Year Rebuild	\$0	\$0	\$0	\$202	\$608	\$1,169	\$1,765	\$5,734	\$11,815	\$18,268	\$23,506	\$63,067	139,760	2035
OZ Grit Chambers I & 2 Upgrades	\$0	\$28	\$0	\$1	\$463	\$620	\$5,036	\$3,913	\$0	\$0	\$0	\$10,061	15,129	2027
PD Secondary East & West Upgrades	\$70	\$0	\$0	\$0	\$0	\$367	\$507	\$4,032	\$3,222	\$0	\$0	\$8,128	9,685	2028
PE Nitrification Reactor/Sedimentation Upgrades	\$46	\$1,009	\$1,905	\$5,449	\$2,594	\$642	\$0	\$0	\$0	\$0	\$0	\$11,599	14,611	2025
RN Liquids Processing Rehabilitation	\$0	\$0	\$0	\$1,000	\$122	\$1,792	\$10,105	\$8,170	\$551	\$0	\$0	\$21,740	23,321	2028
RW Long-term Concrete Rehabilitation Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$2,866	\$14,693	\$25,934	\$14,688	\$819	\$59,000	62,820	2030
UC Filtration/Disinfection Facility	\$5,068	\$8,463	\$6,075	\$3,553	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,091	96,600	2023
TOTAL LIQUID PROCESSING BUDGETS	\$14,810	\$27,817	\$32,187	\$43,326	\$57,315	\$49,011	\$72,645	\$95,707	\$98,920	\$84,012	\$82,419	\$643,359	\$1,250,842	

(\$ in thousands)

	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
AL Plantwide Project Program Management	\$1,707	\$3,759	\$3,491	\$2,700	\$1,677	\$2,088	\$1,693	\$1,285	\$4	\$0	\$0	\$16,697	\$48,777	2030
BY Additional Chemical Systems Phase III	\$0	\$0	\$0	\$0	\$120	\$443	\$874	\$934	\$563	\$465	\$0	\$3,399	\$3,822	2029
CH Miscellaneous Facility Projects	\$0	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10	\$8,039	2022
CV Laboratory Upgrades	\$0	\$630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$630	\$9,268	2021
CW Security at Blue Plains	\$265	\$1,229	\$120	\$72	\$72	\$72	\$48	\$0	\$0	\$0	\$0	\$1,613	\$6,568	2026
DQ Non-OEM PLC Interfaces/Replacements	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	2020
EI Plantwide Painting of Steel Pipes	\$0	\$0	\$0	\$0	\$1,139	\$2,594	\$1,147	\$0	\$0	\$0	\$0	\$4,880	\$4,960	2026
GP Instrumentation & Control & Electric Program Management	\$542	\$933	\$303	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,236	\$5,673	2022
GW Control Systems Replacement	\$0	\$0	\$0	\$420	\$490	\$618	\$1,732	\$1,466	\$7,871	\$12,387	\$6,630	\$31,614	\$37,000	2031
HL DWT - Process and Operations Jobs	\$508	\$281	\$228	\$0	\$868	\$306	\$0	\$0	\$0	\$0	\$0	\$1,683	\$8,852	2025
IC Electrical Monitoring Systems	\$0	\$0	\$2	\$478	\$453	\$5,385	\$14,817	\$3,182	\$0	\$0	\$0	\$24,317	\$26,130	2027
IT Hauled Waste Receiving Facility	\$254	\$226	\$0	\$39	\$1,300	\$2,006	\$1,056	\$0	\$0	\$0	\$0	\$4,627	\$5,000	2026
IU Solar Photovoltaic System	\$9	\$488	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$488	\$960	2021
IV Blue Plains IT Backbone Fibre-Optic Cables Tubes	\$0	\$2	\$202	\$1,960	\$582	\$328	\$64	\$0	\$0	\$0	\$0	\$3,138	\$5,899	2026
JF Construction of Flood Seawall	\$838	\$5,072	\$62	\$5,106	\$1,495	\$987	\$1	\$0	\$0	\$0	\$0	\$12,723	\$15,053	2026
LP Wastewater Asset Management Technical Support	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,825	2020
LS Miscellaneous Facility Projects FY 2013	\$1,448	\$914	\$7	\$304	\$681	\$754	\$754	\$748	\$451	\$450	\$115	\$5,178	\$16,864	2030
LX Process Control System Upgrade	\$0	\$225	\$575	\$1,373	\$1,326	\$2	\$0	\$0	\$0	\$0	\$0	\$3,501	\$4,000	2025
OD Plantwide Paving	\$0	\$42	\$227	\$776	\$2,094	\$2,816	\$529	\$0	\$0	\$0	\$0	\$6,484	\$8,240	2026
OE Plantwide Drainage & Runoff	\$0	\$381	\$4,476	\$1,458	\$1,458	\$4,773	\$1,969	\$0	\$0	\$0	\$0	\$14,515	\$17,289	2026
OG City Water & Sewer Upgrades at Wastewater Treatment Plant	\$0	\$0	\$0	\$29	\$512	\$488	\$0	\$0	\$0	\$0	\$0	\$1,029	\$1,250	2025
OH Plantwide Demolition	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,163	\$3,750	\$2,137	\$2,223	\$9,273	\$11,100	2032
OM Plantwide Hot Water System/ Loop Rehabilitation	\$3,588	\$83	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$83	\$7,075	2021
ON Plantwide Grounding Upgrades	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,500	2028
OP Plantwide Sump Pump Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	2028
OQ Plantwide Roofing Upgrades	\$0	\$0	\$0	\$114	\$496	\$764	\$4,101	\$4,524	\$0	\$0	\$0	\$9,999	\$10,000	2027
OS Plantwide Lighting Upgrades	\$5	\$882	\$0	\$621	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$1,506	\$3,701	2024
PF Chemical System/Building Upgrades	\$368	\$273	\$284	\$171	\$756	\$2,339	\$7,208	\$2,909	\$71	\$0	\$0	\$14,011	\$23,982	2028
TZ Electric Power System - Power Gear	\$989	\$1,935	\$2,512	\$8,093	\$5,370	\$5,032	\$11,491	\$11,449	\$3,138	\$0	\$0	\$49,020	\$71,332	2028
U2 Wastewater Thermal Energy	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,430	2030
VI MFUB - Rehabilitation and Emergency Response VIII	\$0	\$0	\$1,064	\$3,169	\$3,550	\$2,083	\$414	\$0	\$0	\$0	\$0	\$10,280	\$10,280	2026
V2 MFU9 - Rehabilitation and Emergency Response IX	\$0	\$0	\$591	\$2,438	\$3,812	\$2,290	\$1,151	\$0	\$0	\$0	\$0	\$10,282	\$10,280	2027
YD Miscellaneous Projects	\$881	\$651	\$80	\$227	\$1,267	\$1,140	\$448	\$621	\$420	\$271	\$0	\$5,125	\$51,084	2029
XP Efficiency Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,521	\$12,500	\$22,021	\$25,000	2031
TOTAL PLANTWIDE BUDGETS	\$11,475	\$18,011	\$13,638	\$27,701	\$28,147	\$38,830	\$50,636	\$29,432	\$16,268	\$25,231	\$21,468	\$269,362	\$491,232	

(\$ in thousands)

	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
SOLIDS PROCESSING														
AM Solids Processing Program Management	\$491	\$1,406	\$1,359	\$1,396	\$2,143	\$1,505	\$1,609	\$1,540	\$1,198	\$168	\$0	\$12,324	\$18,205	2029
BX Gravity Thickener Upgrades Phase II	\$11,050	\$21,206	\$14,793	\$11,941	\$10,484	\$0	\$0	\$0	\$0	\$0	\$0	\$58,424	\$83,066	2024
EY Area Substation No. 6	\$35	\$853	\$8	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$861	\$22,104	2021
I3 Biosolids Blending Development Center	\$0	\$0	\$169	\$748	\$9,854	\$124	\$0	\$0	\$0	\$0	\$0	\$10,895	\$12,093	2025
LD Pre-Dewatering Additional Centrifuges	\$0	\$306	\$423	\$2,532	\$4,903	\$1,036	\$0	\$0	\$0	\$0	\$0	\$9,200	\$10,118	2025
LE High Strength Waste Receiving Facility (Includes Fats, Oils & Grease)	\$0	\$0	\$0	\$0	\$271	\$726	\$3,804	\$481	\$0	\$0	\$0	\$5,282	\$6,008	2027
RM Biosolids Rehabilitation	\$0	\$0	\$22	\$7,531	\$1,721	\$11,572	\$8,233	\$3,453	\$360	\$325	\$16,250	\$49,467	\$79,996	2033
XA New Digestion Facilities	\$159	\$1,450	\$481	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,938	\$52,896	2022
XB Centrifuge Thickener Facility	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48,726	2020
XZ Solids Processing Building / Dewatered Sludge Loading Facility	\$596	\$542	\$0	\$26	\$3,692	\$5,018	\$3,026	\$1,013	\$1,147	\$1,956	\$1,956	\$18,376	\$42,440	2032
XY Process Control & Computer Sys	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,799	\$10,389	\$10,389	\$28,577	\$54,000	2033
TOTAL SOLIDS PROCESSING BUDGETS	\$12,340	\$25,763	\$17,255	\$24,181	\$33,068	\$19,981	\$16,672	\$6,487	\$10,504	\$12,838	\$28,595	\$195,344	\$929,651	
ENHANCED NITROGEN REMOVAL														
BI Enhanced Nitrogen Removal (ENR) North	\$225	\$67	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$67	\$77,076	2021
E8 Enhanced Clarification Facilities	\$5,073	\$4,404	\$842	\$2,529	\$1,129	\$0	\$0	\$0	\$0	\$0	\$0	\$8,904	\$176,629	2024
E9 Nitrogen Removal Facilities	\$119	\$81	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$81	\$272,930	2021
EE Filtrate Treatment Facilities	\$672	\$377	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$377	\$107,951	2021
EG Blue Plains Tunnel	\$19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	2020
FG Secondary Treatment Upgrades for Total Nitrogen	\$25	\$355	\$0	\$0	\$0	\$0	\$0	\$2,206	\$1,861	\$11,665	\$23,293	\$39,380	\$57,168	2032
FR Blue Plains Tunnel Dewatering Pumping Station	\$56	\$1,168	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,168	\$35,617	2021
FS Bolling Overflow & Diversion	\$455	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$55,937	2021
LM Enhanced Nitrogen Removal Program Management	\$3,717	\$349	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$349	\$20,100	2025
TOTAL ENHANCED NITROGEN REMOVAL BUDGETS	\$10,362	\$7,401	\$842	\$2,529	\$1,129	\$0	\$0	\$2,206	\$1,861	\$11,665	\$23,293	\$50,926	\$803,410	
TOTAL WASTEWATER TREATMENT BUDGETS	\$48,987	\$78,992	\$63,922	\$97,737	\$119,659	\$107,822	\$139,953	\$133,832	\$127,553	\$133,746	\$155,775	\$1,158,991	\$3,475,135	

(\$ in thousands)

FY 2020 Actual	FY 2021 - FY 2030 Disbursement Plan											Lifetime Budget
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	
\$181,317	\$170,842	\$165,276	\$126,598	\$77,962	\$77,216	\$157,621	\$104,808	\$91,414	\$124,593	\$26,645	\$1,122,976	\$2,979,072



Clean Rivers Tunnel



Tunnel



Green Infrastructure

Overview

Similar to more than 700 older communities primarily in the Mid-Atlantic, Northeast, and Midwest portions of the country, a portion of the District of Columbia is served by a combined sewer system. Combined sewers convey both stormwater runoff and sanitary sewage from homes and businesses in a single pipe. In dry weather, the system delivers wastewater to the Blue Plains Advanced Wastewater Treatment Plant. In wet weather, rain water also enters the system and, if the conveyance capacity of the system is exceeded, the excess flow spills into the waterways of the District of Columbia to prevent surface flooding and basement backups. This discharge is called Combined Sewer Overflow (CSO). Approximately one-third of the system is combined, mostly in the downtown and older parts of the city. There are 48 potentially active CSO outfalls in the District.

DC Water has made substantial progress in the implementation of its CSO Long Term Control Plan (LTCP), called the DC Clean Rivers Project, to reduce CSO's that discharge to the Anacostia and Potomac Rivers, as well as Rock Creek. The first phase of the Anacostia River tunnel system was completed and all structures south of RFK stadium placed into operation as of March 2018. DC Water continues to implement the remaining project for the Anacostia River (currently under construction), as well as future projects for the Potomac River and Rock Creek currently under design. When fully implemented, CSO's will be reduced by a projected 96 percent city-wide during an average year (98 percent on the Anacostia River), resulting in improved water quality and significantly reducing debris in our nations capital waterways.

PROGRAM AREAS

DC Clean Rivers – The plan includes a variety of improvements throughout portions of the District served by combined sewers, including a series of massive tunnels and diversion facilities to control CSOs and relieve surface flooding, a tunnel dewatering pumping station and wet weather treatment facility at Blue Plains. The controls for the Anacostia River are scheduled to be complete by 2023, ahead of the 2025 Consent Decree deadline. The Potomac River and Rock Creek Controls are scheduled to be complete in 2030. The Potomac River controls include the Potomac Tunnel, which is currently in planning and design. The Rock Creek controls include a hybrid mix of Green Infrastructure and gray storage optimizing the benefits provided by each technology. Planning is underway for future projects.

Program Management – The CSO Program Manager is responsible for evaluation of combined sewer systems, as well as management for sewer pumping station replacement and other sewer infrastructure projects.

Combined Sewer – Projects within the Combined Sewer Program Area include rehabilitation and/or relocation of combined sewers, control of wet weather related pollution, and upgrades to pumping stations. Most projects in this Program Area include planned upgrades to facilities based on our long term facilities plan.

ACCOMPLISHMENTS

- Continued construction of the Northeast Boundary Tunnel—94% of the mining is complete
- Finding of No Significant Impact (FONSI) for the Potomac River Tunnel Environmental Assessment (EA) was approved on March 30, 2021
- Programmatic Agreement for the Potomac River Tunnel was approved on March 16, 2021
- Completed the design and shortlisted 4 contractors for the Potomac River Tunnel—Contract A—Utility Relocation Construction
- Completed 60% design of Request for Proposal (RFP) documents for the Potomac River Tunnel - Contract B—Tunnel System Construction Project
- Completed design of the CSO 025/026 Sewer Separation Project
- On January 28, 2021, DC Water issued Notice to Proceed for construction of CSO 025/026 Sewer Separation Project
- On November 23, 2020, EPA approved the Rock Creek Practicability Assessment, recommending a hybrid (Green-Gray) approach

ACCOMPLISHMENTS CONTINUED

- Completed the non-material Consent Decree (CD) modification for Gray and Green Infrastructure in Rock Creek CSO 049 on December 22, 2020, with approval by all parties (United States Environmental Protection Agency, United States Department of Justice, DC Water, and the District)
- On February 8, 2021, EPA approved the Potomac River GI Practicability Assessment, recommending all gray solution
- Began planning and procurement for Rock Creek Green Infrastructure (GI) Project B (RC-B)
- Continued the deployment of Clean Rivers' assets into DC Water's enterprise asset management system
- Continued the coordination of preventive maintenance of Clean Rivers assets
- Completed the procurement for new GI maintenance contracts
- Continued the maintenance of GI facilities
- Began NEPA Studies for Rock Creek control facilities
- Regulatory requirements compliance
- Completed upgrades to the Potomac Pumping Station
- Continued construction of Main Pump Station Flood Hardening Project

OPERATIONAL IMPACT OF MAJOR CAPITAL PROGRAMS

DC Clean Rivers – This project aims to control CSO’s to the Anacostia and Potomac Rivers and Rock Creek to meet the District’s water quality standards, while improving the health of the Chesapeake Bay and addressing flooding in Northeast Boundary. This ongoing project includes green infrastructure initiatives that will divert stormwater runoff prior to entering the sewer system. The first portion of Anacostia River Tunnel System, between Blue Plains and Overflow and Diversion Facilities (CSO-019) is complete. All structures south of RFK Stadium are in operation since March 20, 2018. As of March 2021, the first portion of the Anacostia River Tunnel system had captured approximately 10 billion gallons of combined sewer overflows and nearly 5,000 tons of trash, debris, and other solids. The system is achieving a 90% CSO capture rate, exceeding the projected 80% capture rate at this stage of implementation. The tunnel system will improve operational flexibility by providing alternate means of transferring flow to Blue Plains, thereby allowing temporary diversion of flows to the tunnel to facilitate operation, maintenance and rehabilitation throughout the combined sewer system.

Potomac Pump Station Upgrades – Phase 3 upgrades to address health & safety improvements and increase the reliability of the pumping station completed.



Combined Sewer Overflow

capital

(\$ in thousands)

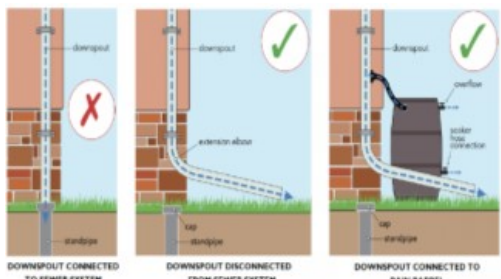
	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
DC CLEAN RIVERS														
CY Anacostia Long Term Control Plan Projects	\$164,696	\$145,110	\$122,679	\$55,306	\$542	\$541	\$479	\$437	\$438	\$437	\$437	\$326,405	\$1,943,252	2031
CZ Potomac Long Term Control Plan Projects	\$12,512	\$11,908	\$22,959	\$38,472	\$61,494	\$43,320	\$120,037	\$86,477	\$51,270	\$40,553	\$0	\$476,490	\$561,079	2029
DZ Rock Creek CSS LTCP Project	\$1,349	\$8,416	\$14,945	\$24,582	\$4,767	\$14,370	\$27,318	\$12,964	\$34,328	\$73,326	\$10,999	\$225,015	\$256,033	2031
TOTAL DC CLEAN RIVERS BUDGETS	\$178,557	\$165,435	\$160,582	\$118,360	\$66,803	\$58,231	\$147,834	\$99,877	\$86,036	\$113,315	\$11,436	\$1,027,910	\$2,760,365	

	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
COMBINED SEWER														
BA DC Water Low Impact Development Projects	\$91	\$314	\$116	\$26	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$456	\$2,870	2023
EJ Potomac Pumping Station - Phase III Rehabilitation	\$114	\$910	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$945	\$36,088	2022
EK Long Term Rehabilitation - Main & O Pump Station	\$0	\$96	\$644	\$730	\$2,595	\$5,685	\$5,241	\$4,876	\$5,321	\$11,223	\$15,161	\$51,572	\$74,495	2031
EQ Potomac Pumping Station-Phase IV Rehabilitation	\$0	\$200	\$0	\$204	\$411	\$226	\$0	\$0	\$0	\$0	\$0	\$1,041	\$2,325	2025
FQ Main & O Street PS Intermediate Upgrade	\$2,545	\$3,839	\$3,632	\$4,332	\$848	\$78	\$0	\$0	\$0	\$0	\$0	\$12,729	\$36,949	2025
FX Rehabilitation Northeast Boundary Sewer - Phase I	\$0	\$10	\$7	\$12	\$23	\$39	\$49	\$55	\$57	\$55	\$48	\$355	\$4,628	2032
FZ Tiber Creek Sewer Lining - Phase I	\$0	\$0	\$0	\$574	\$301	\$0	\$0	\$0	\$0	\$0	\$0	\$875	\$1,000	2024
G7 Combined Sewers Under Buildings	\$10	\$13	\$83	\$756	\$2,354	\$6,703	\$0	\$0	\$0	\$0	\$0	\$9,910	\$21,881	2025
IH Combined Sewer Rehabilitation 2	\$0	\$25	\$1	\$1,036	\$877	\$5,259	\$4,497	\$0	\$0	\$0	\$0	\$11,695	\$31,798	2026
OB FY 2024 - Inflatable Dams Replacement	\$0	\$0	\$176	\$568	\$3,749	\$996	\$0	\$0	\$0	\$0	\$0	\$5,489	\$6,675	2025
TOTAL COMBINED SEWER BUDGETS	\$2,760	\$5,407	\$4,694	\$8,238	\$11,158	\$18,986	\$9,787	\$4,931	\$5,378	\$11,278	\$15,209	\$95,066	\$218,708	

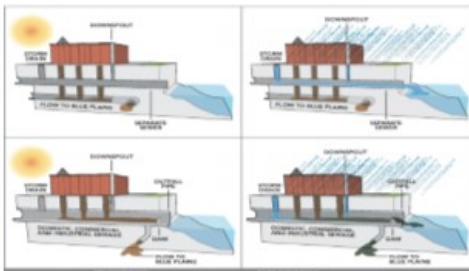
	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
TOTAL COMBINED SEWER OVERFLOW BUDGETS	\$181,317	\$170,842	\$165,276	\$126,598	\$77,962	\$77,216	\$157,621	\$104,808	\$91,414	\$124,593	\$26,645	\$1,122,976	\$2,979,072	

(\$ in thousands)

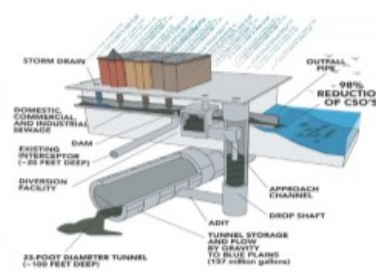
FY 2020 Actual	FY 2021 - FY 2030 Disbursement Plan											Lifetime Budget
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	
\$2,587	\$5,931	\$9,228	\$7,209	\$5,109	\$6,328	\$5,297	\$5,089	\$7,718	\$5,057	\$6,928	\$63,894	\$121,310



Downspout Disconnection Program



Combined Sewer Overflow System



Anacostia River Tunnel

Overview

Stormwater runoff occurs when rain or snowmelt flows over impervious surfaces or surfaces that do not allow water to soak into the ground such as roads, driveways, sidewalks, parking lots, and buildings. The District is required to meet certain regulatory requirements in managing its separate stormwater system under the District’s Municipal Separate Storm Sewer System (MS4) permit issued by the federal government.

The stormwater system has about 575 miles of storm sewer pipes and 16,000 manholes, about 15,000 catch basins and inlets, and other barrel special structures and related facilities. Some components of the existing storm sewer system are over 100 years old. DC Water is responsible for the maintenance and replacement of the publicly-owned collection and conveyance facilities that transport stormwater runoff to the Anacostia and Potomac Rivers, Rock Creek, and other receiving streams within the District of Columbia.

PROGRAM AREAS

Local Drainage – This category includes several projects for investigation, design and rehabilitation of local sewers to relieve local flooding and to address short term needs for improvements to storm sewers located in the separate and combined sewer areas.

On-Going – These include storm sewer rehabilitation projects carried out by DC Water’s Department of Sewer Services. These annual projects also provide funding to assist in immediate storm sewer construction to alleviate flooding.

Pumping Facilities – DC Water’s 16 stormwater pump stations serve critical areas of the District and are integral to the road network to maintain safe passage of vehicles through areas that do not drain without the assistance of mechanical means. DC Water has projects to upgrade all 16 of these stormwater pump stations to replace aging equipment and improve reliability, safety, and code compliance.

Program Management – Provides engineering program management services for the stormwater service area capital projects and required technical assessments and hydraulic studies required to assess problems in the stormwater system. It also provides engineering services for condition assessment of the storm sewer system.

Interceptor Trunk/Force Sewers – Provides for the design and construction services for stormwater interceptors, trunk sewers and force mains that require upgrades. Sewers rehabilitated by this project are defined by the major planning and condition assessment program underway for the stormwater sewer system. As the assessment of the storm sewer system progresses and specific rehabilitation needs are identified, jobs will be created under this program area to remediate system problems.

ACCOMPLISHMENTS

- Construction continued for the rehabilitation and improvement of the Watts Branch Storm Sewer Phase 3
- Design is complete, and construction bidding is pending for rehabilitation of the Kenilworth and 1st and D Stormwater Pump Stations
- Design is underway for rehabilitation of the 12th and Maine Street SW, and Portland Street Stormwater Pump Stations
- An evaluation of hydraulic capacity requirements and pump sizing; redundant power needs, including utility power and backup generators, is underway for all 16 Stormwater Pump Stations
- SCADA control system upgrades are planned for all 16 stormwater pumping stations. Recent upgrades have been completed at 14th Street Bridge, 23rd and Virginia, and 9th and D stormwater pumping stations. This work is partially funded by a grant from FEMA
- Rehabilitation of a number of stormwater outfalls area included in a number of sewer rehabilitation projects.

OPERATIONAL IMPACT OF MAJOR CAPITAL PROGRAMS

Stormwater Pumping Stations Rehabilitation – This project implements the highest priority rehabilitation or upgrades, addresses issues related to health and safety and station reliability, and will reduce maintenance needs.



Stormwater

(\$ in thousands)

	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
LOCAL DRAINAGE														
GY Storm Sewer Rehabilitation at Various Locations	\$0	\$0	\$12	\$0	\$283	\$833	\$0	\$0	\$0	\$0	\$0	\$1,128	\$5,908	2025
IE Storm Sewer Rehabilitation 3	\$0	\$0	\$21	\$188	\$1,228	\$1,860	\$797	\$0	\$0	\$0	\$0	\$4,094	\$4,817	2026
RR Local Storm Sewer Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$80	\$394	\$1,792	\$1,970	\$1,709	\$260	\$6,205	\$7,300	2030
TOTAL LOCAL DRAINAGE BUDGETS	\$0	\$0	\$33	\$188	\$1,511	\$2,773	\$1,191	\$1,792	\$1,970	\$1,709	\$260	\$11,427	\$18,025	
ON-GOING														
HM FY2019 - DSS Stormwater Projects	\$692	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$794	2020
JH FY2020 - DSS Stormwater Projects	\$126	\$394	\$138	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$532	\$820	2022
LO FY2021 - DSS Stormwater Projects	\$0	\$255	\$590	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$845	\$845	2022
M8 FY2022 - DSS Stormwater Projects	\$0	\$0	\$587	\$233	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$820	\$820	2023
MG FY2023 - DSS Stormwater Projects	\$0	\$0	\$0	\$604	\$240	\$0	\$0	\$0	\$0	\$0	\$0	\$844	\$845	2024
NV FY2024 - DSS Stormwater Projects	\$0	\$0	\$0	\$0	\$626	\$245	\$0	\$0	\$0	\$0	\$0	\$871	\$870	2025
PI FY2025 - DSS Stormwater Projects	\$0	\$0	\$0	\$0	\$0	\$281	\$615	\$0	\$0	\$0	\$0	\$896	\$896	2026
QA FY2026 - DSS Stormwater Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$260	\$571	\$0	\$0	\$0	\$923	\$923	2027
T7 FY2028 - DSS Stormwater Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$501	\$380	\$0	\$881	\$979	2029
T9 FY2027 - DSS Stormwater Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$272	\$583	\$0	\$0	\$855	\$950	2028
U6 FY2029 DSS Stormwater Project	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$907	\$0	\$907	\$1,008	2029
U8 FY2030 DSS Stormwater Project	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$935	\$935	\$1,039	2030
TOTAL ON-GOING BUDGETS	\$818	\$649	\$1,315	\$837	\$866	\$526	\$875	\$843	\$1,084	\$1,287	\$935	\$9,217	\$10,788	

	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
PUMPING FACILITIES														
NG Stormwater Pumping Station Rehabilitation	\$1,770	\$5,023	\$7,314	\$5,535	\$1,877	\$2,400	\$2,627	\$2,136	\$4,279	\$1,755	\$5,497	\$38,443	\$62,809	2033
TOTAL PUMPING FACILITIES BUDGETS	\$1,770	\$5,023	\$7,314	\$5,535	\$1,877	\$2,400	\$2,627	\$2,136	\$4,279	\$1,755	\$5,497	\$38,443	\$62,809	
RESEARCH & PROGRAM MANAGEMENT														
AT Stormwater Program Management	\$0	\$164	\$429	\$591	\$653	\$487	\$368	\$0	\$0	\$0	\$0	\$2,672	\$12,679	2026
RQ Storm Water Program Management	\$0	\$0	\$0	\$0	\$0	\$19	\$236	\$318	\$385	\$306	\$236	\$1,500	\$1,500	2030
TOTAL RESEARCH & PROGRAM MANAGEMENT BUDGETS	\$0	\$164	\$429	\$591	\$653	\$506	\$604	\$318	\$385	\$306	\$236	\$4,192	\$14,179	
TRUNK/FORCE SEWERS														
BO Future Stormwater Projects	\$0	\$95	\$137	\$58	\$202	\$123	\$0	\$0	\$0	\$0	\$0	\$615	\$15,510	2025
TOTAL TRUNK/FORCE SEWERS BUDGETS	\$0	\$95	\$137	\$58	\$202	\$123	\$0	\$0	\$0	\$0	\$0	\$615	\$15,510	
TOTAL STORMWATER BUDGETS	\$2,587	\$5,931	\$9,228	\$7,209	\$5,109	\$6,328	\$5,297	\$5,089	\$7,718	\$5,057	\$6,928	\$63,894	\$121,310	

(\$ in thousands)

FY 2020 Actual	FY 2021 - FY 2030 Disbursement Plan											Lifetime Budget
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	
\$23,786	\$50,547	\$75,437	\$94,116	\$126,383	\$130,552	\$182,891	\$214,243	\$166,734	\$138,047	\$134,024	\$1,312,973	\$2,095,695



Sewer Rehab Soapstone Valley Park



Skimmer Boats Cleaning the Potomac River



Sewer Rehabilitation/Replacements

Overview

DC Water is responsible for wastewater collection in the District of Columbia, including operation and maintenance of the sanitary sewer system. The sewer system includes approximately 720 miles of large interceptor sewers and smaller gravity collection sewers, for a total of approximately 2,000 miles of combined, separate and stormwater sewers, 50,000 manholes and 25,000 catch basins, 16 stormwater pumping stations and 9 offsite wastewater pumping stations. In addition, DC Water is responsible for the 50-mile long Potomac Interceptor System, which provides conveyance of wastewater from Dulles International Airport, and areas in Virginia and Maryland, to the Blue Plains AWWTP.

PROGRAM AREAS

Sanitary Collection System – Projects to rehabilitate sanitary sewer pipes based on the findings of inspection and assessment conducted on these assets.

On-Going – Urgent projects managed by the Department of Sewer Services including the replacement of sewer laterals, sewer mains, inspection and cleaning of sewer laterals and mains.

Pumping Facilities – Projects required for the upgrade of existing wastewater pump stations, as well as projects for the engineering and construction of new wastewater pumping facilities to enhance the reliability and integrity of DC Water’s sanitary sewer system.

Program Management – Engineering program management services for the sewer system capital improvement program, including assessing system needs, developing facilities plans, developing design scopes of work, preparing cost estimates, preparing task orders or agreements, and reviewing design documents.

Interceptor/Trunk Force Sewers – The rehabilitation of large diameter sewers that have reached the end of their useful life or are in need of major rebuild or refurbishment.

ACCOMPLISHMENTS

- Notice to Proceed was issued in FY 2020 to a progressive design-build contractor for the rehabilitation of Potomac Interceptor between MH31 and MH30. Design is currently underway and construction is scheduled to start in early FY 2022.
- A three party Memorandum of Understanding was executed with Virginia Department of Transportation and their contractor to rehabilitate a section of the Potomac Interceptor as part of the Route 7 improvements project.
- An emergency contract was executed to rehabilitate an aerial sewer crossing in the National Arboretum for a 51-inch sewer that was in danger of being damaged by continuing erosion of the stream underneath.
- A Finding of No Significant Impact was issued by the National Park Service for the Soapstone Sewer rehabilitation project in Rock Creek National Park allowing this critical project to proceed to construction. Construction is scheduled to start in late FY 2021 or early FY 2022.
- Construction was completed on the Low Area Trunk Sewer Rehabilitation project and the B Street/ New Jersey Avenue Trunk Sewer Rehabilitation project.
- Major Potomac Interceptor projects currently in design include:
 - Phase 2 Rehabilitation at Potomac River Crossing
 - Phase 4 Rehabilitation at Fairfax and Loudoun Counties
 - Phase 6 Rehabilitation at Clara Barton Parkway
 - Cabin John Rehabilitation
- Other major sewer projects currently in design include Creekbed projects for:
 - Fenwick Branch Sewer Rehabilitation
 - Norman stone Sewer Rehabilitation
- Local sewer projects currently in design include:
 - Service Life Restoration Program Phase 2
 - Service Life Restoration Program Phase 4
 - Service Life Restoration Program Phase 5
- Condition assessments are planned for the following major sewers:
 - Potomac Force Mains
 - Anacostia Force Main/Gravity Sewer
 - Lower Eastside Interceptor
 - Rock Creek Siphons
 - Anacostia Siphons

ACCOMPLISHMENTS CONTINUED

- Extensive coordination continues with DDOT’s South Capitol Street Bridge project to protect critical sewer assets:
 - Completed construction on Main Pump Station Hardening Improvements to protect this critical infrastructure from 100-year storm plus approximately 3 feet.
 - Installed influent new screens at Main Pump Station and O Street Pump Station. These screens protect critical equipment in the pump station from accelerated wear and disruption of service.
 - Completed installation of a new seal water pump protection system at Potomac Pump Station.

OPERATIONAL IMPACT OF MAJOR CAPITAL PROGRAMS

Pump Stations – Continued improvements and other upgrades will ensure proper operations of the pump stations to improve reliability and maintain compliance with regulatory requirements and customer expectations.

Ongoing and Local Sewer Rehabilitation – Renewal of small diameter sewer infrastructure will reduce emergency rehabilitations and maintenance demands for these neighborhood sewers.

Major Sewer Rehabilitation – Renewal of major sewers will reduce emergency rehabilitation and maintenance demands for these sewers.

(\$ in thousands)

SANITARY COLLECTION SYSTEM

		Start	Status	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
G1	Small Local Sewer Rehabilitation 1	2010	Ongoing	\$308	\$136	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$136	\$29,169	2021
GA	Small Local Sewer Rehabilitation 4	2014	Ongoing	\$108	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20	\$9,074	2021
J3	Sewer Upgrade - City Wide	2000	Ongoing	\$185	\$2,211	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,211	\$18,390	2021
JX	Sanitary Sewer Rehabilitation 10	2016	Ongoing	\$0	\$156	\$140	\$1,537	\$7,073	\$3,030	\$0	\$0	\$0	\$0	\$0	\$11,936	\$13,607	2025
QS	Local Sewer Rehabilitation 5	2020	Ongoing	\$0	\$9	\$535	\$7,885	\$14,632	\$13,595	\$6,095	\$0	\$0	\$0	\$0	\$42,751	\$45,004	2026
QT	Local Sewer Rehabilitation 6	2024	Ongoing	\$0	\$0	\$0	\$0	\$841	\$4,379	\$21,435	\$24,840	\$8,398	\$0	\$0	\$59,893	\$63,846	2028
QU	Local Sewer Rehabilitation 7	2026	Ongoing	\$0	\$0	\$0	\$0	\$0	\$0	\$906	\$4,046	\$7,975	\$8,864	\$12,263	\$34,054	\$71,964	2030
QW	Local Sewer Rehabilitation 8	2028	Ongoing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$968	\$4,428	\$14,165	\$19,561	\$19,100	\$119,100	2036
QX	Local Sewer Assessment 1	2020	Ongoing	\$20	\$382	\$14	\$5,246	\$1,795	\$0	\$0	\$0	\$0	\$0	\$0	\$7,437	\$8,264	2024
QY	Local Sewer Rehabilitation 2	2022	Ongoing	\$0	\$0	\$5	\$1,706	\$3,904	\$3,500	\$3,695	\$1,691	\$0	\$0	\$0	\$14,501	\$16,553	2027
QZ	Local Sewer Assessment 3	2026	Ongoing	\$0	\$0	\$0	\$0	\$0	\$0	\$11	\$4,094	\$4,106	\$4,094	\$4,094	\$16,399	\$17,200	2030
RG	Local Sewer Rehabilitation 9	2024	Ongoing	\$0	\$0	\$0	\$0	\$826	\$3,526	\$14,656	\$16,343	\$16,181	\$13,364	\$1,610	\$66,506	\$70,000	2030
T4	District Energy Buzzard Point	2021	New	\$0	\$0	\$0	\$0	\$0	\$5,000	\$11,500	\$13,500	\$0	\$0	\$0	\$30,000	\$30,000	2027
TOTAL SANITARY COLLECTION SYSTEM BUDGETS				\$621	\$2,914	\$694	\$16,374	\$29,071	\$33,030	\$58,298	\$64,514	\$37,628	\$30,750	\$32,132	\$305,405	\$512,171	

ON-GOING

		Start	Status	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
FP	FY2017 - DSS Sanitary Sewer Projects	2017	Closed	\$64	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	2020
H6	FY2018 - DSS Sanitary Sewer Projects	2018	Ongoing	\$225	\$69	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$69	\$12,335	2021
HN	FY2019 - DSS Sanitary Sewer Projects	2019	Ongoing	\$4,427	\$1,613	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,613	\$12,200	2021
JL	FY2020 - DSS Sanitary Sewer Projects	2020	Ongoing	\$3,802	\$4,537	\$1,258	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,795	\$12,568	2022
LN	FY2021 - DSS Sanitary Sewer Projects	2021	Ongoing	\$0	\$6,970	\$2,540	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,510	\$12,945	2022
M9	FY2022 - DSS Sanitary Sewer Projects	2021	Ongoing	\$0	\$5	\$9,583	\$1,577	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,165	\$13,335	2023
MF	FY2023 - DSS Sanitary Sewer Projects	2023	Ongoing	\$0	\$0	\$0	\$10,781	\$1,660	\$0	\$0	\$0	\$0	\$0	\$0	\$12,441	\$13,735	2024
NW	FY2024 - DSS Sanitary Sewer Projects	2024	Ongoing	\$0	\$0	\$0	\$0	\$12,793	\$0	\$0	\$0	\$0	\$0	\$0	\$12,793	\$14,225	2024
OX	FY2025 - DSS Sanitary Sewer Projects	2024	Ongoing	\$0	\$0	\$0	\$0	\$0	\$13,185	\$0	\$0	\$0	\$0	\$0	\$13,185	\$14,650	2025
PZ	FY2026 - DSS Sanitary Sewer Projects	2025	Ongoing	\$0	\$0	\$0	\$0	\$0	\$15	\$13,561	\$0	\$0	\$0	\$0	\$13,576	\$15,090	2026
Q3	FY2003 - DSS Sanitary Sewer Projects	2003	Ongoing	\$0	\$74	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$74	\$12,784	2021
T6	FY2028 - DSS Sanitary Sewer Projects	2027	Ongoing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8	\$14,387	\$0	\$0	\$14,395	\$16,020	2028
T8	FY2027 - DSS Sanitary Sewer Projects	2026	Ongoing	\$0	\$0	\$0	\$0	\$0	\$0	\$15	\$13,980	\$0	\$0	\$0	\$13,995	\$15,550	2027
U7	FY2029 DSS Sewer Sanitary Project	2028	New	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8	\$14,842	\$0	\$16,501	\$16,501	2029
U9	FY2030 DSS Stormwater Project	2029	New	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8	\$15,289	\$16,997	\$16,997	2030
TOTAL ON-GOING BUDGETS				\$8,517	\$13,267	\$13,381	\$12,358	\$14,453	\$13,200	\$13,576	\$13,988	\$14,395	\$14,850	\$15,289	\$138,757	\$198,935	

(\$ in thousands)

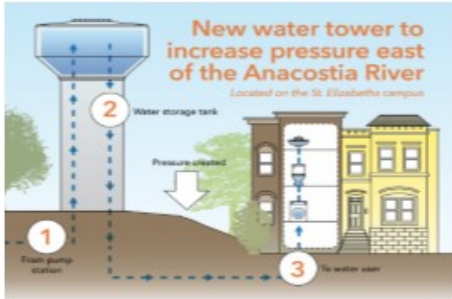
	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
PUMPING FACILITIES														
CX Sewer Facilities Security Upgrades	\$53	\$103	\$52	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$155	\$1,428	2022
GZ Sewer Instrumentation & Control	\$0	\$774	\$326	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,100	\$9,143	2022
LY Sewer Facilities Security Upgrades	\$6	\$56	\$151	\$129	\$60	\$0	\$0	\$0	\$0	\$0	\$0	\$396	\$2,000	2024
MB 3rd Street & Constitution Ave NW - Pumping Station	\$30	\$0	\$0	\$1,910	\$2,532	\$221	\$0	\$0	\$0	\$0	\$0	\$4,663	\$7,501	2025
MC Additional Sewer SCADA System Sites	\$380	\$241	\$326	\$1,560	\$1,728	\$646	\$0	\$0	\$0	\$0	\$0	\$4,501	\$8,116	2025
PM East Side Pumping Station	\$28	\$91	\$117	\$391	\$1,781	\$930	\$0	\$0	\$0	\$0	\$0	\$3,310	\$4,024	2025
PT Existing Sewer Facilities Building Optimization	\$0	\$0	\$0	\$15	\$59	\$185	\$378	\$0	\$0	\$0	\$0	\$636	\$705	2026
RH Sewer Pump Stations Upgrades	\$0	\$811	\$3,383	\$895	\$986	\$2	\$0	\$0	\$0	\$0	\$0	\$6,076	\$8,100	2025
RS Sewer Pump Station Upgrades 2	\$0	\$0	\$0	\$0	\$0	\$3,852	\$5,470	\$17,538	\$23,373	\$28,190	\$0	\$80,424	\$150,720	2032
RT Sewer Pump Station Upgrades 3	\$0	\$0	\$0	\$0	\$0	\$0	\$1,525	\$4,496	\$5,095	\$3,109	\$0	\$14,225	\$24,034	2035
RU Sewer Pump Station Upgrades -Pumps & VFDs	\$0	\$0	\$3	\$1,931	\$3,524	\$6,869	\$8,099	\$6,829	\$3,154	\$0	\$0	\$30,408	\$35,950	2028
TOTAL PUMPING FACILITIES BUDGETS	\$497	\$2,076	\$4,358	\$6,831	\$10,669	\$8,852	\$12,329	\$13,824	\$25,188	\$30,468	\$31,299	\$145,894	\$251,721	
PROGRAM MANAGEMENT														
AU Sanitary Sewer Program Management	\$244	\$3,912	\$4,028	\$5,146	\$4,122	\$2,692	\$1,128	\$0	\$0	\$0	\$0	\$21,028	\$65,441	2026
AV Combined Sewer Overflow Program Management	\$427	\$1,127	\$749	\$3,097	\$3,465	\$4,277	\$3,454	\$2,478	\$0	\$0	\$0	\$18,647	\$57,756	2027
DN Sewer Inspection Program	\$1,139	\$2,689	\$3,322	\$889	\$483	\$482	\$482	\$454	\$313	\$253	\$6	\$9,373	\$27,833	2030
LR Sanitary Sewer Asset Management	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,279	2020
QH Sanitary Sewer Program Management FY26-30	\$0	\$0	\$0	\$0	\$0	\$2,739	\$3,304	\$4,200	\$4,200	\$3,119	\$2,900	\$16,261	\$20,800	2031
RP CSO Program Management	\$0	\$0	\$0	\$0	\$0	\$2,717	\$3,354	\$4,167	\$4,167	\$2,939	\$2,876	\$16,052	\$20,000	2031
TOTAL PROGRAM MANAGEMENT BUDGETS	\$1,810	\$7,728	\$8,099	\$9,132	\$8,070	\$7,451	\$10,519	\$9,589	\$8,680	\$6,311	\$5,783	\$81,361	\$196,108	

(\$ in thousands)

	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
INTERCEPTOR/TRUNK FORCE														
A4 Future Sewer System Upgrades	\$1,110	\$1,067	\$391	\$2,828	\$2,127	\$658	\$0	\$0	\$0	\$0	\$0	\$7,071	\$46,053	2025
DR Low Area Trunk Sewer Rehabilitation	\$4,680	\$2,102	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,102	\$23,073	2021
FW Rehab Piney Branch Trunk Sewer	\$10	\$173	\$747	\$3,635	\$12,916	\$3,979	\$0	\$0	\$0	\$0	\$0	\$21,450	\$30,668	2025
FY Rehab Upstream Rock Creek Main Interceptor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,516	2030
G2 Sewer Structure Rehabilitation 1	\$0	\$218	\$370	\$1,635	\$333	\$0	\$0	\$0	\$0	\$0	\$0	\$2,555	\$9,325	2024
G4 Upper Potomac Interceptor Sewer Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	2024
G5 Sewer Rehab Near Creek Beds	\$373	\$1,004	\$5,554	\$7,156	\$1,710	\$1,091	\$9,128	\$17,764	\$9,429	\$953	\$1,896	\$55,686	\$74,261	2030
G6 Sanitary Sewers Under Buildings 1	\$0	\$14	\$16	\$0	\$714	\$2,025	\$0	\$0	\$0	\$0	\$0	\$2,769	\$6,805	2025
GH Large Sewer Rehabilitation 3	\$0	\$30	\$703	\$1,375	\$8,460	\$6,627	\$712	\$0	\$0	\$0	\$0	\$17,908	\$24,332	2026
HS Rehabilitation of Inflow Sewers	\$0	\$0	\$0	\$1,380	\$910	\$166	\$0	\$517	\$1,999	\$5,849	\$18,764	\$29,585	\$37,430	2030
HT Rehabilitation of Anacostia Force Main	\$28	\$1,584	\$231	\$0	\$0	\$0	\$0	\$0	\$68	\$333	\$375	\$2,591	\$11,376	2032
IF Sanitary Sewer Rehabilitation 2	\$0	\$107	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$107	\$1,594	2021
IK Potomac Force Main Rehabilitation	\$0	\$824	\$5	\$1	\$142	\$163	\$123	\$317	\$944	\$1,752	\$308	\$4,579	\$6,127	2030
IL Creekbred Sewer Rehabilitation 2	\$713	\$1,792	\$2,424	\$1,097	\$2,640	\$3,632	\$5,909	\$1,462	\$200	\$0	\$0	\$19,156	\$54,608	2032
IM Creekbred Sewer Rehabilitation 3	\$0	\$64	\$343	\$407	\$402	\$925	\$4,857	\$6,483	\$193	\$318	\$1,451	\$15,442	\$23,993	2031
IN Upper East Side Trunk Sewer Rehabilitation	\$0	\$0	\$459	\$923	\$501	\$865	\$3,850	\$10,504	\$0	\$0	\$0	\$17,102	\$19,044	2027
JO B Street New Jersey Avenue Trunk Sewer Rehab	\$4,351	\$673	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$673	\$18,038	2021
LZ Potomac Interceptor Projects - Rehab Phase 2	\$1,075	\$10,374	\$29,692	\$19,180	\$16,631	\$20,750	\$15,732	\$15,173	\$13,130	\$6,249	\$221	\$147,132	\$167,095	2030
N7 Potomac Sewer System Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48,684	2020
PJ Re-Activation of Anacostia Force Main(Gravity Main as Relief to Anacostia Force Main	\$0	\$567	\$3	\$803	\$1,201	\$4,755	\$9,151	\$1,030	\$0	\$0	\$0	\$17,510	\$20,001	2027
RA Major Sewer Assessment and Heavy Cleaning 1	\$0	\$2,018	\$3,878	\$2,998	\$2,308	\$2,394	\$123	\$0	\$0	\$0	\$0	\$13,718	\$15,800	2026
RB Major Sewer Assessment and Heavy Cleaning 2	\$0	\$0	\$0	\$0	\$0	\$4,027	\$4,200	\$4,200	\$4,200	\$173	\$0	\$12,600	\$14,100	2029
RC Major Sewer Rehabilitation 1	\$1	\$755	\$2,496	\$5,101	\$11,391	\$6,182	\$8,090	\$16,980	\$3,140	\$6,086	\$3,969	\$64,190	\$73,298	2034
RD Major Sewer Rehabilitation 2	\$0	\$1,197	\$1,593	\$902	\$1,225	\$11,106	\$19,398	\$17,459	\$13,043	\$2,585	\$0	\$48,508	\$75,783	2029
RE Major Sewer Rehabilitation 3	\$0	\$0	\$0	\$0	\$510	\$2,701	\$7,069	\$20,439	\$23,966	\$14,680	\$10,447	\$79,811	\$88,255	2031
RJ Creekbred Sewer Rehabilitation 4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,082	\$10,259	\$5,659	\$20,000	\$22,000	2030
RL Potomac Interceptor Projects - Rehab Phase 3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,449	\$6,431	\$6,431	\$19,311	\$22,500	2032
TOTAL INTERCEPTOR/TRUNK FORCE SEWER BUDGETS	\$12,341	\$24,562	\$48,905	\$49,421	\$64,121	\$68,019	\$88,169	\$112,328	\$80,843	\$55,668	\$49,521	\$641,557	\$936,759	
TOTAL SANITARY SEWER BUDGETS														\$2,095,695

(\$ in thousands)

FY 2020 Actual	FY 2021 - FY 2030 Disbursement Plan										Lifetime Budget	
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030		10-Yr Total
\$41,721	\$75,362	\$100,209	\$119,090	\$112,118	\$122,534	\$122,944	\$126,693	\$129,781	\$118,831	\$120,155	\$1,147,717	\$2,346,963



St. Elizabeth Water Tower



Anacostia Pump Distribution Systems



Monitoring of Water Quality

Overview

Delivery of safe, clean, high-quality drinking water is one of DC Water's highest priorities. Drinking water in the District of Columbia comes from the Potomac River. The U.S. Army Corps of Engineers, Washington Aqueduct (Aqueduct), is a federally owned agency responsible for treating the drinking water. DC Water purchases water from the Aqueduct and is responsible for maintaining the distribution system that delivers drinking water to customers. DC Water distributes drinking water through 1,300 miles of pipes to more than 700,000 residents and businesses in the District of Columbia.

The DC Water distribution system begins at the water treatment plant and ends at private service lines. Customer service lines connect to the mains in the streets and deliver water to residents and commercial buildings, eventually reaching taps. Water is continuously moving through our distribution system, typically at a flow rate that keeps the water fresh. However, once the water leaves the main and enters a customer's service line, the flow of water is dependent on individual water usage.

DC Water is committed to providing customers with the highest quality drinking water and continuously works to deliver water that goes beyond federal standards. We accomplish this goal by aiming to meet target levels that are stricter than water quality standards required by the EPA. We have a dedicated Drinking Water division that collects and analyzes water samples throughout the District of Columbia. These monitoring programs include sampling and analyses that are required by EPA and additional sampling programs conducted voluntarily by DC Water.

DC Water conducts compliance monitoring on a daily basis to ensure that water quality meets EPA standards. Water quality technicians collect and analyze samples for lead and copper, total coliform (bacteria) and disinfection byproduct levels. Compliance monitoring ensures that drinking water treatment effectively prevents pipe corrosion, removes bacteria and other contaminants, and minimizes potentially harmful treatment byproducts.

DC Water operates voluntary sampling programs to support our commitment to providing high-quality drinking water to our customers. Water quality technicians collect and analyze hundreds of water samples throughout the District of Columbia. The Drinking Water division responds quickly to customer complaints and conducts water quality monitoring among the District's most vulnerable populations. DC Water operates two mobile laboratories that allow technicians to conduct on-site water quality tests and respond to emergencies. The Drinking Water division also distributes hundreds of lead test kits each year to residents and assists residents with identifying lead sources.

PROGRAM AREAS

Distribution Systems – Provides for the rehabilitation, replacement or extension of the water distribution system through several projects. The distribution system program area is the largest program for the water service area and includes three primary elements: small diameter water main renewal, large diameter water main rehabilitation, and DDOT project relocation needs.

Lead Free DC Program – The lead service line replacement includes the replacement of lead service liens in public and private right of way with copper piping. The replacement continues throughout the water distribution system as part of water main renewal projects, emergency rehabilitation of water service lines, and for customers that request full replacement as part of the Voluntary Lead Service Replacement (LSR) Program.

On-Going – Includes small projects for urgent rehabilitation of water main breaks, valves and fire hydrants, water service connections, and other minor water main rehabilitation work.

Pumping Facilities – Rehabilitate or upgrade water-pumping stations in the system. All four water pump stations have completed major upgrades within the last fifteen years, and only minor projects are anticipated for the near future.

Storage Facilities – Rehabilitation or upgrade of elevated tanks and reservoirs. Studies to the system have identified the need for upgrades and/or new storage facilities to support changing development patterns, for regulatory compliance, to provide additional water pressure to certain areas of the District, and to provide redundant service during unplanned outages.

DDOT – Projects for the relocation, rehabilitation, replacement and extension of water mains, for which the work is completed under the District of Columbia's District Department of Transportation (DDOT) construction contracts for street paving or reconstruction. This program is being closed and combined with distribution projects.

Program Management – Provides engineering program management services for the drinking water system capital improvements program, including asset management, developing facilities plans, advancement of the smart infrastructure program, conceptual designs, design scopes of work, cost estimates, and design document review.

ACCOMPLISHMENTS

- The water service area continues to install small diameter water mains to meet the DC Water Board goal of renewing 1 percent of the system annually. This renewal includes a combination of replacement with new water mains to reduce water quality degradation from tuberculation, reduce the likelihood of water main breaks and increase the service life the small diameter water mains.
- In FY 2020 3.4 miles of small diameter water mains were replaced. However, in FY 2021 we plan to advertise five jobs for construction totaling over 14 miles and project that 9 miles will be replaced in FY 2021. For FY 2022 we are projecting to meet or exceed the goal of replacing 11 miles.
- Completed design for rehabilitation of the N Street 66/72-inch Prestressed Concrete Cylinder Pipe (PCCP) and advertised for construction in late FY 2020. This project is expected to start construction in FY 2021.
- DC Water continues its Pipe Condition Assessment (PCA) of large diameter water mains. The assessments include detailed field inspection and leak detection of high-risk water transmission mains. In FY 2020 a condition assessment was completed for the 66-inch Low Service Main along 8th Street NE and SE. The total length inspected was 1.6 miles. The project also included the construction of access ports and installation of a 66-inch butterfly valve to facilitate the inspection. Immediate rehabilitations were made to several areas. The results of the inspection will be analyzed and will be used to recommend any required rehabilitation. Planned inspections for FY 2021 include large diameter water mains on Franklin St NE, N Street NW, 11th Street NE and R Street NW.
- Construction continues on the Soldiers Home Reservoir. This project corrects several deficiencies identified during an EPA annual sanitary survey, and makes several other improvements to the reservoir which was originally constructed in 1939.
- Extensive coordination continues with DDOT's South Capitol Street Bridge project to relocate water mains and protect critical transmission mains.

OPERATIONAL IMPACT OF MAJOR CAPITAL PROGRAMS

Water Mains – During FY 2021, the Authority continues renewal of small diameter water pipes with the goal of 1% annual renewal. Large diameter water main condition assessment and rehabilitation projects continue with several large diameter water main condition assessment planned for FY 2021. These projects require extensive coordination with Operations to ensure system operations are not impacted by these projects. The goal of the capital expenditures for linear water asset is to reduce reactive maintenance due to breaks and other unscheduled rehabilitations thereby reducing maintenance costs over time.

Water Pumping and Storage – The Soldiers Home reservoir upgrade project is scheduled for completion in FY 2021 with the purpose of ensuring regulatory compliance and making a number of operational improvements. We are continuing with minor pump station upgrades and improvements to operational procedures which serve to reduce maintenance costs and avoid the need for major upgrades later.

(\$ in thousands)

DISTRIBUTION SYSTEMS		FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
C9	Large Diameter Water Mains I	\$4,067	\$1,636	\$1,670	\$2,427	\$203	\$0	\$0	\$0	\$0	\$0	\$0	\$5,935	\$20,217	2024
DE	Small Diameter Water Main Rehabilitation 12	\$3,982	\$2,704	\$1,304	\$5,279	\$590	\$0	\$0	\$0	\$0	\$0	\$0	\$9,876	\$48,836	2023
FI	Small Diameter Water Main Rehabilitation 13	\$2,273	\$1,132	\$6,779	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,011	\$41,142	2022
F2	Small Diameter Water Main Rehabilitation 14	\$901	\$4,008	\$25,527	\$5,034	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$34,619	\$57,913	2024
F6	Steel Water Main Rehabilitation - Rehabilitation I	\$0	\$33	\$185	\$746	\$4,108	\$348	\$0	\$0	\$0	\$0	\$0	\$5,420	\$12,139	2023
FE	20 Low Service Main & Pressure Reducing Valve	\$102	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,540	2020
FT	Water Mains Rehabilitation Phase II	\$1,014	\$5,631	\$7,740	\$5,562	\$4,451	\$1,523	\$233	\$0	\$0	\$0	\$0	\$25,139	\$35,662	2026
GQ	Fire Hydrant Replacement Program - Phase II	\$661	\$1,976	\$1,653	\$1,443	\$1,624	\$1,619	\$0	\$0	\$0	\$0	\$0	\$8,315	\$28,767	2026
GR	Small Diameter Water Main Rehabilitation 15	\$137	\$3,058	\$15,170	\$20,160	\$268	\$0	\$0	\$0	\$0	\$0	\$0	\$38,657	\$52,000	2023
HX	Small Diameter Water Main Rehabilitation 16	\$1	\$3,824	\$5,171	\$24,232	\$6,697	\$0	\$0	\$0	\$0	\$0	\$0	\$39,924	\$58,000	2024
I8	Large Valve Replacement (Contract 11-13)	\$135	\$428	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$428	\$19,677	2020
JZ	Large Diameter Water Main Replacement 3 - 4 & 5	\$0	\$806	\$659	\$2,274	\$7,112	\$21,153	\$16,004	\$8,760	\$5,501	\$1,099	\$0	\$63,366	\$81,320	2027
K7	Large Diameter Water Main Replacement 6 - 7 & 8	\$0	\$0	\$0	\$0	\$523	\$2,089	\$9,420	\$19,559	\$21,287	\$13,945	\$2,935	\$69,757	\$89,140	2030
K8	Large Diameter Water Main Replacement 9 - 10 & 11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$446	\$1,803	\$8,079	\$16,802	\$27,131	\$76,400	2033
KE	Small Diameter Water Main Rehabilitation 18	\$0	\$378	\$859	\$11,950	\$10,682	\$3,844	\$0	\$0	\$0	\$0	\$0	\$27,712	\$46,340	2025
KF	Small Diameter Water Main Rehabilitation 19	\$0	\$288	\$1,016	\$1,198	\$25,511	\$22,442	\$0	\$0	\$0	\$0	\$0	\$50,455	\$59,950	2026
KG	Small Diameter Water Main Rehabilitation 20	\$0	\$30	\$331	\$726	\$827	\$2,345	\$19,609	\$0	\$0	\$0	\$0	\$53,280	\$63,140	2028
KH	Small Diameter Water Main Rehabilitation 21	\$0	\$0	\$30	\$296	\$827	\$2,345	\$30,776	\$20,265	\$0	\$0	\$0	\$54,539	\$64,547	2029
KI	Small Diameter Water Main Rehabilitation 22	\$0	\$0	\$0	\$26	\$338	\$833	\$3,293	\$31,206	\$20,596	\$0	\$0	\$56,292	\$66,553	2030
KJ	Small Diameter Water Main Rehabilitation 23	\$0	\$0	\$0	\$0	\$30	\$341	\$840	\$3,340	\$31,916	\$20,864	\$0	\$57,330	\$67,760	2031
KK	Small Diameter Water Main Rehabilitation 24	\$0	\$0	\$0	\$0	\$0	\$30	\$343	\$846	\$2,516	\$33,278	\$21,532	\$38,544	\$69,178	2032
KL	Small Diameter Water Main Rehab 25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$82	\$786	\$5,261	\$36,863	\$42,992	\$79,378	2032
MV	Small Diameter Water Main Rehabilitation 3	\$0	\$32	\$35	\$116	\$1,168	\$700	\$0	\$0	\$0	\$0	\$0	\$2,052	\$15,677	2023
OI	Small Diameter Water Main Rehabilitation 9	\$0	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20	\$26,423	2020
O2	Small Diameter Water Main Rehabilitation 10	\$1,266	\$2,393	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,393	\$38,700	2021
O3	Small Diameter Water Main Rehabilitation 11	\$1,969	\$545	\$29	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$574	\$42,235	2021
QF	District Metering	\$0	\$0	\$0	\$443	\$958	\$1,174	\$1,066	\$1,204	\$1,029	\$741	\$473	\$7,086	\$9,930	2031
S3	Large Valve Replacement (Contract 3-7)	\$2	\$640	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$640	\$23,185	2022
U5	WSSC Interconnection Project	\$0	\$81	\$372	\$726	\$3,624	\$1,386	\$738	\$0	\$0	\$0	\$0	\$6,927	\$9,107	2026
KM	Small Diameter Water Main Rehab 26	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$145	\$1,662	\$3,757	\$5,579	\$11,143	\$83,084	2033
KN	Small Diameter Water Main Rehab 27	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$86	\$251	\$338	\$107,405	2030
RY	Small Diameter Water Main FY27-FY29	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	2029
TOTAL DISTRIBUTION SYSTEMS BUDGETS		\$16,509	\$46,643	\$68,528	\$82,740	\$71,899	\$89,272	\$82,322	\$85,853	\$87,095	\$87,109	\$84,434	\$785,895	\$1,502,345	

(\$ in thousands)

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
LEAD PROGRAM													
BW	\$6,179	\$6,075	\$5,908	\$5,869	\$5,963	\$5,396	\$5,428	\$5,666	\$5,739	\$5,390	\$37,613	\$243,956	2038
TOTAL LEAD PROGRAM BUDGETS	\$6,179	\$6,075	\$5,908	\$5,869	\$5,963	\$5,396	\$5,428	\$5,666	\$5,739	\$5,390	\$37,613	\$243,956	
ON-GOING													
D5 FY 2014 - DWS Water Projects	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,248	2020
DY FY 2016 - DWS Water Projects	\$44	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,330	2020
FK FY 2017 - DWS Water Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	2021
GS FY 2018 - DWS Water Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	2021
HY FY 2019 - DWS Water Projects	\$4,757	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$239	\$9,631	2021
JA FY 2020 - DWS Water Projects	\$8,020	\$4,141	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,176	\$15,070	2021
KW FY 2021 - DWS Water Projects	\$0	\$7,686	\$2,113	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,799	\$11,630	2022
KX FY 2022 - DWS Water Projects	\$0	\$0	\$10,297	\$171	\$0	\$0	\$0	\$0	\$0	\$0	\$10,468	\$11,664	2023
KY FY 2023 - DWS Water Projects	\$0	\$0	\$12,272	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$12,307	\$13,150	2024
KZ FY 2024 - DWS Water Projects	\$0	\$0	\$0	\$12,804	\$36	\$0	\$0	\$0	\$0	\$0	\$12,840	\$14,452	2025
LI FY 2025 - DWS Water Projects	\$0	\$0	\$0	\$0	\$13,030	\$30	\$0	\$0	\$0	\$0	\$13,060	\$14,780	2026
L2 FY 2026 - DWS Water Projects	\$0	\$0	\$0	\$0	\$0	\$14,360	\$0	\$0	\$0	\$0	\$14,360	\$15,890	2026
L6 FY 2027 - DWS Water Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$16,670	\$0	\$0	\$0	\$16,670	\$18,250	2027
L7 FY 2028 - DWS Water Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,818	\$0	\$0	\$17,818	\$19,575	2028
QJ DDCS Water Pumping and Storage Projects FY19-21	\$0	\$0	\$1,014	\$2,448	\$1,208	\$0	\$0	\$0	\$0	\$0	\$4,670	\$4,921	2021
QK DDCS Water Pumping and Storage Projects FY22-28	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	2028
L8 FY 2029 - DWS Water Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,000	\$0	\$18,000	\$21,000	2030
L9 FY 2030 - DWS Water Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,000	\$19,000	\$22,000	2031
TOTAL ON-GOING BUDGETS	\$12,126	\$12,480	\$13,457	\$15,287	\$14,274	\$14,390	\$16,670	\$17,818	\$18,000	\$19,000	\$153,502	\$212,590	
PUMPING FACILITIES													
AY Upgrades to Fort Reno Pumping Station	\$115	\$621	\$49	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$837	\$14,442	2022
FD Water Facility Security System Upgrades	\$7	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75	\$2,137	2021
FH Discharge Piping Bryant Street Pumping Station	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	2020
HI Bryant Street Pump Station Phase III	\$0	\$0	\$0	\$0	\$209	\$334	\$1,596	\$3,573	\$0	\$0	\$5,712	\$6,620	2026
HR Anacostia Pump Station Improvements Phase II	\$0	\$0	\$0	\$0	\$0	\$0	\$61	\$202	\$215	\$2,571	\$3,049	\$4,700	2027
HV Bryant Street Pump Station - Spill Header-Flow Control	\$2	\$133	\$316	\$1,475	\$1,077	\$0	\$0	\$0	\$0	\$0	\$6,298	\$8,251	2024
JB Bryant Street PS Improvements - Phase II	\$0	\$175	\$431	\$4,573	\$1,241	\$0	\$0	\$0	\$0	\$0	\$6,420	\$12,185	2023
LT Water System SCADA	\$173	\$324	\$3,217	\$2,330	\$504	\$9	\$0	\$0	\$0	\$0	\$6,364	\$8,391	2023
LU Water Facilities Security System Upgrades 2	\$0	\$0	\$125	\$392	\$606	\$390	\$266	\$0	\$0	\$0	\$1,779	\$2,000	2026
OR Fort Reno Pump Station Improvements Phase II	\$0	\$0	\$210	\$291	\$1,197	\$3,874	\$18	\$0	\$0	\$0	\$5,590	\$6,430	2028
OW Water System Sensor Program (WaSSP)	\$0	\$0	\$720	\$719	\$720	\$720	\$720	\$720	\$0	\$0	\$5,040	\$5,600	2028
PS Existing Water Facilities Building Optimization	\$0	\$0	\$69	\$531	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$695	2023
S6 West Venturi Meter - Bryant Street Pumping Station	\$0	\$0	\$2	\$76	\$345	\$620	\$0	\$0	\$0	\$0	\$1,043	\$1,196	2025
TOTAL PUMPING FACILITIES BUDGETS	\$297	\$1,328	\$5,045	\$10,281	\$3,947	\$5,814	\$23,395	\$4,495	\$2,115	\$2,571	\$42,827	\$72,646	

(\$ in thousands)

	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
DDOT														
B0 B0 FY 2010 - DDOT Water Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,171	2021
BN FY 2011 - DDOT Water Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,738	2021
CJ FY 2012 - DDOT Water Projects	\$74	\$512	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$512	\$6,474	2022
CM FY 2013 - DDOT Water Projects	\$284	\$504	\$152	\$13	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$669	\$1,549	2021
TOTAL DDOT BUDGETS	\$359	\$1,016	\$152	\$13	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,181	\$33,933	

	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
STORAGE FACILITIES														
FA Water Storage Facility Upgrades	\$3,574	\$3,066	\$2,532	\$859	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,457	\$37,510	2023
HW Rehabilitation of Elevated Water Tanks	\$0	\$0	\$0	\$171	\$728	\$941	\$2,171	\$1,377	\$561	\$0	\$0	\$5,949	\$7,000	2026
MA Saint Elizabeth Water Tank	\$906	\$1,310	\$24	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,334	\$47,501	2023
MQ 2MG 4th High Storage Tank	\$34	\$145	\$79	\$127	\$890	\$864	\$0	\$0	\$0	\$0	\$0	\$2,105	\$9,735	2027
MR 2nd High Water Storage	\$0	\$0	\$72	\$96	\$626	\$1,287	\$6,495	\$4,324	\$0	\$0	\$0	\$12,900	\$17,043	2027
QG Anacostia First and Second High Storage	\$0	\$0	\$349	\$1,245	\$7,321	\$1,632	\$486	\$1,846	\$4,193	\$0	\$0	\$17,072	\$19,171	2027
RX Water Storage Facility Upgrades Phase II	\$0	\$0	\$0	\$0	\$0	\$0	\$181	\$420	\$2,087	\$2,611	\$3,602	\$8,901	\$17,800	2036
TOTAL STORAGE FACILITIES BUDGETS	\$4,514	\$4,521	\$3,056	\$2,498	\$9,565	\$4,724	\$9,333	\$7,967	\$6,841	\$2,611	\$3,602	\$54,718	\$155,760	

	FY 2020 Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Lifetime Budget	Completion
PROGRAM MANAGEMENT														
KV Water Program Management Services 2F	\$2,743	\$3,038	\$4,475	\$4,193	\$2,762	\$921	\$0	\$0	\$0	\$0	\$0	\$15,389	\$30,610	2025
LB Water Program Management Services 2G	\$0	\$0	\$0	\$0	\$0	\$3,433	\$5,689	\$8,380	\$7,866	\$5,157	\$1,724	\$32,249	\$35,480	2029
LQ Water Service Area Asset Management	\$0	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$4,309	2023
ME Water System Program Management Services	\$520	\$511	\$398	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$909	\$19,854	2024
NU Water Program Management Services 2H	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,433	\$3,433	\$35,480	2035
TOTAL PROGRAM MANAGEMENT BUDGETS	\$3,263	\$3,550	\$4,873	\$4,193	\$2,762	\$4,354	\$5,689	\$8,380	\$7,866	\$5,157	\$5,157	\$51,981	\$125,733	

TOTAL WATER BUDGETS	\$41,721	\$75,362	\$100,209	\$119,090	\$112,118	\$122,534	\$122,944	\$126,693	\$129,781	\$118,831	\$120,155	\$1,147,717	\$2,346,963	
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(\$ in thousands)

	FY 2020	FY 2021 - FY 2030 Disbursement Plan											Lifetime
	Actual	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total	Budget
CAPITAL EQUIPMENT	\$24,371	\$36,207	\$36,019	\$36,611	\$28,578	\$33,103	\$33,103	\$33,103	\$33,103	\$33,103	\$33,103	\$336,036	\$336,036
WASHINGTON AQUEDUCT	\$13,073	\$15,382	\$13,324	\$37,903	\$8,414	\$16,012	\$34,208	\$11,240	\$10,919	\$18,885	\$13,838	\$180,125	\$180,125
TOTAL ADDITIONAL CAPITAL PROGRAMS	\$37,443	\$51,589	\$49,343	\$74,513	\$36,992	\$49,115	\$67,312	\$44,344	\$44,023	\$51,988	\$46,942	\$516,161	\$516,161



Sink Hole Rehabilitation



Clean Rivers Tunnel



Small Diameter Replacement Program

Overview

Additional Capital Programs is a subset of DC Water’s Capital Improvement Program (CIP) and is comprised of Capital Equipment and the Washington Aqueduct.

Capital Equipment – This category accounts for over 65% of the Additional Capital Programs budget and includes capital equipment purchases, refurbishment, replacement and enhancement of operational facilities, vehicle equipment, office renovations, mechanical equipment, and Information Technology (IT) software/hardware needs. The current capital equipment disbursement budget includes the following cluster groups:

- **Administration** – Capital equipment within this cluster are primarily for the departments of Emergency Management, Facilities Management, Fleet Management, Security, and Safety. The activities/purchases include, plumbing, elevators, photocopiers, appliances, furniture, vehicles, buses, vacuum trucks, boats, backhoes, cranes, trailers, forklifts, fire suppression system equipment, renovations, cameras, and sensors.
- **Customer Experience** – The cluster is comprised of the following departments: Customer Care, and Information Technology (IT). The Customer Care activities/purchases support the enhancements, replacements, and upgrades of residential and commercial water meters. The IT activities are for equipment purchases for infrastructure and enterprise projects which include: laptops, cabling, radios, servers, telephones, and software applications.
- **Finance and Procurement** – This cluster includes the departments of Finance, and Procurement & Compliance. The activities/purchases are primarily for reserve funds to support additional capital equipment needs for new facilities, unplanned emergencies, and capital equipment requiring long-lead times.

- Operations & Engineering** – This cluster is comprised of Wastewater Operations, Water Operations, Sewer Operations, and Engineering. The capital equipment activities/purchases support work attributable to rehabilitation, replacement, and continuous improvements or enhancements for pumps, screens, large motors, centrifuges, process control systems, actuators, flow meters, and Supervisory Control and Data Acquisition (SCADA) hardware. In addition, it includes the purchases of pipes/fittings, manhole covers/frames, sewer cameras, generators, and various other equipment for the plant, distribution and collection systems.

Washington Aqueduct – The Washington Aqueduct, managed by the U.S. Army Corps of Engineers (USACE), provides wholesale water treatment services to DC Water and wholesale customers in Northern Virginia, (Arlington County and Fairfax County Water Authority). DC Water purchases approximately 74 percent of the water produced by the Aqueduct’s two treatment facilities, the Dalecarlia and McMillan Treatment Plants, and thus is responsible for approximately 74 percent of the Aqueduct’s operating and capital costs. Under federal legislation and a memorandum of understanding enacted in 1997 and updated in 2013, when Fairfax Water replaced the City of Falls Church, DC Water and the Aqueduct’s wholesale customers in Northern Virginia inherited a much greater role in oversight of the Aqueduct’s operations and its Capital Improvement Program, than prior to 1997.

The USACE, in accordance with Federal procurement regulations, requires DC Water to remit cash in an amount equal to the total project cost in advance of advertising contracts, and these funds are transferred immediately to a USACE/U.S. Treasury account to be drawn down during the execution of the project, through completion, with no interest going to DC Water. Over the years, extensive discussions with the U.S. Office of Management and Budget (OMB) and the USACE resulted in a proposal in the President’s FY 2006 and FY 2007 budgets that would allow Aqueduct customers to deposit funds for any projects required by their National Pollutant Discharge Elimination System (NPDES) permit (including the residuals project) to a separate escrow account, allowing the Aqueduct customers to retain interest on these funds. The proposal was submitted in May 2006 to the Senate and House. During FY 2006, the USACE briefed the Senate Environment and Public Works Committee staff and in conjunction with DC Water, briefed the Senate Homeland Security and Government Affairs committee staff. Additionally, DC Water and Washington Aqueduct staff provided DC Delegate Norton’s office with the Administration’s proposal. Neither committees acted on the proposal.

We continue to pursue other options that would be more favorable to DC Water, including transferring dollars on a phased basis, utilizing taxable bonds, or taxable commercial paper. In the past, some of these options have not been viewed favorably by the U.S. Treasury, but we will continue our outreach efforts to Congressional staff, federal agencies and the Corps on this critical issue.

DC Water’s share of Washington Aqueduct’s infrastructure improvements to achieve established service levels for FY 2021 – FY 2030 is \$180.1 million. This investment of \$15.1 million funds Washington Aqueduct’s risk-based asset management CIP, except the following projects: Federally Owned Water Mains, Travilah Quarry Acquisition Outfitting, and Advanced Treatment.



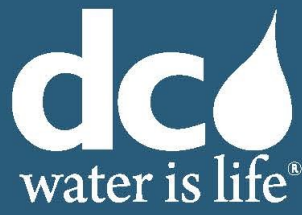
Additional Capital Programs

summary overview financial plan rates&rev capital financing departmental glossary

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	10-Yr Total
FY 2020 Actual											
CAPITAL EQUIPMENT											
OPERATIONS & ENGINEERING											
WASTEWATER OPERATIONS											
810006 Wastewater Operations	\$50	\$50	\$50	\$88	-	-	-	-	-	-	\$238
812003 Wastewater Process Engineering	\$375	\$400	\$400	\$400	-	-	-	-	-	-	\$1,575
811003 Maintenance Services	\$3,000	\$4,000	\$4,000	\$4,000	-	-	-	-	-	-	\$15,000
815000 Pumping Services	\$1,400	\$1,765	\$1,765	\$1,765	-	-	-	-	-	-	\$6,695
Subtotal	\$4,825	\$6,215	\$6,215	\$6,253	-	-	-	-	-	-	\$23,508
WATER OPERATIONS											
813003 Water Operations	\$600	\$800	\$900	\$900	-	-	-	-	-	-	\$3,200
813012 Water Quality and Technology	-	-	-	-	-	-	-	-	-	-	\$0
Subtotal	\$600	\$800	\$900	\$900	-	-	-	-	-	-	\$3,200
SEWAGE OPERATIONS											
814000 Sewer Operations	\$185	\$235	\$235	\$235	-	-	-	-	-	-	\$890
Subtotal	\$185	\$235	\$235	\$235	-	-	-	-	-	-	\$890
ENGINEERING											
801000 Engineering & Technical Services	\$317	\$25	\$25	\$25	-	-	-	-	-	-	\$392
Subtotal	\$317	\$25	\$25	\$25	-	-	-	-	-	-	\$392
FINANCE & PROCUREMENT											
FINANCE											
300003 Finance, Accounting & Budget	\$10	\$10	\$10	\$10	-	-	-	-	-	-	\$40
300003 Reserve Fund	\$7,112	\$8,613	\$13,500	\$5,500	\$30,070	\$30,070	\$30,070	\$30,070	\$30,070	\$30,070	\$215,145
Subtotal	\$7,122	\$8,623	\$13,510	\$5,510	\$30,070	\$30,070	\$30,070	\$30,070	\$30,070	\$30,070	\$215,185
CUSTOMER EXPERIENCE											
CUSTOMER CARE											
600018 AMR Replacement	-	-	-	-	-	-	-	-	-	-	\$0
600018 On-Going Replacement	\$2,930	\$2,900	\$2,800	\$3,300	\$3,033	\$3,033	\$3,033	\$3,033	\$3,033	\$3,033	\$30,131
600018 SDWM Meter Program	-	179	184	188	-	-	-	-	-	-	\$551
Subtotal	\$2,930	\$3,079	\$2,984	\$3,488	\$3,033	\$3,033	\$3,033	\$3,033	\$3,033	\$3,033	\$30,682
INFORMATION TECHNOLOGY											
601003 IT Infrastructure	\$2,350	\$2,910	\$2,522	\$2,522	-	-	-	-	-	-	\$10,304
601012 IT Enterprise Technology	\$9,200	\$4,359	\$2,720	\$3,145	-	-	-	-	-	-	\$19,424
Subtotal	\$11,550	\$7,269	\$5,242	\$5,667	-	-	-	-	-	-	\$29,728
ADMINISTRATION											
204000 Facilities Management	\$1,400	\$2,168	\$1,650	\$1,650	-	-	-	-	-	-	\$6,868
205003 Security	\$1,253	\$1,407	\$800	\$800	-	-	-	-	-	-	\$4,260
202006 Fleet Management	\$6,000	\$6,148	\$5,000	\$4,000	-	-	-	-	-	-	\$21,148
201006 Emergency Management	\$25	\$50	\$50	\$50	-	-	-	-	-	-	\$175
Subtotal	\$8,678	\$9,773	\$7,500	\$6,500	-	-	-	-	-	-	\$32,451
TOTAL CAPITAL EQUIPMENT	\$36,207	\$36,019	\$36,611	\$28,578	\$33,103	\$33,103	\$33,103	\$33,103	\$33,103	\$33,103	\$336,036
WASHINGTON AQUEDUCT	\$15,382	\$13,324	\$37,903	\$8,414	\$16,012	\$34,208	\$11,240	\$10,919	\$18,885	\$13,838	\$180,125
TOTAL ADDITIONAL CAPITAL PROGRAMS	\$51,589	\$49,343	\$74,514	\$36,992	\$49,115	\$67,312	\$44,344	\$44,023	\$51,988	\$46,942	\$516,161



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Approved FY 2022 Budgets

Section VI: CAPITAL FINANCING, CASH AND DEBT



Solar panel installation, Blue Plains



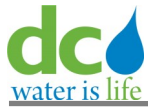
\$ in thousands

DC Water relies on several funding sources to finance its capital projects and cash flow needs. The process of identifying, obtaining, and managing these funds, is a combined effort throughout the Authority. This includes future revenues, collections, grant applications, planning, and debt service management. Below is the list of various funding sources and the percentage contribution, to DC Water’s overall CIP needs.

Approximately 61% percent of DC Water’s Capital Program is funded by debt and pay-go, 21% of the funds is contributed by the wholesale capital payments, and the remaining estimated 18% funds comes from other available funds.

Ten-year Sources of Funds	Amount	Percentage
Debt Financing (1)	\$ 2,024,996	37.3%
Wholesale Capital Payment	1,136,195	20.9%
Pay-Go Financing (2)	1,294,012	23.8%
Clean Rivers Impervious Area Charge (CRIAC)	644,800	11.9%
EPA Grants & CSO Appropriation	161,569	3.0%
System Availability Fee (SAF)	76,300	1.4%
Uses of Available Fund	66,768	1.2%
Interest Income on Bond Proceeds	14,924	0.3%
Curing Pad and Solar	12,920	0.2%
Total	\$ 5,432,485	100%

- 1) Debt financing refers to the borrowing of funds through long-term revenue bonds, commercial paper and other short-term notes
- 2) Pay-go financing is any funds available after meeting the reserves and rate stabilization fund deposits



Funds Summary

\$ in thousands

Sources and Uses of Funds

	FY 2020 Actual	FY 2021 Approved	FY 2021 Revised	FY 2022 Approved
Sources				
Beginning Balance	\$ 72,281	\$ 158,584	\$ 266,205	\$ 209,136
New Debt Proceeds / Commercial Paper / EMCP ⁽¹⁾	\$ 300,000	\$ 300,000	\$ 200,000	\$ 200,000
System Availability Fee (SAF)	5,270.64	7,700	7,000	7,700
Clean Rivers Impervious Area Charge (CRIAC)	29,346.81	35,675	49,158	52,095
Pay-Go Financing	122,588.91	90,252	71,406	89,226
EPA Grants	18,097.37	28,464	32,645	31,311
CSO Appropriation	8,038.00	-	-	-
Wholesale Customer Capital Contributions	52,942.76	95,205	75,803	83,640
Interest Income	3,497.54	6,365	1,749	2,623
Total Sources	\$ 539,782	\$ 563,661	\$ 437,761	\$ 466,596
Uses				
Water Projects	\$ 41,721	\$ 88,677	\$ 75,362	\$ 100,209
Wastewater Treatment	48,987	102,976	78,992	63,922
Sanitary Sewer Treatment	23,359	63,926	50,547	75,437
Combined Sewer & LTCP Projects	181,745	157,058	170,842	165,276
Stormwater Projects	2,587	9,631	5,931	9,228
Non-Process Facilities	10,016	31,849	38,004	12,725
Washington Aqueduct	13,073	16,266	15,382	13,324
Capital Equipment	18,548	27,327	26,327	32,940
Meter Replacement / AMR/ CIS	5,823	9,880	9,880	3,079
Total Uses	\$ 345,859	\$ 507,590	\$ 471,267	\$ 476,140
Contingency	\$ -	\$ -	\$ 23,563	\$ 47,614
Ending Balance	\$ 266,205	\$ 214,655	\$ 209,136	\$ 151,978

(1) Commercial Paper and Extendable Municipal Commercial Paper are used for interim financing and capital equipment

Cash Reserve Summary

	FY 2020 Actual	FY 2021 Approved	FY 2021 Revised	FY 2022 Approved
Beg. O&M Reserve Balance (Net of Rate Stabilization Fund)	\$ 186,764	\$ 180,000	\$ 186,827	\$ 185,000
Operating Surplus	\$ 160,152	\$ 115,046	\$ 98,407	\$ 122,961
Wholesale Customer Prior Year Billing Reconciliation	14,925	(5,417)	(5,243)	(3,342)
Project Billing Refund	(4,000)	(4,000)	(4,000)	-
Federal Customer Prior Year Billing Reconciliation	1,317	2,233	6,161	488
Transfer to CAP Fund	(15,000)	-	-	-
Transfer to Rate Stabilization Fund	(28,794)	-	-	-
Interest Earned from Bond Proceeds	113	410	57	85
Pay-Go Capital Financing	(128,651)	(103,272)	(97,209)	(111,192)
Ending O&M Reserve Balance (Net of Rate Stabilization Fund)	\$ 186,827	\$ 185,000	\$ 185,000	\$ 194,000
Rate Stabilization Fund	\$ 90,244	\$ 71,950	\$ 87,744	\$ 77,244



\$ in thousands

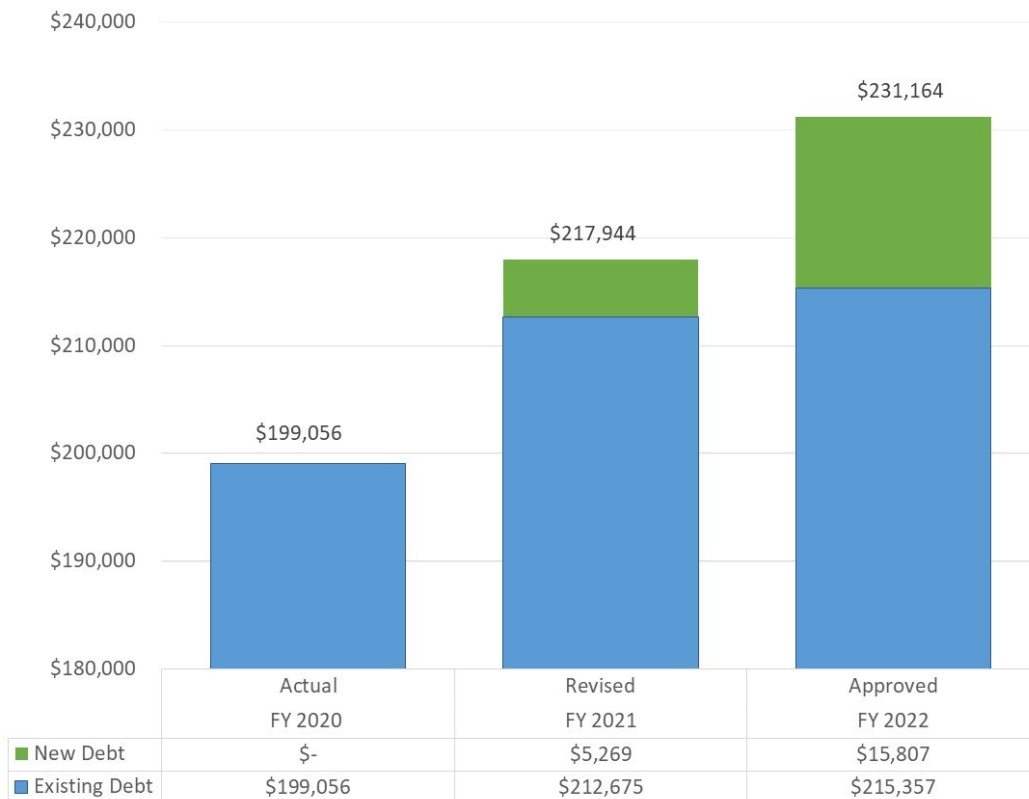
Interest Rate Assumptions

- Budget Appropriation and Financial Plan
 - 1) Variable rate
 - 2.50% for FY 2021 and FY 2022
 - 2) Fixed rate
 - 5.00% for FY 2021 and FY 2022
 - Plus cost of issuance and insurance

Capital Financing Plan

- DC Water will issue debt for two purposes. 1) Finance the costs associated with the CIP. 2.) Refund existing debt to obtain Debt Service savings and/or restructure certain terms of existing debt. The key goals of DC Water’s comprehensive capital financing plans are:
 - 1) Minimize the cost of capital
 - 2) Increase operational flexibility; and
 - 3) Optimize assets/liability matching through Interim Financing, Pay-Go Financing, and Federal Grants.

Debt Management FY 2020 – FY 2022





Debt Service Management

\$ in thousands

The chart below shows debt service payment of principal and interest for a three-year outlook.

Bond Series	FY 2020 Actual	FY 2021 Revised	FY 2022 Approved
Senior Lien			
Series 1998	\$ 19,360	\$ 23,365	\$ 23,365
Series 2014A	16,788	16,849	16,849
Series 2017A&B	17,777	17,848	17,846
Series 2018A&B	18,277	18,324	18,326
WIFIA Loan	-	367	978
Total Senior Lien	\$ 72,202	\$ 76,753	\$ 77,364
Subordinate Lien			
Series 2010A	\$ 15,836	\$ 15,402	\$ 15,511
Series 2012A,B-1,B-2&C	19,991	20,087	20,087
Series 2013A	1,244	-	-
Series 2014B	875	1,998	2,500
Series 2014C	30,255	30,348	30,393
Series 2015A&B	19,366	24,733	24,729
Series 2016	16,909	17,039	17,039
Series 2016B	855	835	813
Series 2019A&B	6,879	7,625	7,625
Series 2019C	1,572	1,741	1,741
Series 2019D	11,319	12,308	12,305
Series 2022A	286	-	1,446
EMCP	365	1,500	1,500
Commercial Paper	297	1,500	1,500
Jennings Randolph Bond	805	805	805
Total Subordinate Lien	\$ 126,854	\$ 135,922	\$ 137,993
Proposed Debt Service	\$ -	\$ 5,269	\$ 15,807
Total Debt Service	\$ 199,056	217,944	231,164

As of September 2020, DC Water received an upgrade to its Senior bond ratings from AA to AA+ by Fitch Ratings; this allows for a lower borrowing cost which in turn reduces ratepayer cost in the long run.

Senior Bond Ratings		
Standard & Poor's Corporation	AAA	Stable Outlook
Moody's Investor Service	Aa1	Stable Outlook
Fitch's Rating	AA+	Stable Outlook



\$ in thousands

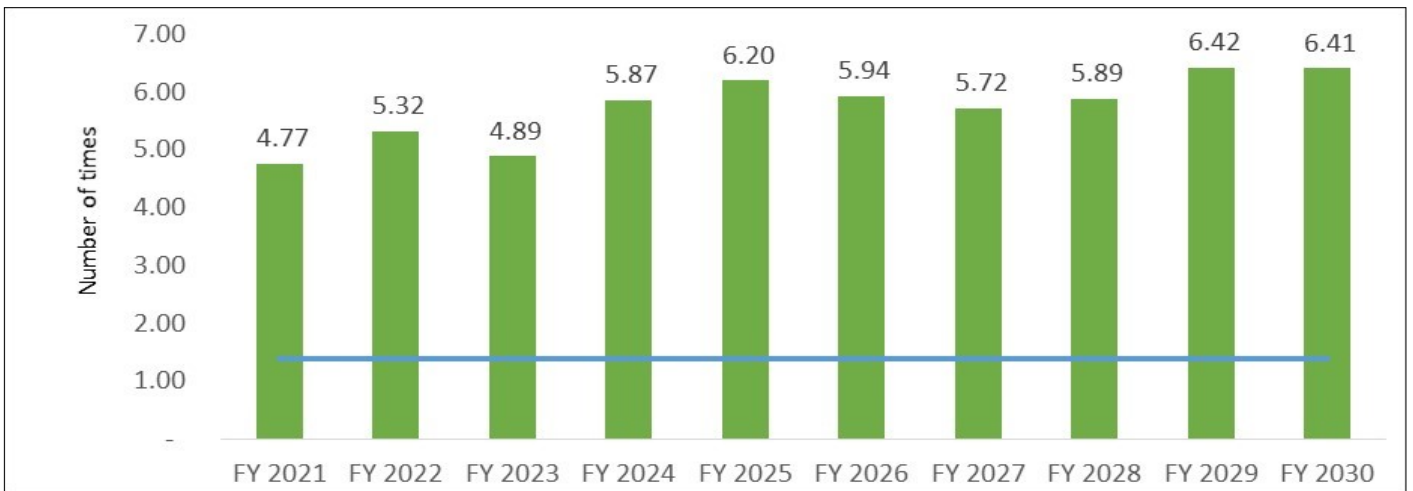
Debt Service Coverage (FY 2021 – FY 2030)

DC Water is authorized to issue additional debt only to the extent that it can satisfy the Debt Service Coverage (annual net revenues as a percent of annual debt service) requirements established in the Indenture and certain Board policies.

Debt level	Master Indenture	Board Resolution	Management Practice
Senior	120x	140x	140x
Subordinate	100x	100x	100x

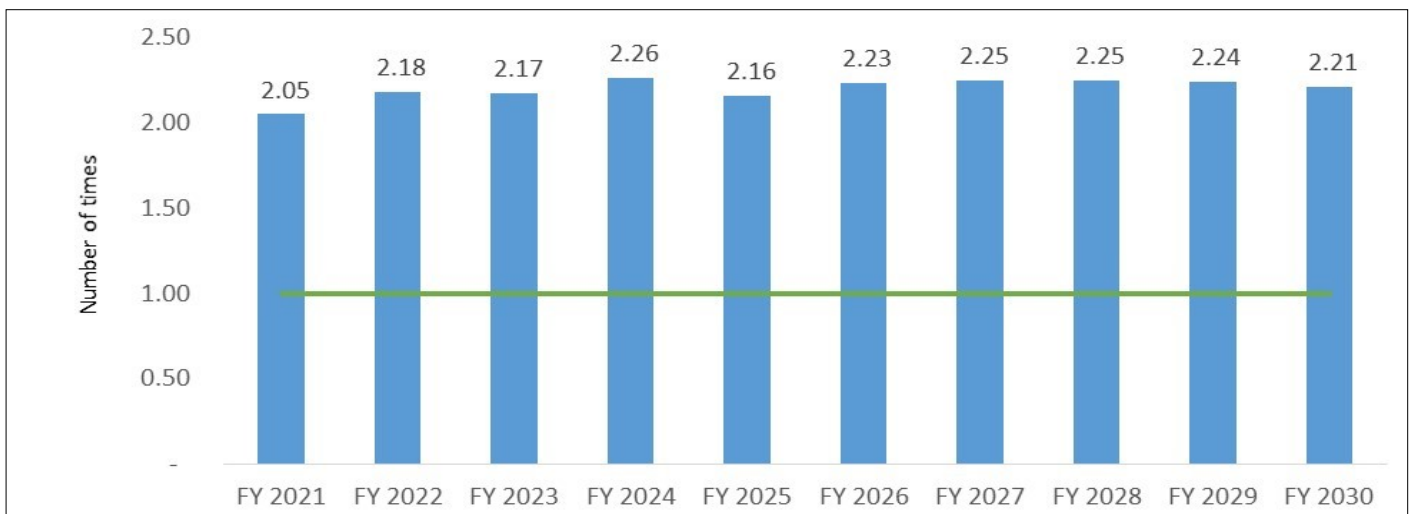
Senior Debt Service Coverage

Senior Debt Service Coverage (Management target = 140x)



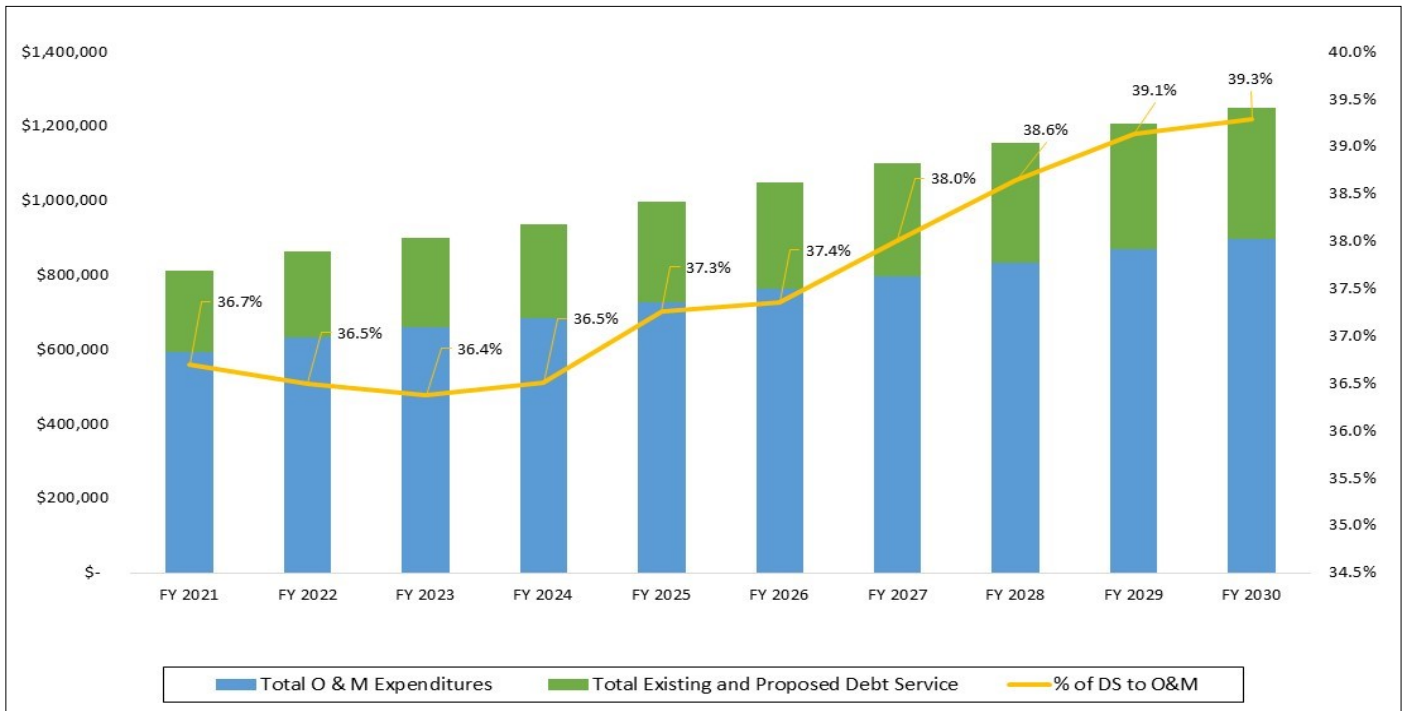
Subordinate Debt Service Coverage

Subordinate Debt Service (Board/Management target = 100x)

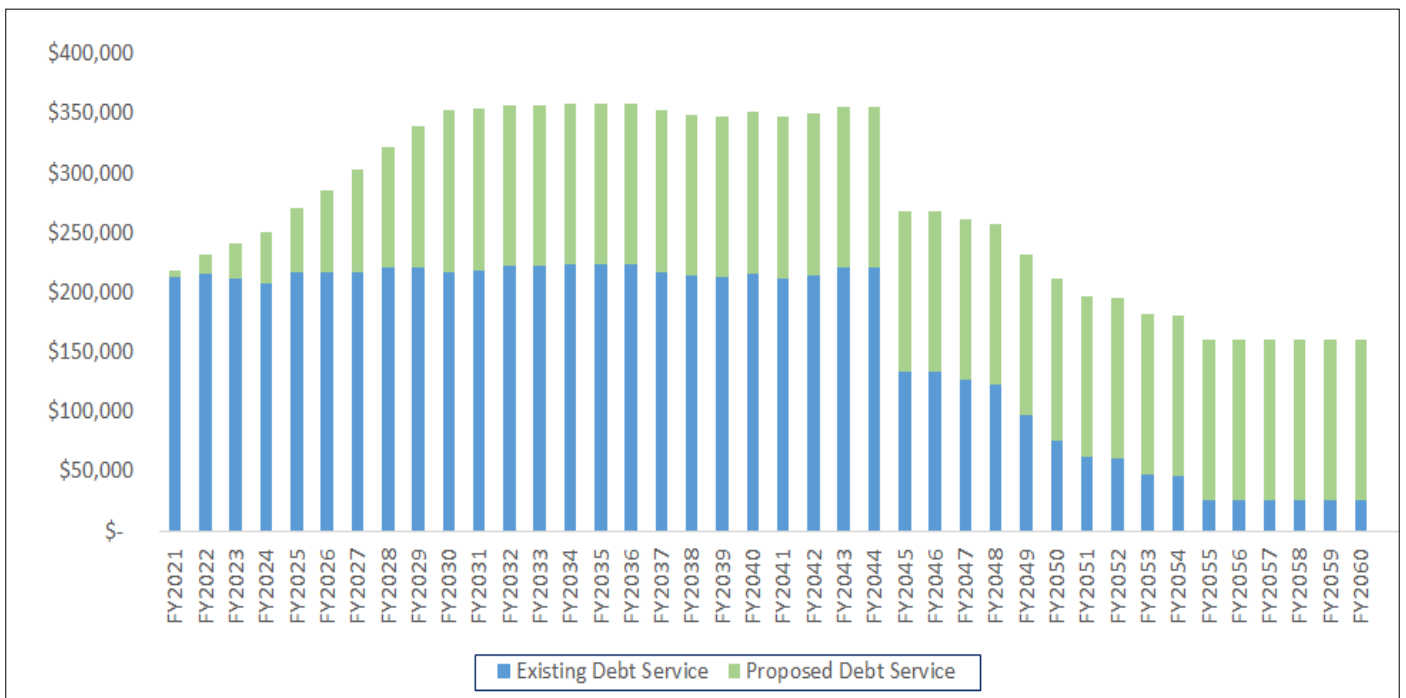


\$ in thousands

Debt Service as Percentage of O&M Expenditures

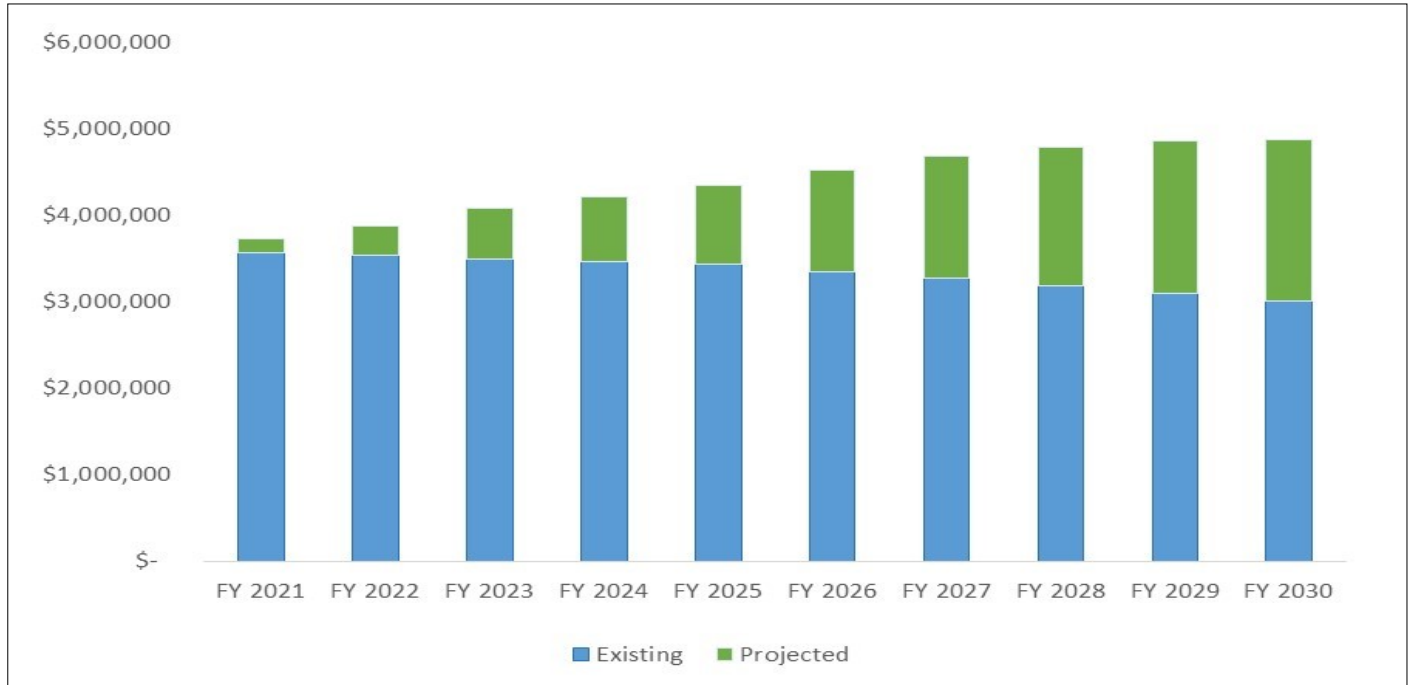


Total Outstanding & Proposed Debt Service

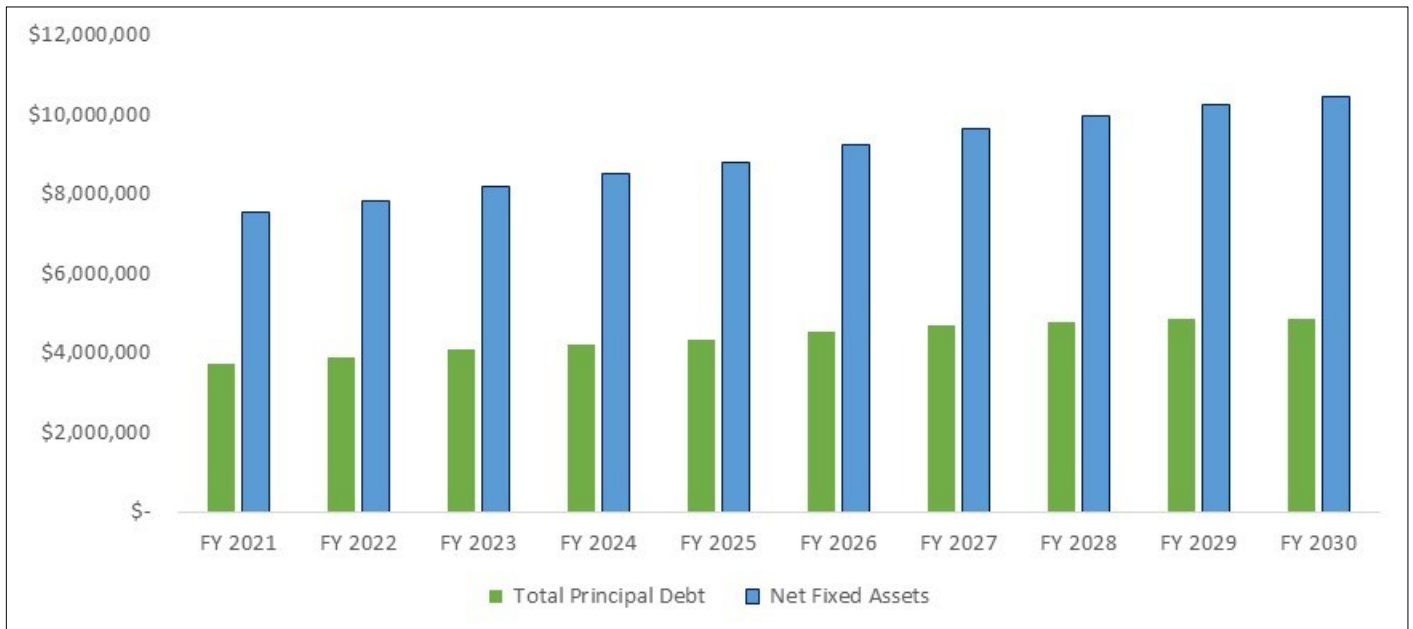


\$ in thousands

Principal Outstanding Debt

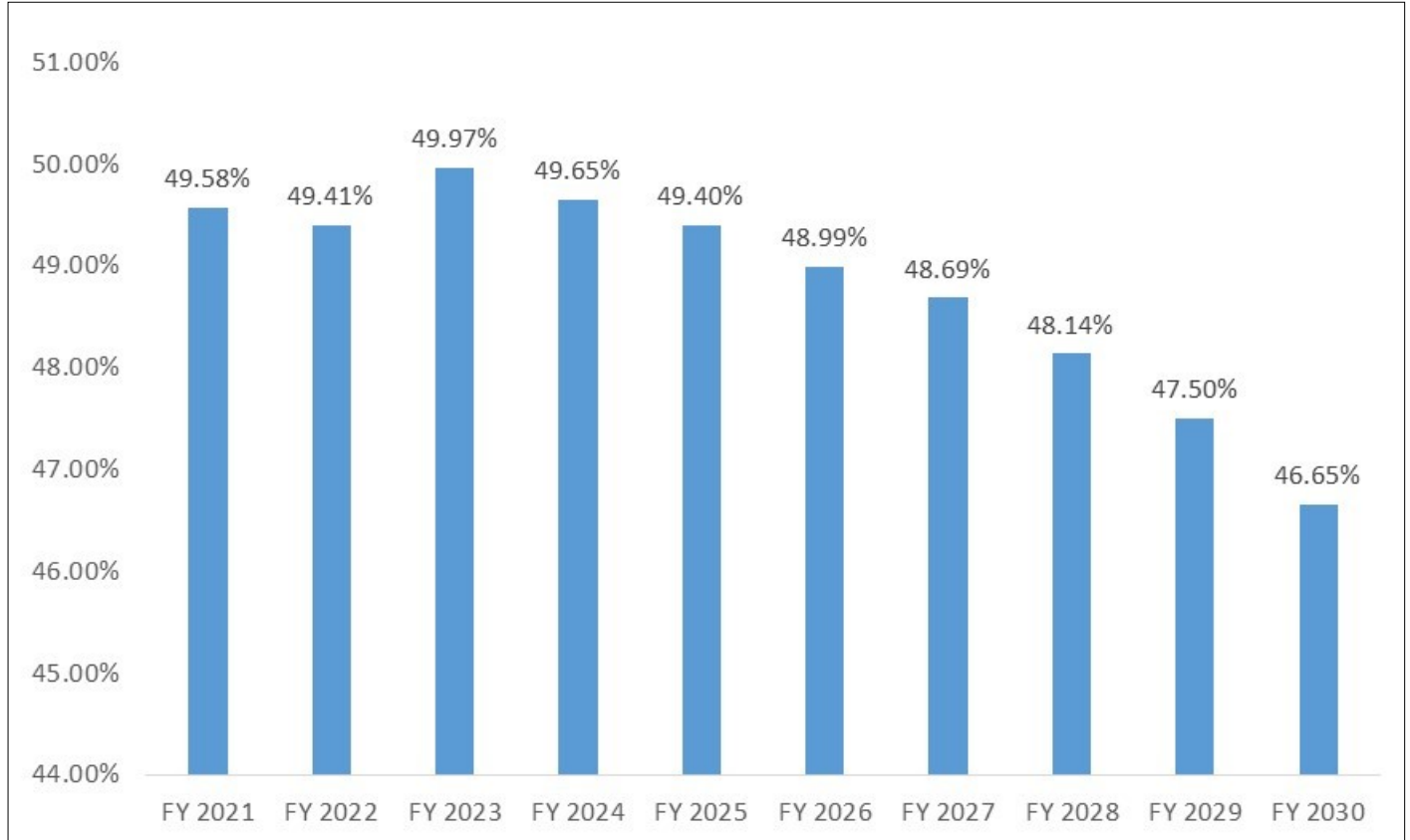


Principal vs Net Fixed Assets



\$ in thousands

Debt to Net Fixed Assets Ratio



DEBT LIMIT: DC Water is not subject to any legal debt limitations. However, prior to any new debt issuance, DC Water must meet an additional bonds test and certify revenue sufficiency.

PUBLIC UTILITY SENIOR LIEN REVENUE BONDS: 1) Series 1998 (March 1998); 2) Series 2014A (July 2014); 3) Series 2017A (January 2017); 4) Series 2017B (January 2017); 5) Series 2018A (April 2018); 6) Series 2018B (April 2018); 7) WIFIA Loan (March 2021).

PUBLIC UTILITY SUBORDINATE LIEN REVENUE BONDS: 1) Series 2012A (March 2012); 2) Series 2013A (July 2013); 3) Series 2014B (July 2014); 4) Series 2013A (July 2013); 5) Series 2014B (July 2014); 6) Series 2015A (October 2015); 7) Series 2015B (October 2015); 8) Series 2016B Environmental Impact Bond (September 2016); 9) Series 2019A (October 2019); 10) Series 2019B (October 2019); 11) Series 2019C (October 2019); and 12) Series 2019D Refunding (October 2019).

PUBLIC UTILITY SUBORDINATE LIEN REVENUE BONDS (FEDERALLY TAXABLE ISSUER SUBSIDY BUILD AMERICA BONDS): 1) Series 2010A (October 2010).

PUBLIC UTILITY SUBORDINATE LIEN REVENUE REFUNDING BONDS: 1) Series 2008A: (refunded Series 2004, Assured Guaranty insured, April 2008); 2) Series C taxable commercial paper: (refunded Series 2007B, April 2008); and 3) Series 2012C: (advance refunded Series 2003, March 2012); 4) Series 2014C: (advanced refunded all or a portion of Series 2007A, 2008A, 2009A, and 2012B, October 2014); 5) Series 2016A: (advanced refunded all or a portion of Series 2007A, 2008A, and 2009A, January 2016); 6) Series 2019D: (advanced refunded all of Series 2013A).

NOTES FOR JENNINGS RANDOLPH RESERVOIR: The note payable to the Federal government for improvements to the Jennings Randolph Reservoir is considered subordinate debt under the Master Indenture of Trust. The notes were issued to provide a backup water supply facility for the Authority. DC Water's share of operating and capital cost is 30 percent.

NOTES FOR LITTLE SENECA RESERVOIR: The note payable to Washington Suburban Sanitary Commission (WSSC) is considered subordinate debt under the Master Indenture of Trust. The notes were issued by WSSC for construction of the Little Seneca Dam and Lake for backup and peak-day water supply for the Authority. DC Water's share of operating and capital costs is 40 percent. DC Water prepaid the note in full in August 2013.

COMMERCIAL PAPER (CP): These notes issued are considered subordinate debt under the Master Indenture of Trust. DC Water's commercial paper program is issued in increments with maturities less than 270 days. As described in Section III, the Board approved the commercial paper program in early FY 2002; proceeds from the sale of the notes are used for interim bond financing, short-term financing for capital equipment and certain taxable costs for the Washington Aqueduct. Each new bond issuance is evaluated to determine the most cost-effective way of reducing the amount of taxable commercial paper. Normal market conditions for commercial paper carries significantly lower interest rates than long-term debt. In May 2020, DC Water authorized the Letter of Credit facility to TD Bank, NA.

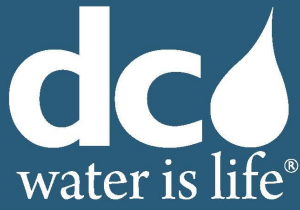
Additionally, DC Water successfully extended JP Morgan Chase Bank as the authorized dealer and US Bank as the Issuing Paying Agent. The \$150 million commercial paper program includes: (1) Series B (tax-exempt) aggregate principal amount not to exceed \$100 million; and (2) Series C (taxable) aggregate principal amount not to exceed \$50 million.

May 2020, DC Water authorized the Letter of Credit facility to TD Bank, NA. Additionally, DC Water successfully extended JP Morgan Chase Bank as the authorized dealer and US Bank as the Issuing Paying Agent. The \$150 million commercial paper program includes: (1) Series B (tax-exempt) aggregate principal amount not to exceed \$100 million; and (2) Series C (taxable) aggregate principal amount not to exceed \$50 million

EXTENDABLE MUNICIPAL COMMERCIAL PAPER (EMCP): This program will provide interim financing for a portion of the Authority's Capital Improvement Program. Under this program the notes are issued backed by the liquidity and credit rating of the Authority. Each Series A EMCP Note will mature on its respective "Original Maturity Date", which may range from one to 90 days from the date of issuance, unless its maturity is extended on the "Original Maturity Date" to the "Extended Maturity Date", which will be the date that is 270 days after the date of issuance of the Series A EMCP Note. The notes are payable from and secured by a subordinate lien on the Authority's net revenues, as further described in the Authority's master trust indenture as supplemented. In November 2015, DC Water authorized the dealer for the EMCP program as Goldman, Sachs & Co. The \$100 million extendable municipal commercial paper program includes: (1) Series A (tax-exempt) aggregate principal amount not to exceed \$100 million.

DEBT POLICY: DC Water's comprehensive debt policy can be found on our website at www.dewater.com

INVESTOR RELATIONS: DC Water's investor relations can be found via BondLink at www.dewaterbonds.com



Approved FY 2022 Budgets

Section VII: DEPARTMENTAL SUMMARIES



Lead Replacement press event,
Franklin Street, NE

Introduction to DC Water’s Operational and Administrative (Support) Departments

DC Water’s organizational structure is a key tool for ensuring that the organizational mission is achieved. The structure consists of twenty-eight departments that are defined primarily along functional roles and further grouped along service lines (Operational or Administrative) or reporting clusters of authority.

Service Lines: Operational departments include: Water Operations, Pumping and Sewer Operations, and Wastewater Treatment services (including maintenance of these facilities). These departments are responsible for the day-to-day operations of the DC Water’s extensive infrastructure and facilities that provide direct services to our customers. Similarly, the Customer Care Department is classified as an operational department due to the integrated nature of their work to operations (i.e., customer care, metering and billing). Provision of first-line customer care to our customers includes 24 hour emergency service. The departments of Engineering and Technical Services, Wastewater Engineering, Clean Rivers, Permit Operations, and Capital Improvement Program (CIP) Infrastructure Management are responsible for ongoing reinvestment in the system infrastructure, compliance with various mandates and provides services to the development community throughout the District of Columbia.

All other departments provide critical administrative and technical support to ensure the safe and reliable continuity of our vital services through short and long-term planning, asset management, leadership and all financial and human capital support requirements.

Reporting Lines: Departments are grouped within clusters to ensure accountability and to enhance efficiency and delivery of various services. A member of the Executive Team heads each cluster group and is accountable for service delivery and performance metrics of the departments within their cluster.

DC Water continues to make organizational changes and improvements to enhance efficiencies, improve processes and efficiently utilize all assets with the goal of better serving the public and protecting the environment. To this end during FY 2019, DC Water’s Executive Team implemented series of structural changes aimed at leveraging organizational strengths to produce maximum results, promote high performing team culture across all business units, and provide best employee experience. These structural changes include the creation of the CIP Infrastructure Management department within the Engineering cluster; consolidation of the Distribution & Conveyance Services and Sewer Services into a single department, Pumping and Sewer Operations; creation of the Office of Emergency Management department which was within Distribution & Conveyance Services; and consolidation of the Water Quality & Technology as part of the Water Services department; and creation of the Office of the Chief Operating Officer and Strategy & Performance departments which were previously within the Office of the Chief Executive Officer.

DC Water’s new organizational chart can be found on page VII-14 and reflects structural changes for the following departments and cluster groups:

- Chief Executive Officer – This cluster is comprised of the Office of the Chief Executive Officer, Office of Chief Operating Officer, Strategy & Performance, Board Secretary, and Internal Audit.
- Office of the Chief Operating Officer – Oversees the operations, engineering, administration and customer experience clusters.
- Operations and Engineering – All operational and engineering functions are consolidated into a single cluster. This includes Department of Engineering & Technical Services (DETS), Wastewater Engineering, Clean Rivers, Permit Operations, and CIP Infrastructure Management. The operations departments include Water Operations (includes Water Quality and Technology), Pumping & Sewer Operations, Wastewater Treatment Operations, Process Engineering, and Maintenance Services.
- Administrative Services – This cluster includes the Administration Office, Security, Occupational Safety and Health, Office of Emergency Management, Fleet Management, and Facilities Management departments.
- Customer Experience – This cluster includes Customer Care (previously Customer Service) and Information Technology departments.
- Finance and Procurement – This cluster is comprised of Finance and the Procurement & Compliance departments. All goods, services and engineering procurement administration are consolidated under the Procurement and Compliance department. This cluster is also responsible for the oversight of the Non-Ratepayer Revenue Fund.
- People and Talent – Human Capital Management is now the Human Resources department and includes Labor Relations under this cluster.
- Strategy & Performance – This cluster is comprised of Sustainability & Watershed Management, Innovation, Enterprise Program Management Office, Strategic Management and Business Performance Management business units.
- Legal Affairs – General Counsel is now Legal Affairs.
- Marketing and Communications – External Affairs is now Marketing and Communications.

Senior Executive Team

Chief Executive Officer & General Manager	Chief Operating Officer & Executive Vice-President	Chief Financial Officer & EVP, Finance and Procurement	Chief People & Inclusion Officer & EVP People & Talent	Chief Strategy & Performance Officer & EVP Strategy & Performance	Chief Legal Officer & EVP Government & Legal Affairs	Chief Communications & Stakeholders Engagement Officer & EVP
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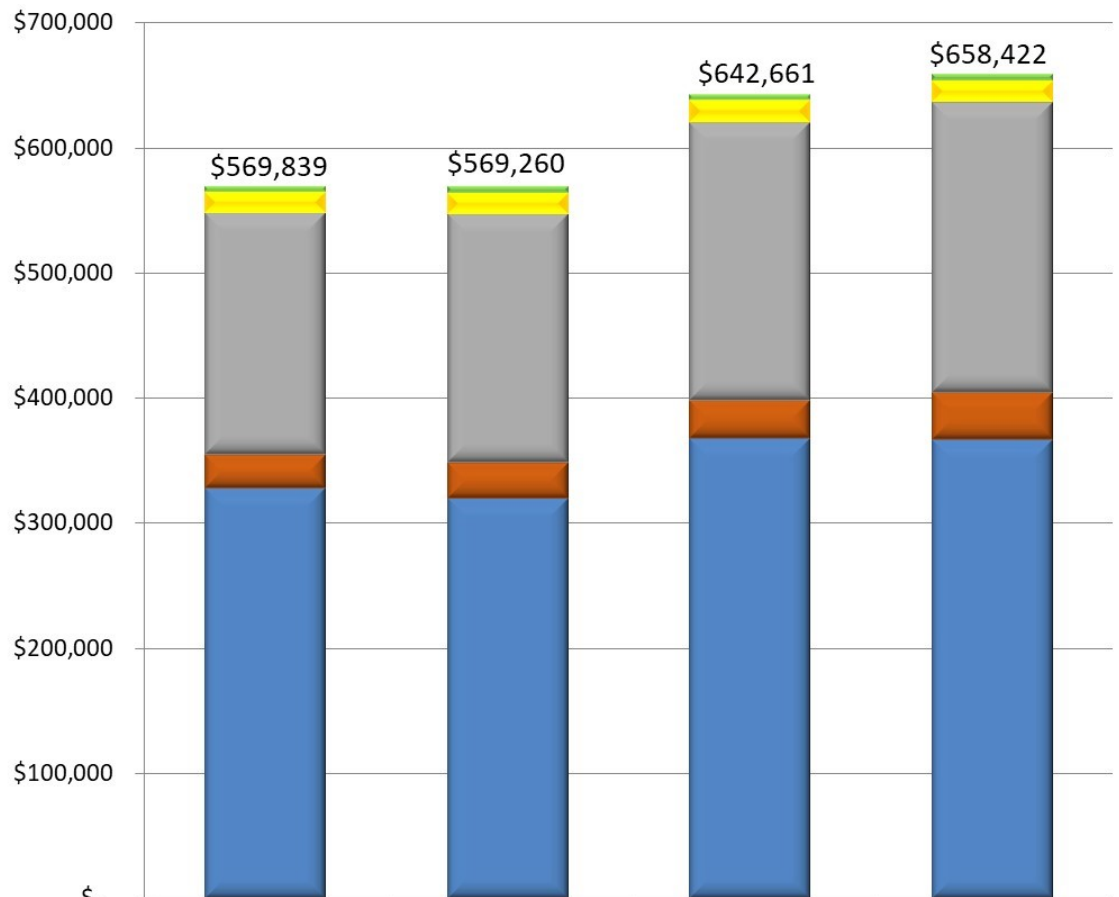


Operating Expenditures Budgets

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[overview](#)
[financial plan](#)
[rates&rev](#)
[capital](#)
[financing](#)
[departmental](#)
[glossary](#)

\$ in thousands

FY 2019 - FY 2022

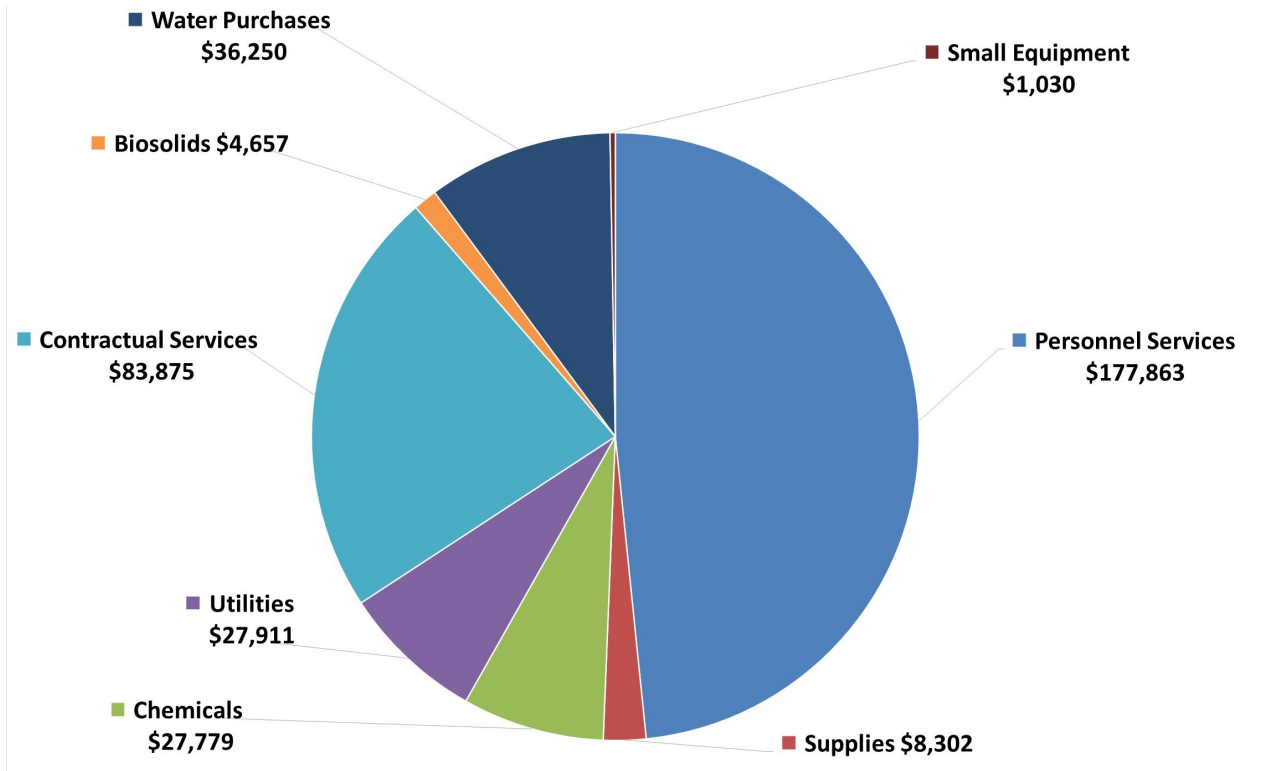


	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Approved
■ ROW	\$5,100	\$5,100	\$5,100	\$5,100
■ PILOT	\$16,602	\$16,934	\$17,272	\$17,618
■ Debt Service	\$193,035	\$199,056	\$222,268	\$231,164
■ Cash Financed Capital Improvements	\$26,999	\$28,556	\$30,355	\$37,830
■ Operations & Maintenance	\$328,104	\$319,614	\$367,667	\$366,711

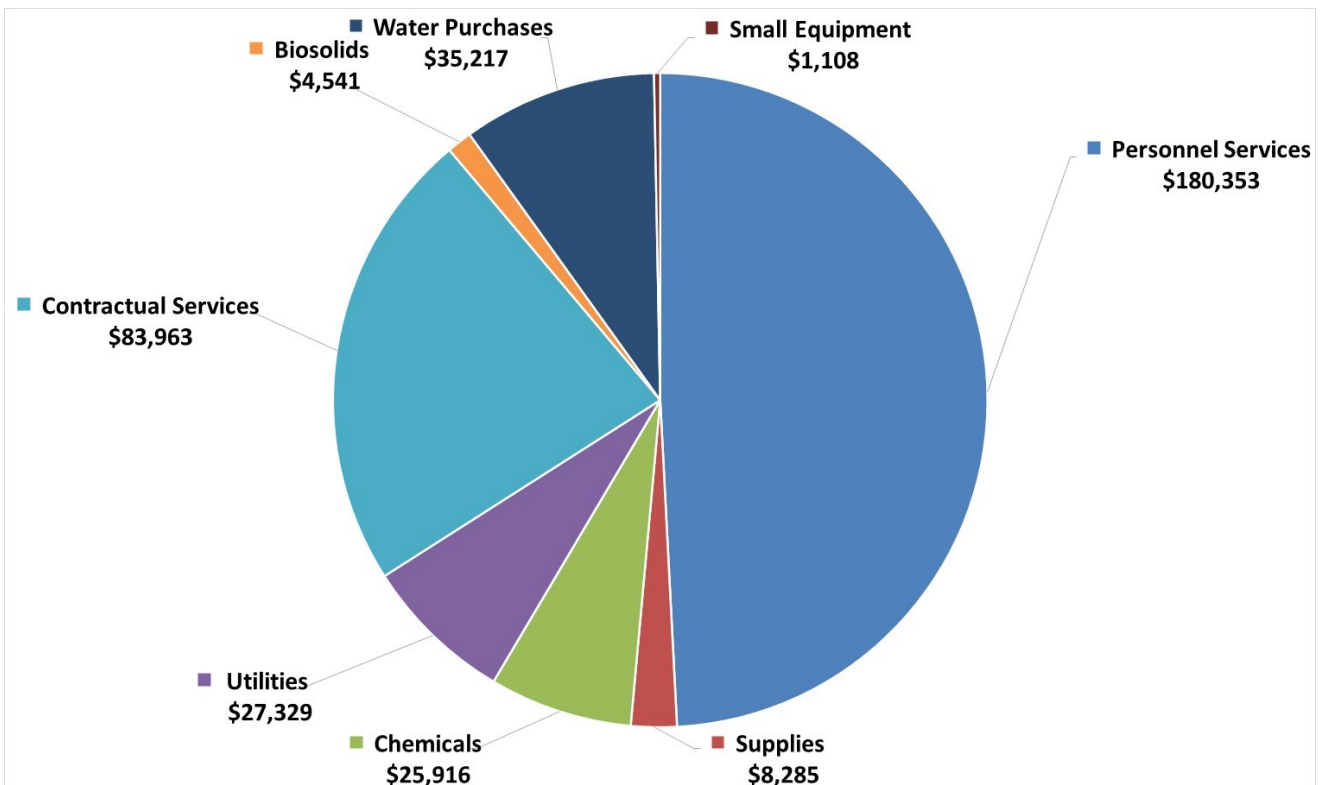
The above chart shows steady growth in operations and maintenance (O&M) costs to maintain appropriate service levels. The overall operating budget is constrained by the increasing debt service costs required to support DC Water’s Capital Improvement Program.

\$ in thousands

FY 2021 Approved \$367,668



FY 2022 Approved \$366,711





Operating Expenditures by Object

[summary](#)[overview](#)[financial plan](#)[rates&rev](#)[capital](#)[financing](#)[departmental](#)[glossary](#)

\$ in thousands

Object	FY 2019 ACTUAL	FY 2020 ACTUAL	FY 2021 APPROVED	FY 2022 APPROVED
Personnel Services	\$ 157,979	\$ 159,244	\$ 177,863	\$ 180,353
Contractual Services	76,206	74,503	88,532	88,504
Water Purchases	32,430	31,696	36,250	35,217
Chemicals and Supplies	34,979	28,659	36,081	34,201
Utilities	25,778	24,705	27,911	27,329
Small Equipment	731	806	1,030	1,108
Subtotal Operations & Maintenance Expenditures	328,104	319,614	367,666	366,711
Debt Service	193,035	199,056	222,268	231,164
Cash Financed Capital Improvements	26,999	28,556	30,355	37,830
Payment in Lieu of Taxes	16,602	16,934	17,274	17,618
Right of Way Fees	5,100	5,100	5,100	5,100
Total Operating Expenditures	\$ 569,839	\$ 569,260	\$ 642,663	\$ 658,423
Personnel Services charged to Capital Projects	(17,588)	(24,906)	(24,382)	(25,086)
Total Net Operating Expenditures	\$ 552,251	\$ 544,354	\$ 618,280	\$ 633,337

- **Personnel Services** – This covers the salaries, benefits, overtime, on-call and other employee compensation for full time employees, temporary/part-time employees and the DC Water’s internship program.
- **Contractual Services** – This includes the maintenance and repairs for DC Water’s water, sewer and wastewater infrastructure, automotive and various operational facilities. It also covers the legal, insurance and compliance requirements, customer support and community outreach programs, employee training, safety programs, software maintenance, information technology services, pay for success based on performance of the Green Infrastructure project, etc.
- **Water Purchases** – This is for water purchased from the U.S. Army Corps of Engineers (Washington Aqueduct), the entity that sources, treats and produces the tap water distributed by DC Water in the District.
- **Chemicals and Supplies** – This includes the various chemicals used in the treatment processes, office supplies, parts sourced from the warehouse, uniforms for operational and technical employees, etc.
- **Utilities** – This covers the costs for telecommunications (radios, cell and phone lines), electricity, natural gas, water usage, building rentals, etc.
- **Small Equipment** – Include items such as adding machines, cameras, small appliances, etc.
- **Debt Service** – This is for repayment of principal and interest on debt issued for the capital program.
- **Cash Financed Capital Improvements (CFCI)** – The purpose of this fund is two-fold: to serve as an Operations and Maintenance budget contingency and to provide sufficient debt service coverage.
- **Payment in Lieu of Taxes and Right of Way** – These are payments to the District for water and sewer conduits that it occupies within the District of Columbia, consistent with memorandum of understanding (MOU).



Operating Expenditures by Department and Cluster

\$ in thousands

Departments & Clusters	FY 2019 ACTUAL	FY 2020 ACTUAL	FY 2021 APPROVED	FY 2022 APPROVED
OPERATIONS & ENGINEERING	\$ 227,171	\$ 219,519	\$ 249,766	\$ 246,808
Maintenance Services	18,867	18,690	20,075	20,779
Wastewater Treatment-Operations	77,024	69,432	79,533	77,050
Wastewater Treatment-Process Engineering	6,892	6,557	7,232	7,373
Water Quality and Technology	3,436	-	-	-
Water Operations	23,863	53,823	68,045	66,446
Sewer Operations	15,916	11,320	-	-
Pumping Operations/DDCS	52,501	20,462	37,970	37,945
DC Clean Rivers	2,175	309	2,951	4,097
Engineering & Technical Services	21,564	33,548	24,937	21,473
CIP Infrastructure Management	-	725	1,259	4,259
Wastewater Engineering	1,740	1,269	3,599	3,058
Permit Operations	3,192	3,385	4,165	4,328
FINANCE & PROCUREMENT	19,967	22,060	33,467	30,480
Finance	14,853	15,912	26,888	22,673
Procurement & Compliance	5,114	6,148	6,079	7,292
Non-Ratepayer Revenue Fund			500	515
CUSTOMER EXPERIENCE	32,311	30,902	30,745	32,304
Customer Care	20,643	19,563	20,360	21,367
Information Technology	11,668	11,339	10,384	10,937
INDEPENDENT OFFICES	9,153	7,782	9,446	9,708
Board Secretary	567	498	632	634
Office of the Chief Executive Officer	4,877	3,896	5,206	2,133
Office of the Chief Operating Officer				924
Strategy & Performance				2,435
Internal Audit (outsourced)	856	562	742	750
Marketing and Communications	2,853	2,826	2,867	2,832
PEOPLE AND TALENT	6,495	8,671	9,619	10,096
Human Resources	6,495	8,671	9,619	10,096
LEGAL AFFAIRS	6,743	5,639	6,644	7,454
Legal Affairs	6,743	5,639	6,644	7,454
ADMINISTRATIVE SERVICES	26,264	25,040	27,981	29,861
Administration Office	570	629	634	688
Office of Emergency Management	959	1,219	1,498	1,583
Fleet Management	6,717	5,911	6,965	7,194
Occupational Safety & Health	1,817	1,669	2,335	1,898
Facilities Management	8,457	7,952	8,661	9,262
Security	7,742	7,660	7,888	9,236
Subtotal O & M Expenditures	328,104	319,614	367,668	366,711
Debt Service	193,035	199,056	222,268	231,164
Cash Financed Capital Improvements	26,999	28,556	30,355	37,830
Payment in Lieu of Taxes	16,602	16,934	17,272	17,618
Right of Way Fees	5,100	5,100	5,100	5,100
Total Operating Expenditures	\$ 569,840	\$ 569,260	\$ 642,663	\$ 658,423
Personnel Services charged to Capital Projects	(17,588)	(24,906)	(24,382)	(25,086)
Total Net Operating Expenditures	\$ 552,251	\$ 544,354	\$ 618,280	\$ 633,337



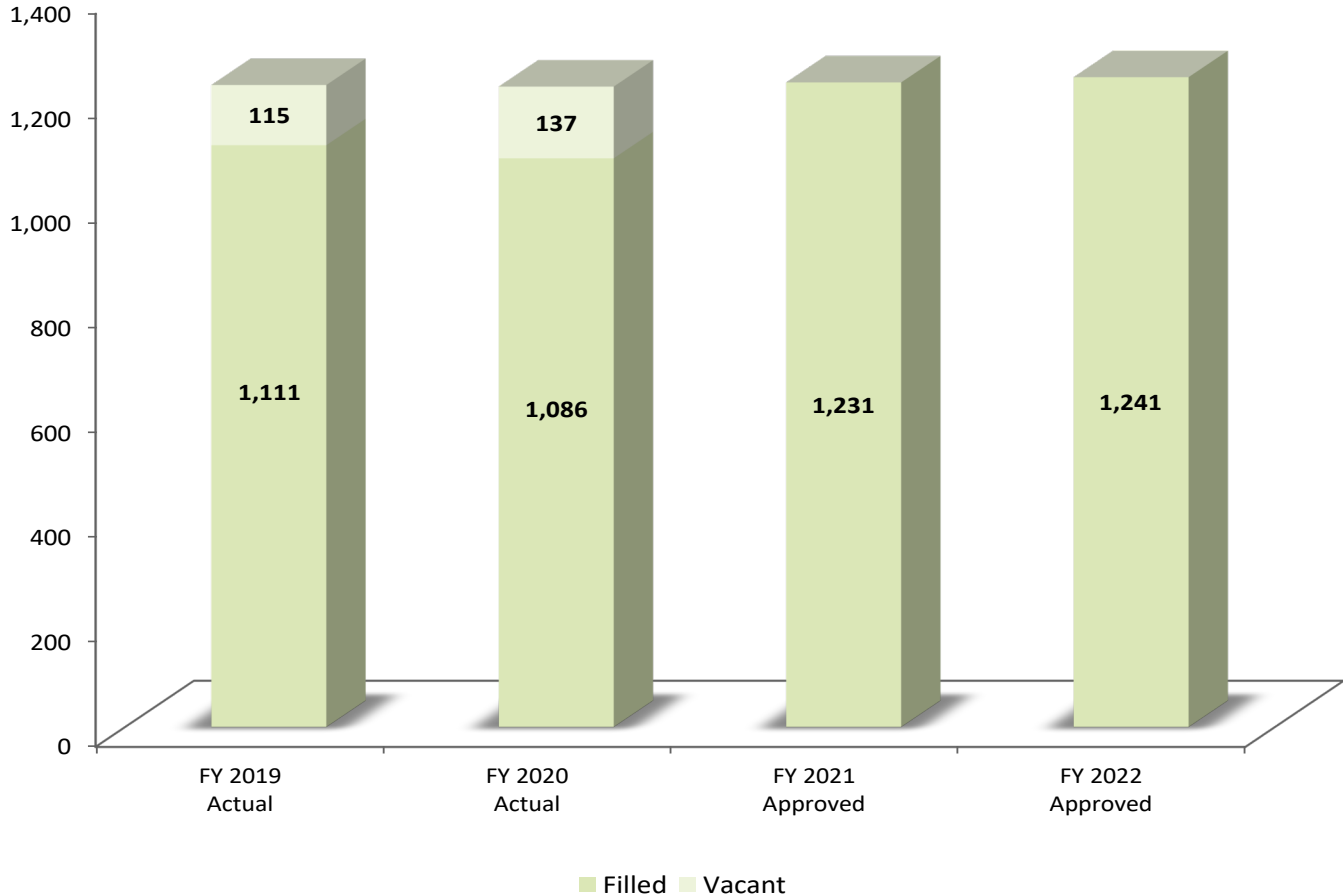
FY 2021 Approved Budget by Department by Category

summary overview financial plan rates&rev capital financing departmental glossary

(\$ in thousands)

Auth Pos	Pay	Fringe	Overtime	Personnel Services	Supplies	Chemicals	Utilities	Contracts	Biosolids	Water Purchases	Equipment	Total Non-Personnel Services	Total Operating
126	\$ 12,340	\$ 3,716	\$ 1,796	\$ 17,853	\$ 1,052	\$ 27,599	\$ 17,707	\$ 10,488	\$ 4,657	\$ -	\$ 177	\$ 61,681	\$ 79,533
35	3,789	1,211	50	5,051	565	-	57	1,489	-	-	70	2,181	7,232
100	9,132	2,847	630	12,609	3,435	-	167	3,488	-	-	376	7,467	20,075
200	18,140	6,638	1,780	26,558	1,240	30	431	3,504	-	36,250	32	41,487	68,045
123	10,952	3,887	462	15,300	69	-	394	4,587	-	-	10	5,060	20,360
177	16,652	5,625	2,068	24,345	1,384	150	6,244	5,735	-	-	113	13,625	37,970
129	15,466	4,694	938	21,098	125	-	579	3,085	-	-	50	3,839	24,937
17	2,180	653	25	2,857	12	-	-	730	-	-	-	742	3,599
11	1,741	525	-	2,266	22	-	114	549	-	-	-	685	2,951
6	948	311	-	1,259	-	-	-	-	-	-	-	-	1,259
21	2,217	824	45	3,085	41	-	403	636	-	-	-	1,080	4,165
945	93,556	30,930	7,794	132,280	7,946	27,779	26,096	34,290	4,657	36,250	828	137,846	270,126
18	3,226	958	-	4,184	13	-	24	985	-	-	-	1,021	5,206
2	274	53	11	338	17	-	3	272	-	-	2	294	632
17	2,225	617	3	2,844	3	-	7	735	-	-	-	742	3,587
13	1,602	481	-	2,083	14	-	20	3,776	-	-	-	3,800	6,644
30	3,656	1,111	5	4,772	29	-	26	732	-	-	12	784	2,867
28	3,733	1,079	10	4,822	4	-	27	4,790	-	-	-	4,846	9,619
36	3,911	1,186	30	5,126	30	-	163	5,319	-	-	77	5,563	10,384
53	7,329	2,293	40	9,662	20	-	53	866	-	-	3	953	6,079
3	457	115	-	573	1	-	53	17,149	-	-	4	17,225	26,888
6	741	204	5	949	15	-	4	500	-	-	-	500	1,498
51	4,221	1,394	250	5,864	118	-	21	493	-	-	20	549	8,661
8	814	244	1	1,059	54	-	171	2,508	-	-	-	2,797	7,888
11	1,452	409	-	1,861	20	-	325	6,410	-	-	40	6,829	2,335
10	1,090	349	5	1,444	19	-	893	4,564	-	-	45	5,521	6,965
286	34,731	10,491	360	45,582	356	-	1,814	49,585	-	-	203	51,959	97,541
1,231	\$ 128,287	\$ 41,422	\$ 8,154	\$ 177,863	\$ 8,302	\$ 27,779	\$ 27,911	\$ 83,875	\$ 4,657	\$ 36,250	\$ 1,030	\$ 189,804	\$ 367,668
Debt Service													
Cash Financed Capital Improvements													
Payment in Lieu of Taxes													
Right of Way													
Total OPERATING EXPENDITURES													
Personnel Services charged to Capital Projects													
TOTAL NET OPERATING EXPENDITURES													
												\$ 642,663	
												(24,382)	
												\$ 618,281	
												222,268	
												30,355	
												17,272	
												5,100	

FY 2019 - FY 2022



DC Water is committed to a strategic goal to achieve a lower vacancy rate. Through FY 2022, the approach undertaken included a closer look and assessment of staffing requirements needed to maintain service levels, coupled with increased hiring efforts in areas of need and criticality throughout the Authority.

During the FY 2020 budget cycle, a total of 63 aged and hard to fill vacant positions were deactivated to lower costs and reduce the high vacancy rate. There were 15 new positions added for a net reduction of 48 positions in FY 2020. The new positions were for in-house support of various operational requirements for water quality compliance, automotive parts, permits, and other strategic programs.

For FY 2021, 5 new positions were added to the overall headcount to support DC Water’s activities as required by the Consumer Protection Amendment.

In FY 2022, 8 new positions were added to advance the Lead Free DC initiatives for inspection work and reduce continued reliance on consultants for support of various operational and day-to-day activities.



Authorized Positions

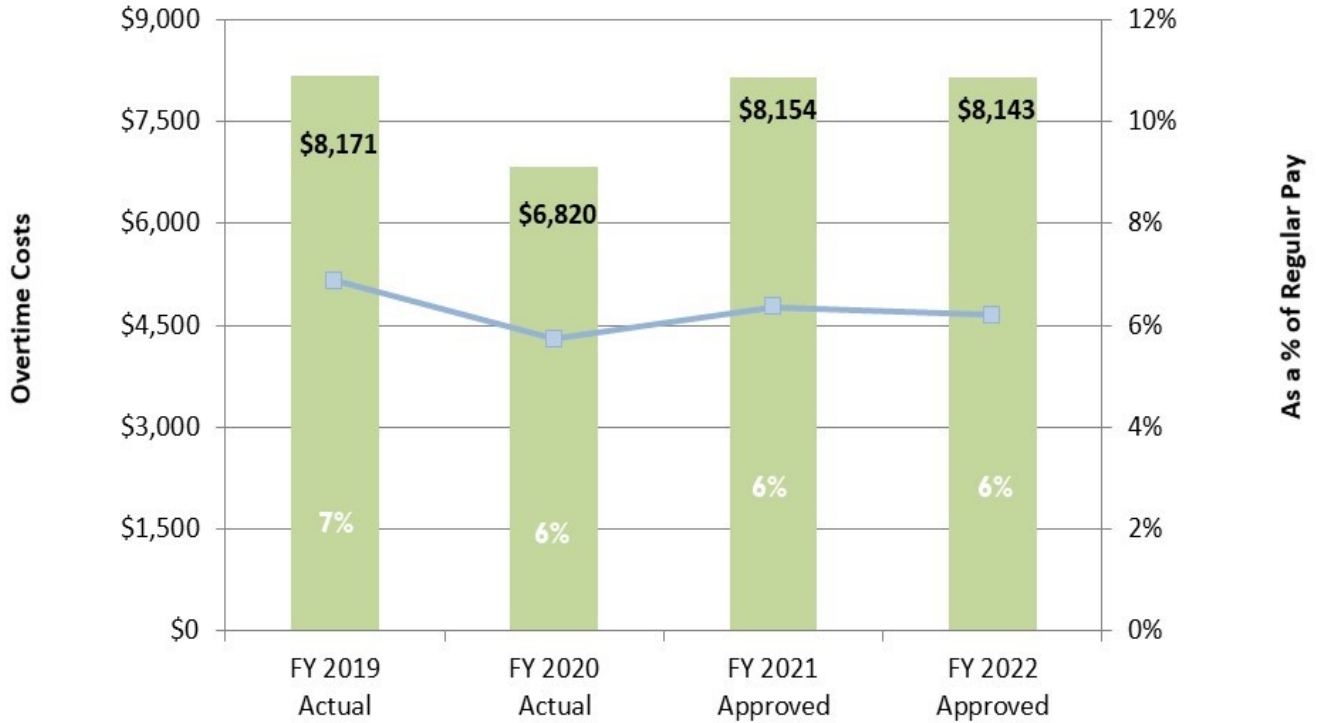
[summary](#)[overview](#)[financial plan](#)[rates&rev](#)[capital](#)[financing](#)**departmental**[glossary](#)

	FY 2019		FY 2020		FY 2021	FY 2022
	Authorized	Year -End Filled	Authorized	Year -End Filled	Authorized	Authorized
Wastewater Treatment - Operations	126	113	127	114	126	126
O Wastewater Treatment - Process Engineering	35	32	33	30	35	35
p Maintenance Services	100	95	102	89	100	99
e Water Operations	173	166	199	185	200	202
r Sewer Operations	97	89	99	88		
a Customer Care	121	107	122	103	123	123
t Pumping and Sewer Operations	80	77	78	75	177	176
i Water Quality & Technology	27	24				
o Engineering and Technical Services	135	120	129	97	129	110
n Wastewater Engineering	17	12	18	10	17	15
s CIP Infrastructure Management			6	20	6	25
D.C. Clean Rivers	11	8	11	8	11	9
Permit Operations	21	20	20	21	21	21
Subtotal	943	863	944	840	945	941
Office of the Chief Executive Officer	18	15	15	11	18	4
A Office of the Chief Operating Officer						4
d Performance & Strategy						9
m Office of the Secretary	2	2	2	2	2	2
i Internal Audit (outsourced)	-	-	-	-	-	-
n Legal Affairs	15	8	15	12	17	18
i Marketing and Communications	13	13	13	11	13	13
s Human Resources	30	24	29	29	30	31
t Information Technology	28	28	28	26	28	31
r Procurement and Compliance	36	30	35	35	36	42
t Finance	52	51	52	48	53	57
t Administration Office	3	3	3	3	3	3
i Office of Emergency Management	6	4	6	3	6	6
o Facilities Management	51	46	52	45	51	52
n Security	8	7	8	5	8	7
Occupational Safety and Health	11	11	11	9	11	12
Fleet Management	10	6	10	7	10	9
Subtotal	283	248	279	246	286	300
Total Positions	1,226	1,111	1,223	1,086	1,231	1,241

Apprentices, year-round interns, short-term temps and summer temps are not included in the authorized or filled count.

\$ in thousands

FY 2019—FY 2022



The Authority’s overtime target is 6 percent of regular pay. Overtime cost in FY 2020 was significantly below historical trends due to the modified shifts to ensure the safety of work crews during the COVID-19 pandemic. The projected increases in future overtime costs is cover any needed response to emergencies during the winter seasons and maintenance work due to aging water and sewer infrastructure.



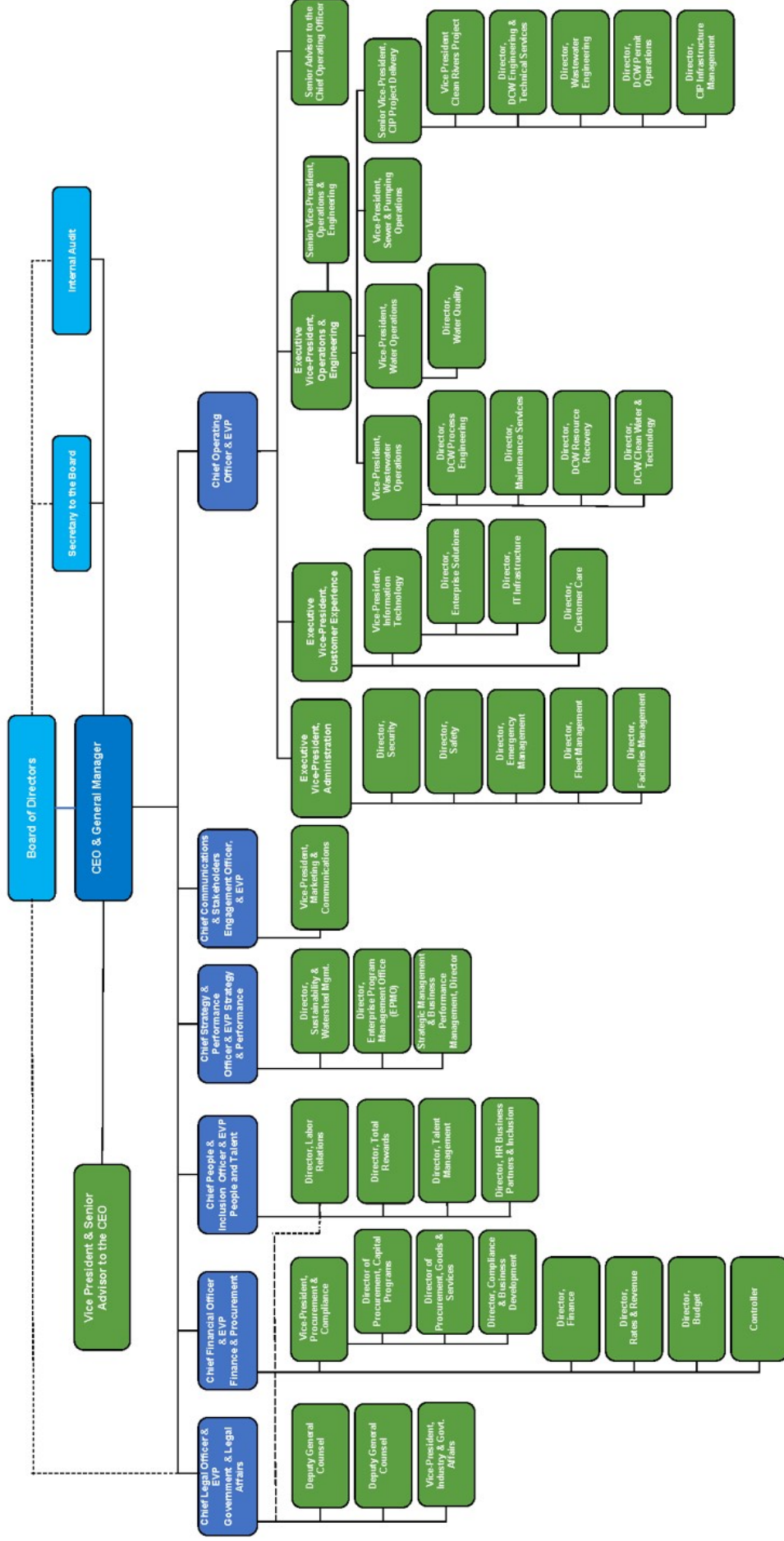
Overtime Budget by Department

[summary](#)
[overview](#)
[financial plan](#)
[rates&rev](#)
[capital](#)
[financing](#)
[departmental](#)
[glossary](#)

\$ in thousands

Department	FY 2019 Actual	FY 2020 Actual	FY 2021 Approved	FY 2022 Approved
Wastewater Treatment - Operations	\$ 1,859	\$ 1,687	\$ 1,796	\$ 1,796
Wastewater Treatment - Process Engineering	30	80	50	50
Maintenance Services	587	684	630	630
Water Operations	1,856	1,098	1,780	1,780
Sewer Operations	1,527	779	-	-
Customer Care	448	374	462	462
Pumping and Sewer Operations	730	669	2,068	2,068
Water Quality & Technology	2	-	-	-
Engineering and Technical Services	696	1,135	938	928
Wastewater Engineering	22	16	25	25
CIP Infrastructure Management		11		10
DC Clean Rivers	6	-	-	-
Permit Operations	21	15	45	45
Office of the Chief Executive Officer	2	2	-	-
Office of the Board Secretary	13	2	11	-
Internal Audit	-	-	-	-
Legal Affairs	2	1	3	3
Marketing and Communications	3	2	-	-
Information Technology	9	9	10	10
Finance	38	25	40	40
Office of Emergency Management	-	-	5	5
Administration Office	-	-	-	-
Human Resources	1	3	5	5
Facilities Management	240	196	250	250
Security	1	0	1	1
Procurement and Compliance	66	26	30	30
Occupational Safety and Health	0	-	-	-
Fleet Management	13	5	5	5
Total	\$ 8,171	\$ 6,820	\$ 8,154	\$ 8,143

DC Water Organizational Leadership

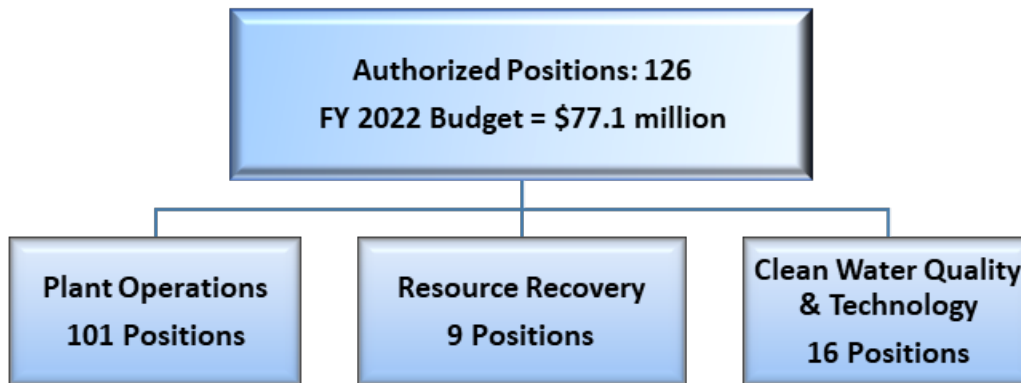


CLUSTER: OPERATIONS AND ENGINEERING

DEPARTMENT: Wastewater Treatment Operations

PURPOSE: Operate the Advanced Wastewater Treatment Plant at Blue Plains to produce treated effluent that meet stringent Federal Clean Water Act and local water quality requirements

MISSION: To treat wastewater delivered to Blue Plains from the collection system of the District of Columbia and surrounding jurisdictions in Maryland and Virginia, and ensure that effluent is in compliance with the Clean Water Act



FUNCTIONS

Plant Operations	Resource Recovery	Clean Water Quality & Technology
Treat influent wastewater to remove pollutants and meet National Pollutant Discharge Elimination System Permit (NPDES) requirements	Biosolids storage, loading, hauling and utilization/ beneficial use	Physical, chemical and biological analysis of wastewater and biosolids used for process control and permit reporting
Condition, thicken, dewater and stabilize biosolids for beneficial use	Certification and marketing of Class A Biosolids	Industrial pretreatment discharge monitoring
Manage 4 shift crews – round the clock and manage use of resources – chemicals, energy, and contracts, including the Combined Heat and Power (CHP) facility	Outreach and partnership with surrounding jurisdictions on regulatory requests for biosolids applications	Treatment process innovation and R&D administration of the DC Water Advanced Research & Testing (ART) Program
Implement Asset Management goals and administer effective use of Maximo	Identify, prioritize, study, and implement energy generation and optimization options	

Department: Wastewater Treatment Operations

BUDGET

The \$2.5 million decrease in FY 2022 over the FY 2021 budget is mainly for price decrease in major chemicals, cost reductions in utilities, offset by an increase in personnel service

\$000's Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	127	127	126	126	0	0%
Headcount: Filled	123	114				
Total Personnel Services	\$16,982	\$16,786	\$17,853	\$18,330	\$477	3%
Supplies	573	510	1052	922	-130	-12%
Chemicals	26,751	21,643	27,599	25,835	-1,764	-6%
Utilities & Rent	15,861	15,179	17,707	17,148	-559	-3%
Contractual Services	12,200	10,522	10,488	10,074	-414	-4%
Biosolids	4,566	4,660	4,657	4,541	-116	-2%
Small Equipment	91	134	177	200	23	13%
Total Non-Personnel Services	60,042	52,647	61,681	58,720	-2,961	-5%
Department Total	\$77,024	\$69,433	\$79,533	\$77,050	-\$2,484	-3%
Capital Equipment	-\$3	\$22	\$100	\$50	-\$50	-50%

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Achieve NACWA Award Status	Platinum	Platinum	Platinum	Platinum
Compliance with disposal of biosolids regulations (100%)	100 % compliance	100 % compliance	100 % compliance	100 % compliance
Inspection and Sampling of Pretreatment Permittees (100%)	100 % compliance	100 % compliance	100 % compliance	100 % compliance
Obtain 90% acceptable results on discharge monitoring report quality assurance samples	100 % compliance	Greater than 90 % compliance	Greater than 90 % compliance	Greater than 90 % compliance

Note: EPA 503 (i.e. Title 40 of the Code of Federal Regulations, Part 503) regulates the use or disposal of sewage sludge or biosolids EPA DMR QA (i.e. Discharge Monitoring Report Quality Assurance) is conducted on wastewater samples used for permit compliance reports. Achieving acceptable results for at least 90% of samples will minimize the potential for EPA to audit the laboratory

Department: Wastewater Treatment Operations

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue implementation of an Asset Management Program in tandem with an Asset Reliability Program
- Continue optimization of new capital projects (this includes Filtrate Treatment Facility, Tunnel Dewatering Pump Station, and Gravity Thickening Upgrades)
- Implement workforce development to enhance skill and create a learning environment for staff
- Continue to support implementation of other CIP projects in progress, including Long Term Control Plan (LTCP), Raw Wastewater Pump Station 2 (RWWPS2), Gravity Thickener, Primary Scum Screening Degrating Building (PSSDB) upgrades, and Filter Update Design (this includes installation of new Filter Influent Pumps)
- Continue implementation of Safety and Operator Cross Training
- Continue to improve the structure and use of Maximo (this will include roll out of mobile tablets for creation of work orders and field inspections)
- Continue to work with surrounding jurisdictions (Maryland and Virginia) on regulatory requirements for biosolids and land applications
- Continue to increase the use of biosolids products (Bloom), in the service area, for restoration projects, tree plant, and Low Impact Development (LID) projects
- Implement the marketing plan for Class A exceptional quality Bloom
- Continue to take a lead in conducting cutting-edge research in wastewater treatment and biosolids management
- Expansion of innovative research strategies such as Advanced Research Technology (ART) initiatives

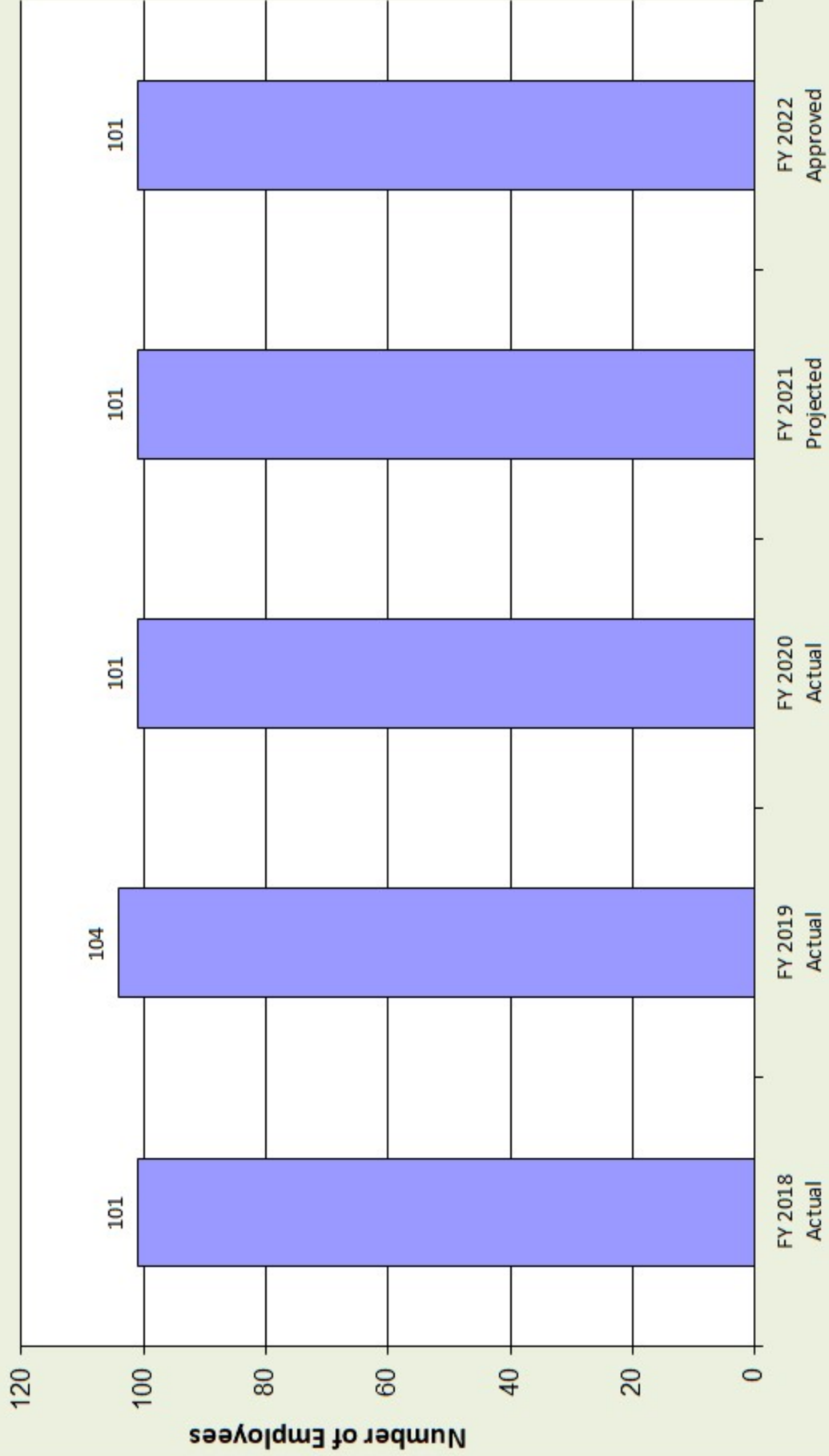
FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue implementation of an Asset Management Program in tandem with an Asset Reliability Program
- Continue optimization of all CIP projects

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

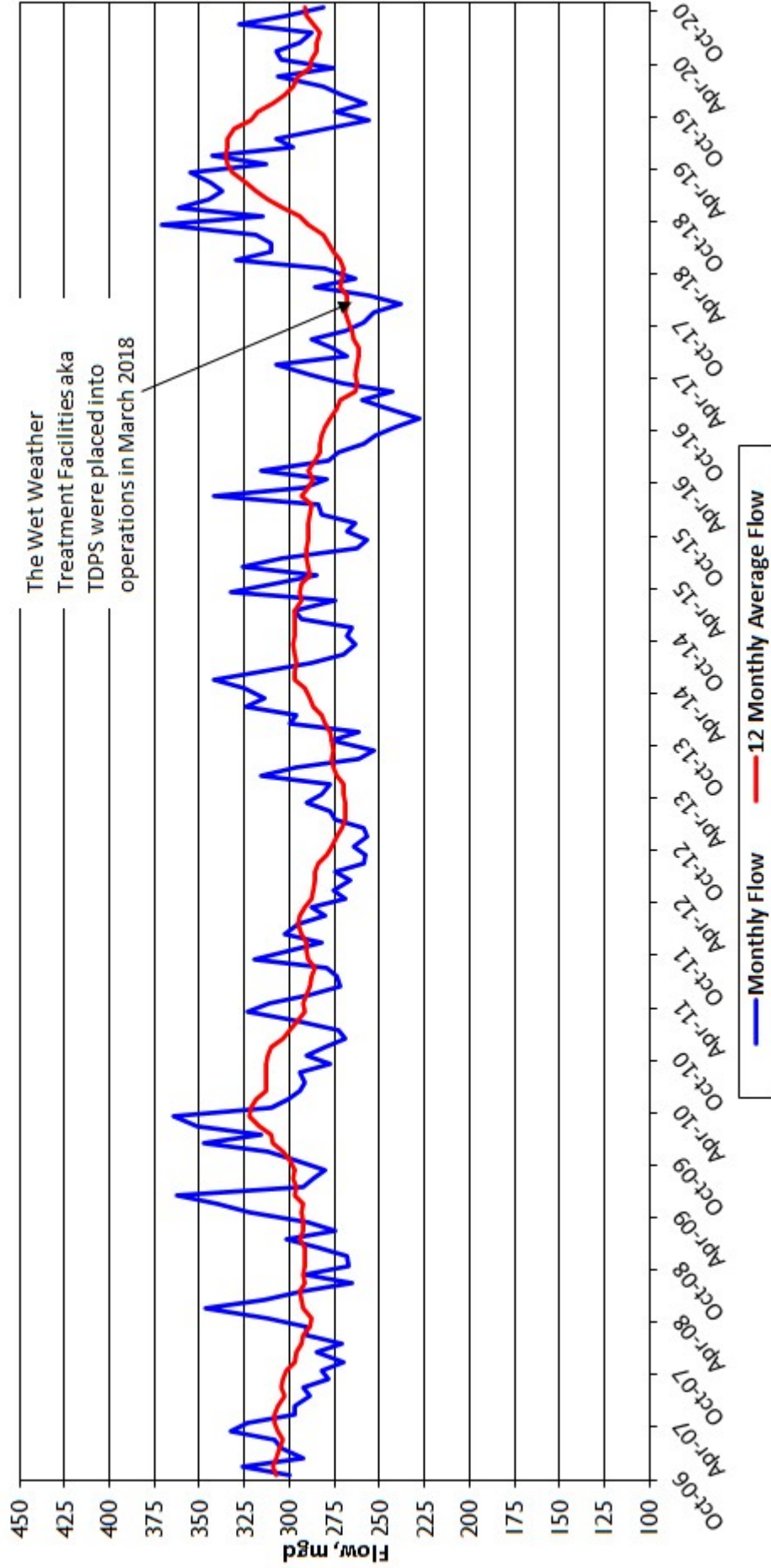
- Increased use of city water as a result of improved fluent screening
- Full year operation of the Filtrate Treatment Facilities (FTF) will decrease methanol usage, increase electricity usage and other associated operation and maintenance costs
- Full year operation of the Tunnel Dewatering Enhanced clarification Facilities will increase electricity usage, chemicals and other associated operation and maintenance costs

Wastewater Treatment Certified Operators* FY 2018 - FY 2022

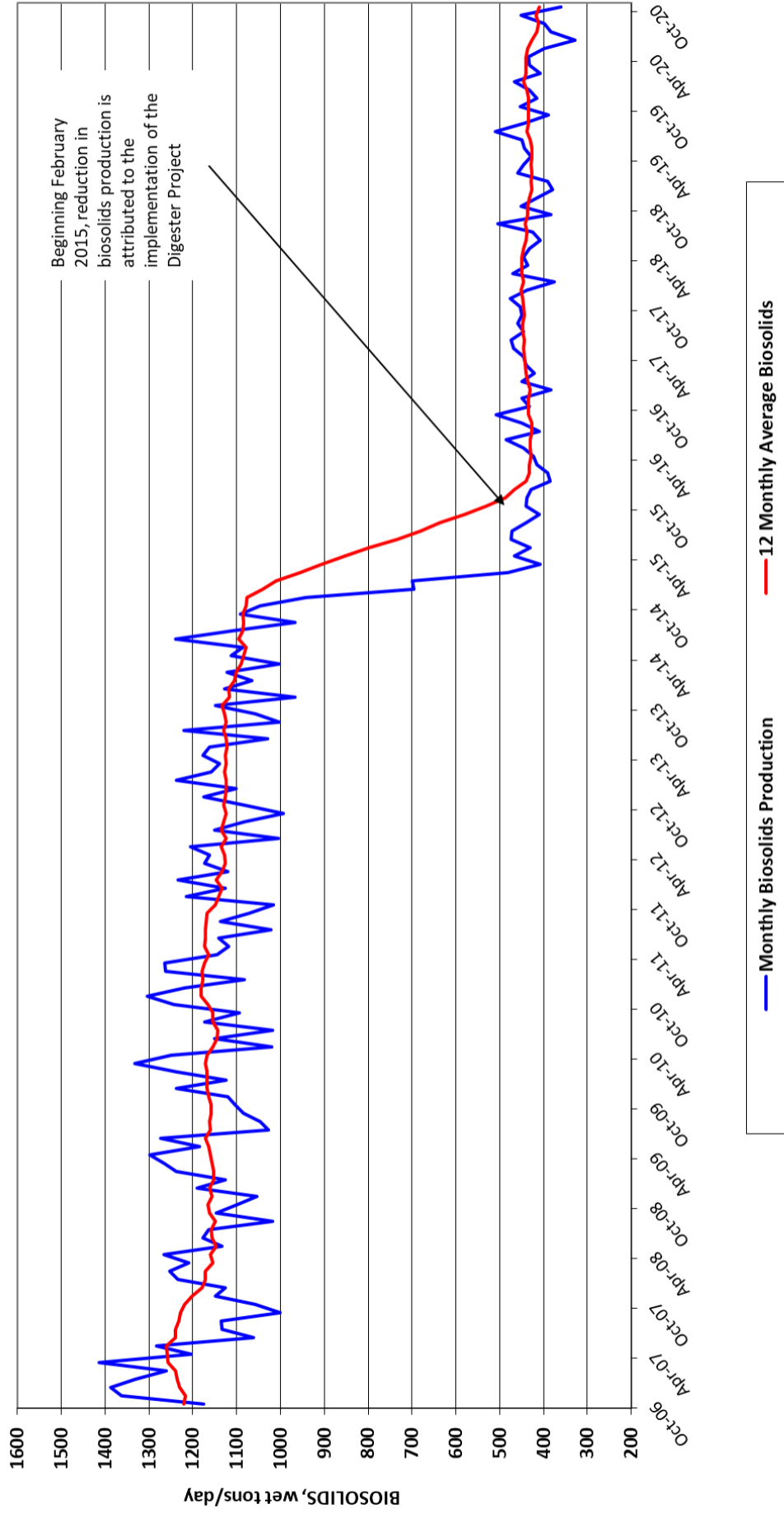


*Includes all positions with Certified Wastewater Treatment Plant Operator License
DC Water FY 2022 Budgets, Adopted April 1, 2021

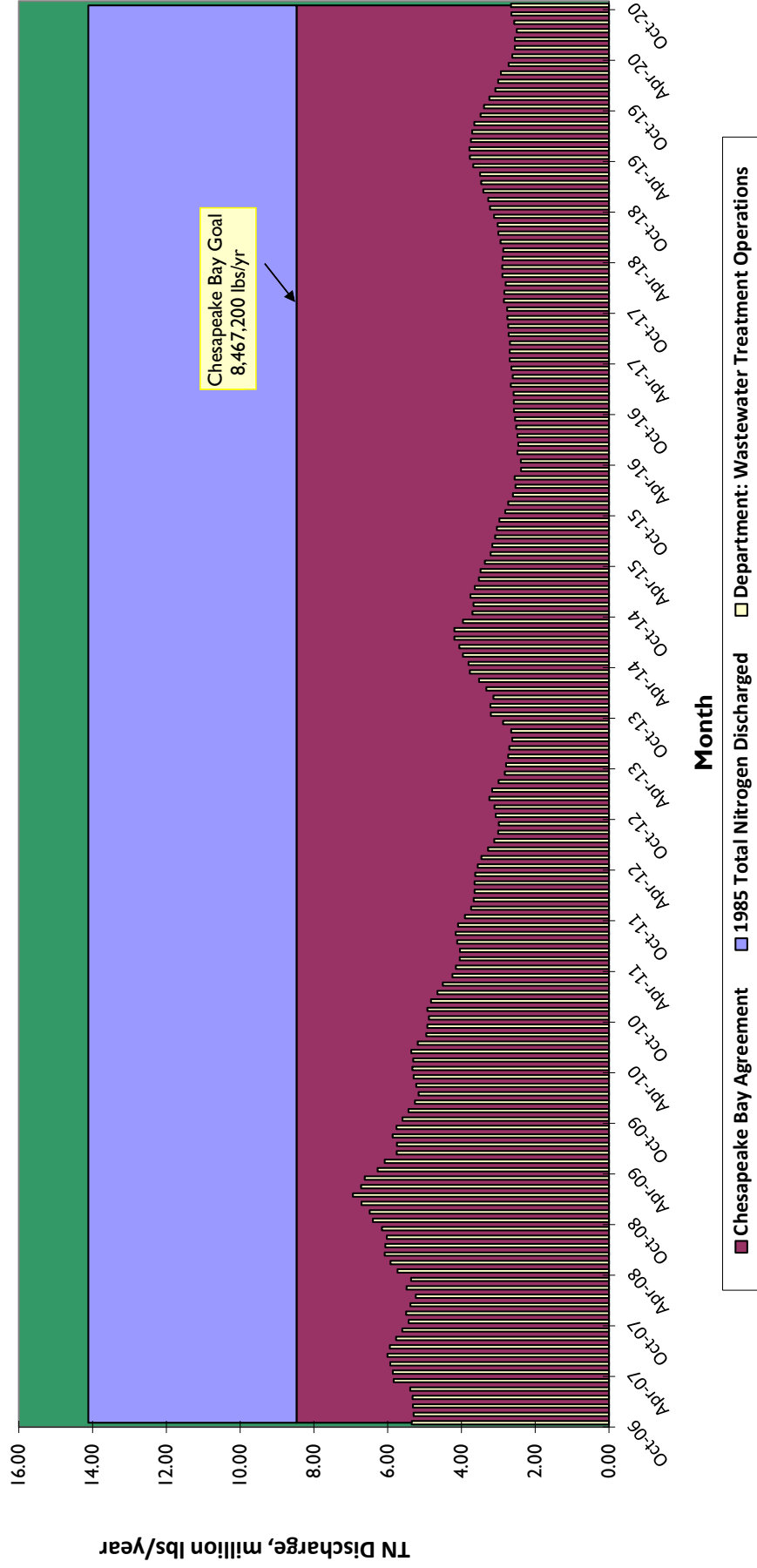
BLUE PLAINS PLANT EFFLUENT FLOW OCTOBER 2006 - OCTOBER 2020



BLUE PLAINS PLANT BIOSOLIDS PRODUCTION OCTOBER 2006 - OCTOBER 2020



ANNUAL TOTAL NITROGEN LOAD GRAPH OCTOBER 2006 - OCTOBER 2020

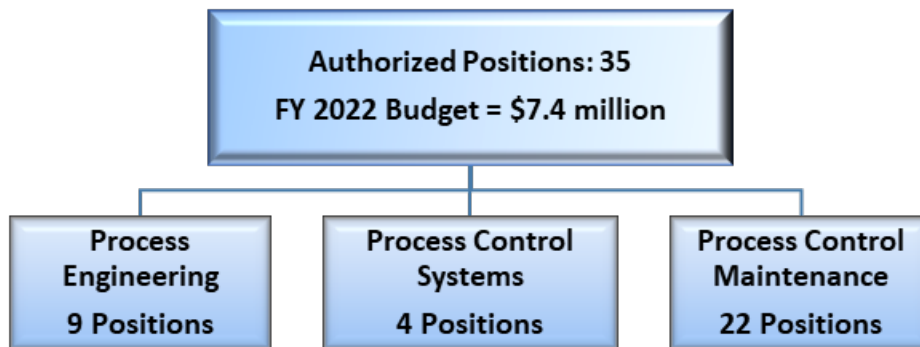


CLUSTER: OPERATIONS AND ENGINEERING

DEPARTMENT: Wastewater Treatment - Process Engineering

PURPOSE: To assist in the operation of the Advanced Wastewater Treatment Plant at Blue Plains, and produce treated effluent and Class A Biosolids that meet stringent Federal Clean Water Act and local water quality requirements

MISSION: To economically maintain DC Water's process equipment and facilities at the Blue Plains Advanced Wastewater Treatment Plant, and ensure that the operational and customer service objectives of the Authority are achieved



FUNCTIONS

Process Engineering	Process Control Systems	Process Control Maintenance
Establish Process Control operating targets for Blue Plains	Maintain Process Control System (PCS) for Blue Plains Advanced Wastewater Treatment Plant	Plan and coordinate all activities for corrective, preventive, and predictive maintenance
Optimize process, chemical, and power use at the Plant; Provide design comments and support during construction of capital projects	Provide Design and Construction interface to PCS; Manage PCS hardware, software, maintenance, and support services	Maintain electronic process control systems, flow measurement, metering and recording equipment for the Plant
Troubleshoot process performance problems	Troubleshoot PCS issues and train Process and Instrumentation staff	

Department: Wastewater Treatment - Process Engineering

BUDGET

The \$0.1 million increase in FY 2022 compared to the FY 2021 budget is mainly for personnel services cost adjustments

\$000's	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
Description	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	39	33	35	35	0	0%
Headcount: Filled	33	30				
Total Personnel Services	\$4,841	\$4,833	\$5,051	\$5,222	\$171	3%
Supplies & Chemicals	413	450	565	492	-73	-13%
Utilities & Rent	55	43	57	46	-11	-20%
Contractual Services	1,579	612	1,489	1,533	45	3%
Small Equipment	4	25	70	80	10	14%
Total Non-Personnel Services	2,051	1,130	2,181	2,152	-30	-1%
Department Total	\$6,892	\$5,963	\$7,232	\$7,373	\$142	2%
Capital Equipment	\$152	\$339	\$425	\$400	-\$25	-6%

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Critical Equipment Availability (97%)	>97%	>97%	>97%	>97%

Department: Wastewater Treatment - Process Engineering

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Maintain full compliance with the National Pollutant Discharge Elimination Systems (NPDES) permit
- Continue to training staff on new processes such as Filtrate Treatment Facilities (FTF), Wet Weather Facility and training on CIP/commissioning projects as part come on-line; Raw Wastewater Pump Station 2 (RWWPS2), Gravity Thickener and Primary Scum Screening De-grating Building (PSSDB) Upgrades and Filter Influent Pump Replacement
- Continue to support implementation of other CIP projects in progress, including Long Term Control Plan (LTCP), Raw Wastewater Pump Station 2 (RWWPS2), Gravity Thickener and Primary Scum Screening De-grating Building (PSSDB) upgrades, Filter Influent Pump Replacement, Reclaimed Final Effluent Pumping Upgrades and Multimedia Filter Upgrades
- Conduct process design reviews for capital projects (i.e. Headworks Upgrades, Multi Media Filtration Upgrades, etc.)
- Continue implementation of Reliability Program to ensure availability of critical process equipment
- Continue implementation and support of an Asset Management Program in tandem with an Asset Reliability Program
- Continue to improve the structure and use of Maximo (including the roll out of mobile tablets for completion of work orders)
- Continued optimization of the Plant Processes for improved permit compliance reliability and treatment performance, including Class A Biosolids Facilities
- Fine tune and monitor key performance indicators in Process Engineering, Control Systems, and Control Maintenance groups
- Conduct aggressive training program to support reduction in contracted work force

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue implementation of an Asset Management Program in tandem with an Asset Reliability Program
- Continue implementation of an Asset Management Program in tandem with an Asset Reliability Program

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

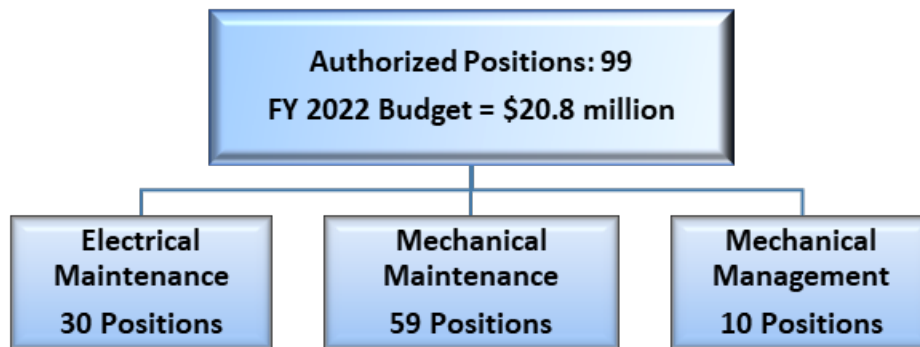
- Increased preventive maintenance costs for new equipment and facilities
- Increased effort for training and commissioning of new facilities—RWWPS2, GT Upgrade, FIP Replacement and Tunnel Facilities

CLUSTER: OPERATIONS AND ENGINEERING

DEPARTMENT: Maintenance Services

PURPOSE: Maintain all mechanical and electrical equipment at the Blue Plains Advanced Wastewater Treatment Plant

MISSION: To economically maintain DC Water's process equipment and facilities at the Blue Plains Advanced Wastewater Treatment Plant, ensuring that the operational and customer service objectives of the Authority are achieved



FUNCTIONS

Electrical Maintenance	Mechanical Maintenance	Mechanical Management
Maintain electrical process control systems, equipment, and components for the Blue Plains Advanced Wastewater Treatment Plant	Maintain mechanical process systems and equipment for the Plant	Plan and coordinate all activities for corrective, preventive, and predictive maintenance
Operate and maintain electrical power distribution system from 5kv to 69kv, electrical control systems for all process equipment and all DC Water facilities	Plan, schedule, and perform condition monitoring for all process equipment at all DC Water facilities	Plan and operate support systems to manage maintenance by planning, estimating, inspecting, and scheduling maintenance activities
Inspect and maintain cranes for all DC Water facilities		Coordinate work through operations and engineering and provide administrative support

Department: Maintenance Services

BUDGET

The \$0.7 million increase in FY 2022 compared to the FY 2021 budget is due to personnel services adjustments and increase in supplies

Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	110	102	100	99	-1	-1%
Headcount: Filled	101	89				
Total Personnel Services	\$11,497	\$11,644	\$12,609	\$13,110	\$501	4%
Supplies & Chemicals	3875	3,669	3435	3753	318	9%
Utilities & Rent	155	177	167	136	-32	-19%
Contractual Services	3,080	2,931	3,488	3,391	-97	-3%
Small Equipment	260	269	376	389	13	4%
Total Non-Personnel Services	7,370	7,046	7,467	7,669	202	3%
Department Total	\$18,867	\$18,690	\$20,075	\$20,779	\$704	4%
Capital Equipment	\$3,582	\$2,898	\$3,920	\$4,000	\$80	2%

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Critical Equipment Availability (97%)	93% ⁽¹⁾	96%	95%	95%
Ratio of Proactive vs Reactive Maintenance	60:40	63:37	68:32	68:32

¹Includes out of service equipment awaiting capital upgrades (Raw Wastewater Pump Station 2, East Screens, Gravity Thickeners, Filter Influent Pumps)

Department: Maintenance Services

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Improve planning and scheduling process
- Continue to expand culture of Reliability and Asset Management in the department
- Continue to Increase the level of data driven decision making at all levels of the organization
- Continue to perform Failure Mode and Effects Analysis (FMEAs) along with Preventive Maintenance Optimization (PMOs)
- Establish Quality Assurance & Quality Control as a program
- Continue training initiatives to provide skills that supports best maintenance practices and reduction in contracted work force

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Maintain a culture of Reliability and Asset Management in the department and shared across the Authority
- Continue to perform Failure Mode and Effects Analysis (FMEAs) along with Preventive Maintenance Optimization (PMOs)
- Continue training initiatives to provide skills that supports best maintenance practices and reduction in contracted work force

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

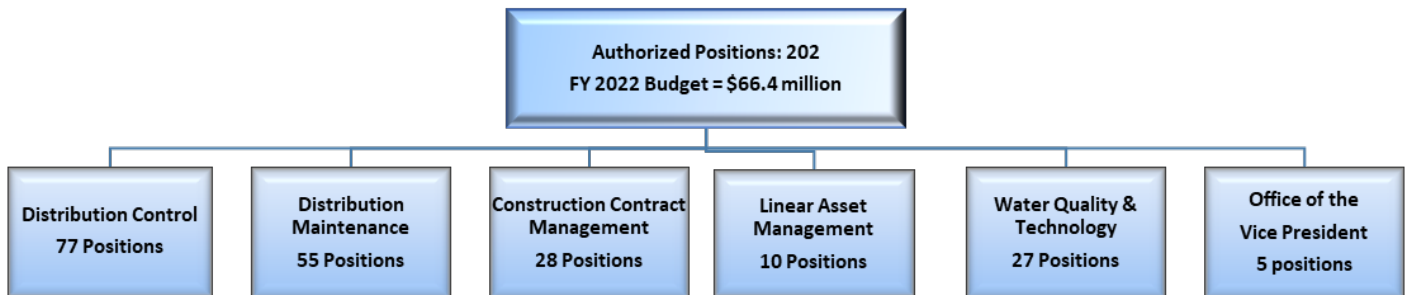
- Assume maintenance activities for Tunnel Dewatering Pump Station (TDPS) and Enhanced Clarification Facility (ECF)
- Develop maintenance plan for Gravity Thickening Project

CLUSTER: OPERATIONS AND ENGINEERING

DEPARTMENT: Water Operations

PURPOSE: The Department of Water Operations (DWO) is charged with operating and maintaining the water distribution system delivering potable water to the citizens and visitors to the District of Columbia. DWO ensures compliance with the applicable regulations promulgated by the Safe Drinking Water Act

MISSION: To support the Authority’s mission as defined by the strategic plan and exceed expectations by providing high quality water services in a safe, environmentally friendly, and efficient manner



FUNCTIONS

Distribution Control	Distribution Maintenance	Construction Contract Management	Linear Asset Management	Water Quality & Technology	Office of the Director
Preventative maintenance on the 43,860 system valves Inspect, maintain and replace 9,510 fire hydrants, in accordance with the Memorandum of Understanding (MOU)	Repair and replace water mains, service lines, valves, hydrants and other appurtenances including linear assets	Manage ongoing multifaceted contracts to support water and sewer infrastructure rehabilitation and replacement programs Administer Public Space Restoration Program	Administer the comprehensive asset management program for both water and sewer systems Support Voluntary Lead Service Program	Environmental Protection Agency (EPA) drinking water compliance, monitoring and reporting Assess online water quality data and models and enforce fire hydrant usage policies and regulations	Provide oversight and ensure operational compliance with various MOUs
Perform fire flow tests for developers and analyze system data First responders to Investigate water system leaks emergencies	Perform all water services taps, and abandonments in the District	Manage the acquisition of District Department of Transportation (DDOT) permits to facilitate emergency repairs and scheduled projects	Optimize and prioritize capital program projects using condition assessment and analysis of Computerized Management Maintenance Software (CMMS)	Ensure water quality within the distribution system Manage cross connection program, Fats, Oil & Grease (FOG) program, and Fire hydrant use permits and fees	Manage departments operating and capital budgets and perform budget monitoring functions
Manage the Operations Control Center Coordinate and monitor system pressure in the water distribution system		Provide inspection services for private developers validating service connections and abandonments	Manage the lifecycle maintenance costs and extend service life of assets preventative maintenance programs	Collaborate with District agencies to mitigate adverse health effects from drinking water contaminants	

Department: Water Operations

BUDGET

The \$1.6 million decrease in FY 2022 compared to FY 2021 budget is for contractual services and water purchases from the Washington Aqueduct (WAD) based on DC Water's proportionate share of WAD's operating budget, slightly offset by an increase in salary adjustments

Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	182	199	200	202	2	1%
Headcount: Filled	166	185				
Total Personnel Services	\$20,289	\$24,897	\$26,558	\$26,802	\$244	1%
Supplies & Chemicals	867	572	1270	943	-327	-26%
Utilities & Rent	305	568	431	572	141	33%
Contractual Services	1,929	1,889	3,504	2,860	-645	-18%
Water Purchases	0	31,696	36,250	35,217	-1,033	-3%
Small Equipment	21	47	32	54	22	69%
Paving	0	141	0	0	0	0%
Total Non-Personnel Services	3,122	34,912	41,487	39,645	-1,842	-4%
Department Total	\$ 23,411	\$59,809	\$68,045	\$66,446	-\$1,599	-2%
Capital Equipment	\$646	\$348	\$800	\$800	\$0	0%

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Maintain full compliance with Safe Drinking Water Act standards for positive coliform results (less than 5%)	0.4%	2%	2%	2%
Maintain a 99% fire hydrant operational rate	99%	99%	99%	99%
Respond to 95% of all emergency service orders in less than 45 minutes	97%	97%	97%	97%
# of Distribution Control Branch (DCB) reports highlighting System Pressure Monitoring by Zone	new	12	12	12
Number of water main breaks per 100 miles of pipe	35	33	31	31
Percent of chlorine results < 1.0 mg/L	26%	25%	25%	25%
Flush and test areas susceptible to chlorine degradation	197	200	200	200
Point of entry pipe material identification	280	500	1000	1000
Lead profiling for unknown service lines	39	100	200	200

Department: Water Operations

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue to develop the transmission and distribution valve assessment and rehabilitation program to extend the full life expectancy of the assets
- Continue to conduct preventative maintenance on all public fire hydrants at least once a year and perform repairs in accordance with the existing MOU
- Continue to replace fire hydrants in accordance with the existing MOU
- Correct 90% of fire hydrants that are out of service within 30 days
- Work on enhancements to the fire flow testing program to increase the number of accepted fire flow tests to be in line with the existing MOU
- Continue to support the CIP, Developer, DDOT, AMI, condition assessment, and private plumbing projects with distribution system isolations
- Expand water system distribution pressure monitoring
- Continue to develop the transmission and distribution valve assessment and rehabilitation program to extend and realize the full life expectancy of the assets
- Continue to develop customer notification system using Everbridge for water distribution system isolations
- Plan and execute flushing operations to achieve target chlorine residual in all areas
- Coordinate with IT to create new data applications and database for lead testing processes; and create new Maximo and data applications for customer complaint and flushing processes
- Improve water quality on-line monitoring surveillance
- Expand customer usage of Third Party Portal (3PP) online reporting system in the areas of Cross-Connection Control/Backflow Preventer Inspection, Fire Hydrant Usage and Fats, Oils and Grease Abatement System Cleaning and Maintenance including promoting use of the 3PP mobile app
- Coordinate with external and internal stakeholders to improve customer compliance with Cross-Connection Control/Backflow Preventer and Fats, Oils and Grease (FOG) Regulations from an FY 2020 average monthly compliance ratio of 64%
- Coordinate with Offices of Legal Affairs and Pretreatment and Department of Pumping and Sewer Operations to propose new regulations and codes on Cross-Connection/Backflow Preventer and FOG
- Coordinate with Customer Service and IT to Improve SAP automatic billing and 3PP issuing of permits and equipment associated with Customer Fire Hydrant Usage
- Coordinate with IT and Department of Pumping Operations and WWT Maintenance to evaluate a barcode system for identifying and tracking internal backflow preventers
- Continue to manage valve exercising and condition assessment program to extend the useful life of the assets
- Continue to support preventative maintenance programs (i.e. hydrant, valve, sewer mains, outfalls)
- Continue to support SDWMR CIP projects (plan review, shut development, asset commissioning)
- Develop Drone Inspection Program
- Support water main inspection and condition assessment program
- Implement cathodic protection testing, inspection, and maintenance program
- Implement mobile computing solution in support of hydrant inspection
- Continue to provide technical support for department (hydraulic modeling, GIS mapping, GPS location, field inspection)

Department: Water Operations

- Manage CSO Compliance Program in support of consent decree
- Continue to perform RCA (Root Cause Analysis) on major asset failures

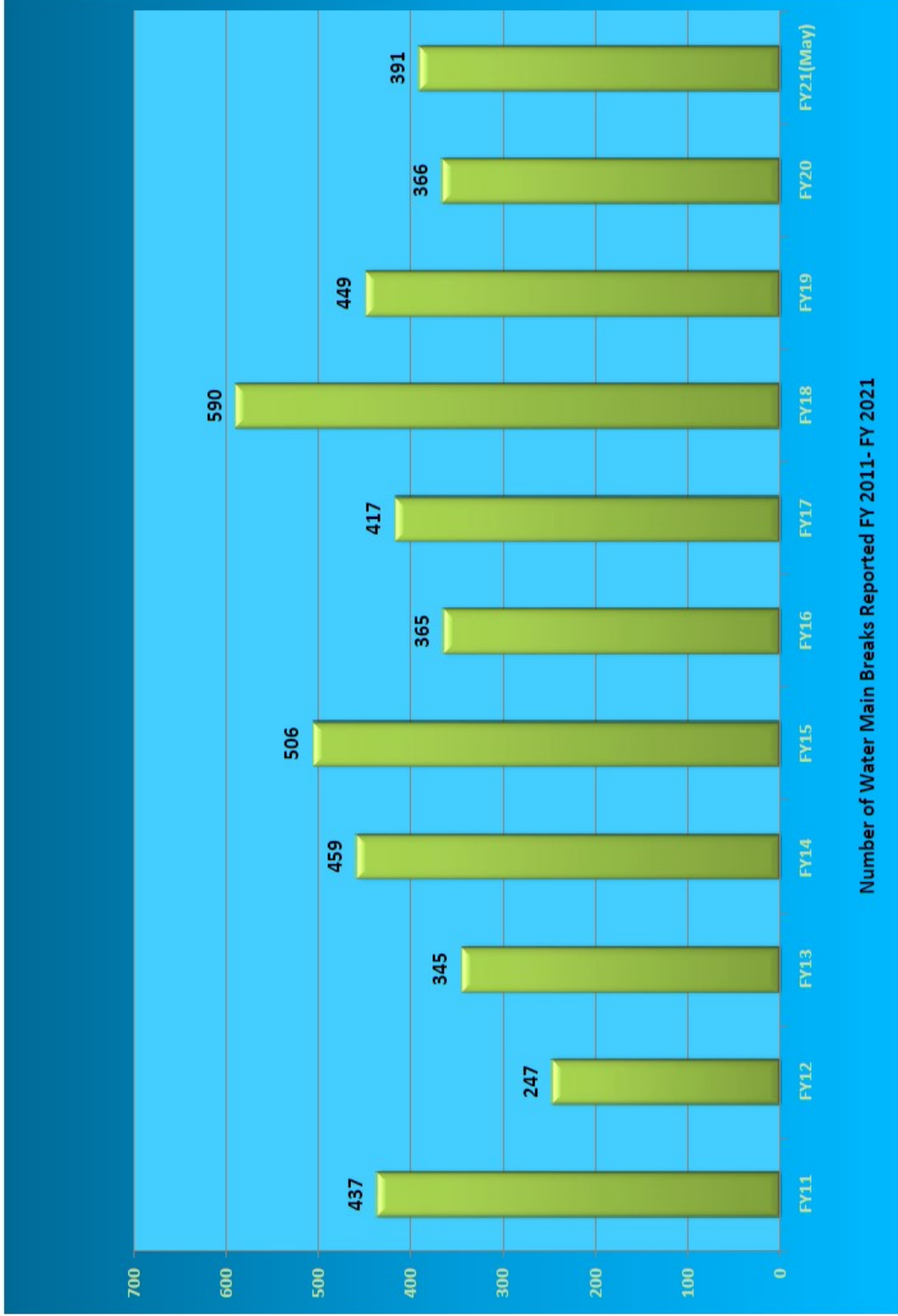
FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue to provide emergency response and conduct repairs on the distribution system
- Continue to improve customer experience by reducing the response time for conducting low priority repairs
- Continue to identify and execute small operational Capital Improvement Projects focused on addressing water quality issues that were previously deferred
- Continue to perform all water services taps and abandonments 2” and smaller in the District
- Continue to inspect sites for compliance and enforcement
- Continue to ensure industry best practices for safety, technology implementation, and equipment
- Continue and potentially expand leadership and support to the Lead Free DC initiative (i.e., unknown material inventory, revised CIP focus, etc.)
- Expand main break data collection capabilities and explore options for conducting material/soil testing in-house
- Develop CCTV Master Database program
- Expand cathodic protection testing, inspection, and maintenance program
- Expand mobile computing solution in support of all operational activities
- Develop Pipeline and Soil Testing and Analysis Pilot Program
- Pipeline LEAD Free DC Program Support
- Expand operational dashboard to visualize data and provide meaningful insight
- Streamline asset commissioning and coordination program

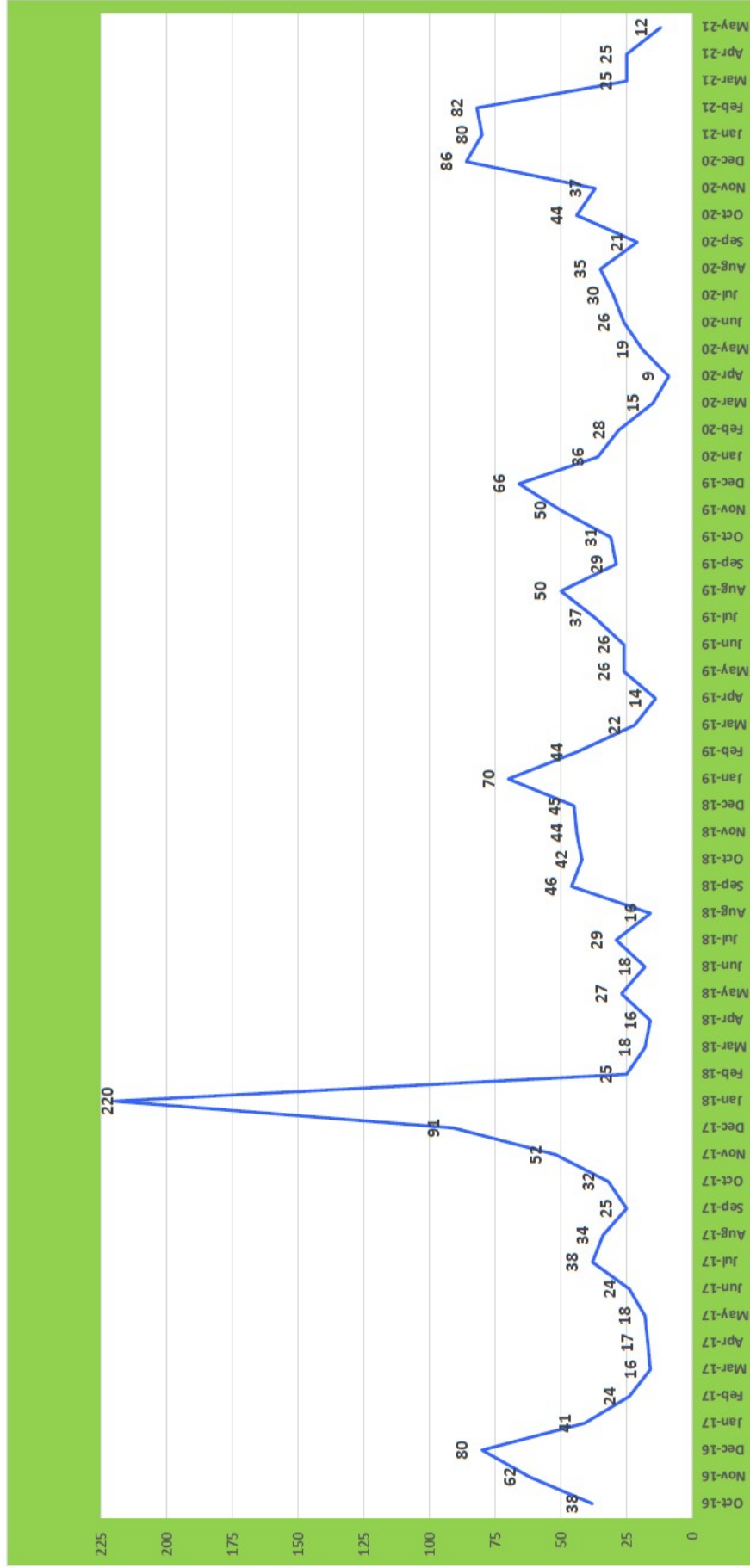
IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- As capital projects ramp up in FY 2022, additional overtime and/or contractor expenses may be incurred
- Additional requirements may come as a result of addressing potential system issues due to deferred replacements having direct impact on operational spending in the form of overtime and capital equipment requests
- Additional labor, materials, and miscellaneous operating expenses may be associated with the completion of capital improvement projects in support of Water Quality issue resolution and the Lead Free DC program

Historical Water Main Breaks



HISTORICAL MONTHLY MAIN BREAK October 2016 thru May 2021

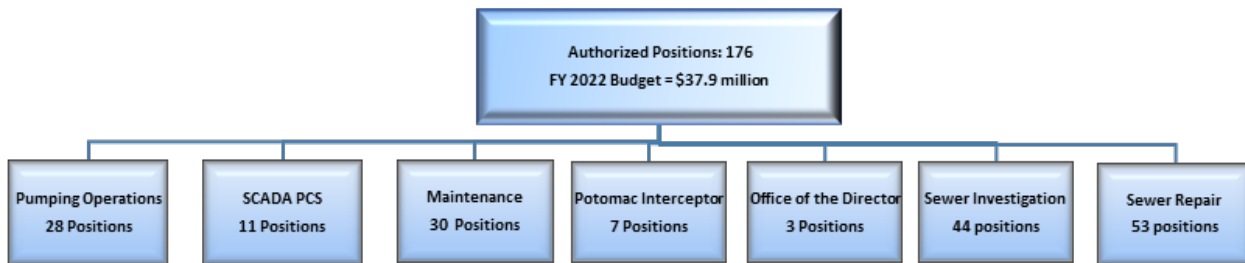


CLUSTER: OPERATIONS AND ENGINEERING

DEPARTMENT: Pumping and Sewer Operations

PURPOSE: To provide for the operation and maintenance of the sewer system which collects and transports wastewater and stormwater flows to treatment areas and authorized discharge points and deliver clean, safe and reliable drinking water to its customers with an efficient flow of sewer effluent to Blue Plains

MISSION: To perform engineering planning, design, and construction management necessary to execute DC Water's Capital Improvement Program (CIP); to provide assistance and advice to operating departments and management on engineering aspects of the Authority's operation and facilities. In addition, provide resilient delivery of Water Distribution and Sewer Pumping services every minute of the day



Pumping Operations	SCADA PCS	Maintenance	Potomac Interceptor	Office of the Director	Sewer Investigation	Sewer Repair
Operate Water, Sewer, and Storm-water Pumping Stations, Water Storage Facilities and Water Towers	Operate and maintain Supervisory Control and Data Acquisition (SCADA) computer system, Applications, Hardware and Network Support	Plan and coordinate corrective, emergency, preventive, and predictive maintenance for pump stations	Operate and maintain Potomac Interceptor (PI) Sewer	Directs Department of Pumping Operations	Inspect public sewers and sewer laterals; Clean sewers and inlet/outlet structures	Install and repair sewer mains and sewer laterals; Install and repair catch basins
Remove screenings and debris from pump stations and prepare work order for equipment in need of repair	Operate and maintain all process instrumentation and controls, including completion of all related preventative and corrective maintenance	Maintain, troubleshoot, and repair mechanical and electrical process systems and equipment	Operate and maintain PI Flow Meters and odor control facilities and manholes	Plans and manages the capital equipment and operating funds	Monitor & Control Operations; Removal of floatable debris	Responsible for the cleaning and maintenance operations of regular catch basins, stormceptors, and grate ponds
Perform Stormwater Pollution Prevention Plan inspections and reports Inspect inflatable dams to maintain proper function during rain events	Ensure integrity of SCADA, disaster Recovery Planning, Implementation and Testing Administer and manage service contracts and special projects for department	Plan, schedule, and perform condition monitoring for process equipment, including vibration, infrared, and oil analysis	Manage Miss Utility service in Virginia and Montgomery County in Maryland; Monitor Right-of-Way to maintain integrity and prevent encroachment	Manage Maximo operations and perform reviews to evaluate effectiveness of methods in relation to asset management, uptime, Mean Time to Repair (MTTR), and Mean Time Between Failures (MTBF) metrics	Enforcement of Fats, Oils and Grease (FOG) removal program Operate and maintain sewer regulator structures	Oversees maintenance program for storm water structures, filter bio-retention and water quality catch basins cleaning

Department: Pumping and Sewer Operations

BUDGET

The Department of Pumping & Sewer Services are consolidated. There is no significant difference between the FY 2022 and FY 2021 budgets. Increases in personnel services were offset by decreases in contractual services

\$000's Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	194	177	177	176	-1	-1%
Headcount: Filled	166	163				
Total Personnel Services	\$22,046	\$19,759	\$24,345	\$24,877	\$532	2%
Supplies & Chemicals	1,503	1,218	1,534	1,418	-116	-8%
Utilities & Rent	5,674	5,825	6,244	6,312	68	1%
Contractual Services	5,056	4,887	5,735	5,242	-493	-9%
Water Purchases	32,430	0	0	0	0	0%
Small Equipment	78	92	113	96	-17	-15%
Total Non-Personnel Services	44,741	12,023	13,626	13,067	-559	-4%
Department Total	\$66,787	\$31,781	\$37,971	\$37,945	-\$26	0%
Capital Equipment	\$2,451	\$1,868	\$2,135	\$2,000	-\$135	-6%

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
% Availability of our critical assets	90%	90%	95%	95%
Odor Complaints/Sewer Overflows for the entire District of Columbia	0%	0%	0%	0%
Odor Complaints/Sewer Overflows (Potomac Interceptor Area)	0%	0%	0%	0%

Department: Pumping and Sewer Operations

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

PUMPING

- Work with the Department of Wastewater Engineering to design and implement improvements to Sewer Pump Stations, Stormwater Pump Stations, Bryant St Pump Station Spill Header and Flow Meters
- Monitor and report Internal Benchmarking Metrics monthly, including: Departmental Cost per MG of Water/ Sewer pumped, Overtime rate, Proactive maintenance rate, Energy efficiency (water pilot), Wet weather operations, Budget vs actuals
- Install emergency connection for portable pumps at Fort Reno Pump Station
- Finalize Business Case Evaluation (BCE) for Long Term Corrosion Prevention Program
- Manage relocation of Potomac Interceptor at I-495 crossing
- Replace all Potomac Interceptor manholes with Lockable composite material
- Leverage key performance indicators, i.e. availability of critical process assets (Pumps/Screens, Odor Control Facilities) and performance visibility to drive business results
- Maintain and evaluate results from the maintenance reliability programs - oil analysis, thermography, vibration analysis, and ultrasound
- Emphasize reliability centered maintenance and ensure all work management processes are documented
- Maintain safety awareness highlighting best practice daily among our department, internal, external customers and stakeholders
- Operate Water Pumping Stations, Reservoirs and Storage Tanks within the regulations of Safe Drinking Water Act, guidelines of DC Water for the benefit of our customers
- Operate Sewer Pumping Stations, Storm water Pumping Stations, Inflatable Dams, within the requirements of the National Pollution Discharge Elimination System (NPDES) Permit, the Municipal Separate Storm Water Sewer System (MS4) Permit, DC Water Standard Operating Procedures
- Emergency response training – SCADA
- Develop a system wide hydraulic model that includes Fairfax/Arlington etc.
- Deploy the Accounting for Water Operating Loss Dashboard information
- Start implementation of LIDAR scans of the Potable Water, Storm Water and Sewer Pump Stations
- Meters upgrades – billing meters, Anacostia Pump Station flow meters, gas monitoring at Poplar Point Pump Station, Secondary level transmitters at fabridams, Upper Anacostia Pump Station and Potomac Pump Station flow meters
- Disaster Recovery Site Planning
- Communication interface upgrade for electrical data at O Street Pump Station
- Actuators for wet well gates at Upper Anacostia Pump Station
- SCADA Security Audit Recommendations
- Develop and Implement a wet weather control strategy at Potomac Sewer Pump Station
- Deploy the new Operations and Maintenance Manual for the Water Facilities

SEWER

- Manage application of chemical root foaming at locations previously affected by roots
- Explore plan for further application of Red Zone Robotics for small diameter sewer inspection
- Expand installation of point patch repair of mainline sewer using Trenchless Technologies
- Manage replacement of sewer laterals using Trenchless Technologies
- Evaluate emerging technologies for conditional applications that will promote cost efficiency with the pipe repair
- Manage catch basin data to determine frequency of cleaning
- Work with IT on the testing and deployment of an updated catch basin application

Department: Pumping and Sewer Operations

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

SEWER

- Develop plans with Facilities to replace the building structure and dock facility for the floatable debris removal program
- Manage inspection of MS4 Sewer Outfalls

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

PUMPING

- Review and deploy the Combined Sewer System Operations and Maintenance Manual
- Launch CMOM
- Deploy customer service training program
- Develop an operating Maturity Matrix for DPSO – Sewer and continue to monitor Maturity Matrix for DPSO – Pumping
- Prepare and submit MJUF FY2021 Bill
- Implementation of Long-Term Corrosion Prevention Program
- Update MJUF Operation and Maintenance (O&M) Cost Share Procedure
- Repair Potomac Interceptor Access Road
- Implement Potomac Interceptor manhole reinforcement as part of SSO prevention

SEWER

- Deploy the new catch basin app
- Deploy Local and Small Sewer Inspection and Maintenance Program
- Update the Sewer Emergency Operations Response Documents – Major Assets (Sewer)
- Root cause analysis training
- Work with DETS on the design phase of rehabilitation to Oxon Run Sewers
- Coordinate with DETS in creek bed sewer rehab projects for 1) Soapstone Valley 2) Pinehurst 3) Suitland Parkway
- Continue coordination with DETS on condition assessment for Outfall Sewer Rehab
- Coordinate with DETS to complete design phase for Spring Place sewer rehabilitation.

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

PUMPING

- If CIP projects are deferred, there is potential for more failures and emergencies, i.e. at Main Pump Station, Stormwater Pump Stations, Inflatable Dams, etc. This impacts overtime and material costs, public confidence, environmental risks, etc.
- Upcoming major CIP projects would have impact on Potomac Interceptor workload in addition to all the new VCVs responsibility
- Maintenance of old/obsolete Equipment

SEWER

- If CIP projects are deferred, there is potential for more failures and emergencies, i.e. in the sewer system, outfalls, and catch basins, etc. This will impact overtime and material costs, public confidence, environmental risks, etc.
- Manage the Fats, Oils and Grease (FOG) program to effectively reduce the adverse impact on the sewer system regarding malodors and sewer backups.

CLUSTER: OPERATIONS AND ENGINEERING

DEPARTMENT: CIP Infrastructure Management

PURPOSE:	To Improve project delivery efficiency and outcomes; Centralize key support functions to improve service by aligning current staff and functions and bringing functions in house from consultants; and Provide enhanced project execution tools and standards to drive performance improvements
MISSION:	To provide the CIP management tools, analysis, oversight and leadership to ensure DC Water Capital and Operating Program goals and objectives are consistently met, while ensuring compliance with the required fiscal boundaries through a transparent and collaborative process

**Authorized Positions: 25
FY 2022 Approved Budget = \$4.3 million**

FUNCTIONS

CIP Infrastructure Management

- Manage and track the Capital Improvement Plan (CIP)
- Ensure contract documents comply with DC Water and Environmental Protection Agency (EPA) procurement regulations
- Manage DETS engineering systems hardware/software

Department: CIP Infrastructure Management

BUDGET

This department was established with functions previously undertaken as part of the Engineering & Technical Services department; currently the department only has personnel services

\$000's	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
Description	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized		6	6	25	19	317%
Headcount: Filled		20				
Total Personnel Services		\$1,453	\$1,259	\$4,259	\$3,000	238%
Supplies & Chemicals		0	0	0	0	0%
Utilities & Rent		0	0	0	0	0%
Contractual Services		0	0	0	0	0%
Small Equipment		0	0	0	0	0%
Total Non-Personnel Services		0	0	0	0	0%
Department Total		\$1,453	\$1,259	\$4,259	\$3,000	238%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Percentage of KPI's Completed	80%	80%	80%	80%
Use 100% of Clean Water Act grant funds	100%	100%	100%	100%
Use 100% of Safe Drinking Water Act grant funds	100%	100%	100%	100%

Department: CIP Infrastructure Management

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Establishment of cost estimating center of excellence including standards and procedures—transferring consultants task in-house
- Commence administration of Water Infrastructure and Finance and Innovation Act (WIFIA) loan and compliance with requirements following loan closing
- Digitizing of DC Water’s document archive of over 11 million records
- Continue Implementation of Oracle Primavera Unifier Project Management tool (CM14 replacement) Phase 1 and 2
- Continued Development of Enterprise Resource Planning (ERP) for capital project management in conjunction with OCFO
- Establishment of Project Management controls systems team to administer and develop Unifier
- Establishment of Risk and Change Management branch
- Establishment of scheduling center of excellence – hiring staff in house from consultants

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Implementation of Oracle Primavera Unifier Management tool (CM14 replacement) Phase 3 and continued development
- Development of ERP for capital project management in conjunction with OCFO
- Complete transfer of project cost estimating to in-house team
- Establishing standards and procedures to consistently control and mitigate risk
- Further advancement of ERP for capital project management in conjunction with OCFO
- Track and control CIP Project Execution through established metrics and Key Performance Indicators (KPI)

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- Continue to build staff needed to establish centers of excellence for Scheduling and Cost Estimating as well as establishing in house support team for the FY 2021 Unifier implementation and document management as previously approved by the CEO’s office. Also investigate increase staff to support Engineering’s Risk and Change Management team. All of these positions to be hired in house will result in corresponding reduction in consultant staff and corresponding cost savings

CLUSTER: OPERATIONS AND ENGINEERING

DEPARTMENT: Engineering and Technical Services

PURPOSE: To perform engineering planning, design, and construction management necessary to execute DC Water's Capital Improvement Program (CIP)

MISSION: To provide assistance and advice to operating departments and management on engineering aspects of the Authority's operation and facilities. To develop and maintain engineering documentation of the Authority's facilities and systems; and to assist the Authority with environmental policy



FUNCTIONS

Design	Engineering Management	Planning	Water & Sewer Construction	Asset Management	Quality Management
Design linear capital projects (water and sewer) and support construction efforts	These resources and functions have been transferred to the CIP Infrastructure Management Department	Develop and maintain the water and sewer hydraulic models	Manage and inspect new construction, major repair and modifications to water & sewer systems and facilities	These functions have been absorbed into Planning	These resources and functions have been transferred to the CIP Infrastructure Management Department
Provide Civil & Structural Engineering support to entire agency		Develop the 10-year CIP for all water and sewer system infrastructure improvements	Monitor and inspect third party construction impacting DC Water infrastructure		
Provide Electrical and Mechanical Engineering support to entire agency		Manage large diameter condition assessment program for the water & sewer systems	QA/QC Inspection of precast structures used on DC Water projects		

Department: Engineering and Technical Services

BUDGET

The overall budget has decreased by \$4.7 million. The FY 2022 budget excludes personnel services funding for the newly established CIP Infrastructure Management department

\$000's	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
Description	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	150	129	135	110	-25	-19%
Headcount: Filled	121	97				
Total Personnel Services	\$21,989	\$18,372	\$22,357	\$16,890	-\$5,467	-24%
Supplies & Chemicals	193	71	125	104	-21	-17%
Utilities & Rent	636	627	579	515	-64	-11%
Contractual Services	1,910	2,251	3,085	3,904	819	27%
Small Equipment	62	7	50	60	10	20%
Total Non-Personnel Services	2,801	2,956	3,839	4,583	744	19%
Department Total	\$24,790	21,328	\$26,196	\$21,473	-\$4,723	-18%
Capital Equipment		\$0	\$492	\$25	-\$467	-95%

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Percentage of KPI's Completed	80%	80%	80%	80%
Use 100% of Clean Water Act grant funds	100%	100%	100%	100%
Use 100% of Safe Drinking Water Act grant funds	100%	100%	100%	100%

Department: Engineering and Technical Services

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue with condition assessment of major sewers including East and West Outfall Sewer, and East and West Outfall Relief Sewer, East Side Interceptor, Anacostia Siphons
- Inspection of local sewers (40 miles/year)
- Condition assessment of critical large diameter water mains
- Identify rehabilitation needs for water and sewer linear assets
- Move forward with the next steps of the identified potential alternative drinking water source study
- Further development of an on-line water quality monitoring system in the water distribution system
- Advertise projects with at least 11 miles of small diameter water mains. Continue to meet small diameter water main renewal goal of 1% (or 11 mi) per year
- Develop Master Plan of the water distribution system and wastewater collection system
- Obtain IMA (Inter Municipal Agreement) approval for upcoming joint use project cost shares
- Development of ERP for capital project management in conjunction with Finance
- Digitizing of DC Water’s document archive of over 11 million records
- Validate and prioritize CIP projects using the Enterprise Asset Management Framework
- Acquire permits and approvals needed to execute CIP (Capital Improvement Program) projects

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Lead and manage timely and on-budget delivery of all approved water and sewer CIP projects
- Continue to validate and prioritize CIP projects using the Enterprise Asset Management Framework and InfoAsset Planner
- Implement Water and Sewer Facility Plans and corresponding Asset Management Plans
- Improve program management, project development, and implementation across the service areas
- Maintain and use water and sewer hydraulic models
- Provide engineering support to other departments within DC Water
- Acquire permits and approvals needed to execute various CIP projects
- Continue condition assessments of large diameter water mains
- Inspect and assess the condition of major and critical trunk sewers and interceptors
- Monitor and inspect third party projects impacting DC Water assets

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- Increase in operating costs due to ramping up of CIP projects. Examples include support for isolating water mains for condition assessment
- Increase in Capital Projects will require additional staff and/or consultant support

CLUSTER: OPERATIONS AND ENGINEERING

DEPARTMENT: Wastewater Engineering

PURPOSE: Oversee the construction and rehabilitation of wastewater treatment, water, and sewer pumping facilities to meet all required National Pollutant Discharge Elimination System (NPDES) and consent decree requirements, and continued performance for critical functionality of assets

MISSION: Plan and execute a Capital Improvement Program (CIP) that supports DC Water in effectively and efficiently meeting the NPDES standards



FUNCTIONS

Technical Support	Program Management	Blue Plains Project
Review and approve PCS, SCADA, and Instrumentation and Control (I&C) engineering documents for compliance with established guidelines and standards	Develop and maintain long-term facility planning Provide staff support for environmental policy affecting DC Water	Perform construction management of new construction, major repairs and modifications to process and non-process facilities
Manage the engineering responsibilities for all PCS and SCADA related projects from planning, design, construction, commissioning and operational support	Provide engineering data for development and maintenance of the Capital Improvement Plan	Administer contracts for construction management, new construction, major upgrades, modifications, and start-up to the Blue Plains Advanced Wastewater Treatment Plant, pump stations, and facilities that serve the water distribution and wastewater collection systems
Coordinate with all DC Water user and customer groups/ departments on all SCADA, PCS, and I&C matters	Generate bid documents for construction and rehabilitation projects	Perform design reviews and coordinate construction work with other departments at Blue Plains

Department: Wastewater Engineering

BUDGET

The \$0.5 million decrease in FY 2022 below the FY 2021 budget is primarily for personnel services cost adjustments

\$000's	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
Description	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	15	18	17	15	-2	-12%
Headcount: Filled	12	10				
Total Personnel Services	\$2,310	\$2,005	\$2,857	\$2,253	-\$604	-21%
Supplies & Chemicals	13	0	12	10	-2	-17%
Utilities & Rent	0	0	0	0	0	0%
Contractual Services	736	612	730	795	66	9%
Small Equipment	5	0	0	0	0	0%
Total Non-Personnel Services	754	612	742	805	64	9%
Department Total	\$3,064	\$2,617	\$3,599	\$3,058	-\$541	-15%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Design Lock-In and Stag-gating with comment closure	2	3	2	2
Construction Contracts Awarded	3	4	2	2
Construction Contracts Closed	2	1	3	3

Department: Wastewater Engineering

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Update Engineering Standard Operating Procedures to reflect transition of roles previously assigned to the Engineering Division that have been assigned to the new Capital Procurement Department
- Continue planning, design, construction and commissioning of Upgrades to Stormwater Pump Stations, Sewage Pump Stations and the Advanced Wastewater Treatment Plant at Blue Plains
- Begin construction of Final Reclaimed Effluent Pump Station Upgrades
- Begin industry outreach for Power Monitoring and Control System at Blue Plains
- Solicit engineering consultant for design of Filter Underdrain and Backwash System Upgrades
- Solicit engineering consultant for Basic Ordering Agreement to perform planning studies and designs for water, sewer, stormwater and combined sewer facilities
- Achieve Commercial Operation Date for the Solar PPA Project
- Achieve Substantial Completion for Segment C of Flood wall at Blue Plains
- Achieve Substantial Completion for the Raw Wastewater Pump Station 2 Upgrades Project
- Complete the Flood Proofing Upgrades at Main PS (Grant Funded Project)
- Complete the Emergency repairs to the West Grit Effluent channels

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Recruit, hire and integrate into the department, a senior technical expert to lead a consolidated planning and design team and a task order construction team for the department
- Begin design for Filter Underdrain and Backwash System Upgrades
- Begin concept planning for Power Monitoring and Control System at Blue Plains, including feasibility studies for microgrid and energy storage.
- Solicit contractor for construction of Headworks Electrical Upgrades, Headworks Influent Structures Rehabilitation and Central Operations Facility Electrical Upgrades
- Complete concept plan for mitigation of 500-year flood at the Advanced Wastewater Treatment Plant at Blue Plains
- Complete SCADA upgrades for Stormwater Pump Stations
- Improve power monitoring for water and sewer sites
- Begin construction for Miscellaneous Facilities Upgrades Phase 7
- Issue Construction Management Basic Ordering Agreement Contract
- Solicit contractor for Miscellaneous Facilities Upgrades Phase 8 Project
- Closeout the Tunnel Dewatering Pump Station/Enhanced Clarification Facility Project

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

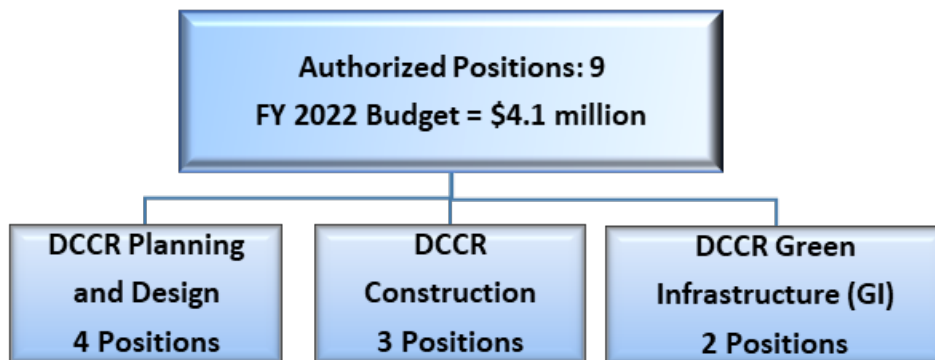
- Installation of Solar Arrays has decreased power purchase cost at Blue Plains

CLUSTER: OPERATIONS AND ENGINEERING

DEPARTMENT: Clean Rivers

PURPOSE: To oversee the Authority’s DC Clean Rivers to reduce combined sewer overflows to bring them into compliance with the District water quality standards, and provide flood relief to neighborhoods in the Northeast Boundary section of the City. The project is a combination of tunnel systems and Green Infrastructure

MISSION: To develop, design, construct and implement the Authority’s 25-year DC Clean Rivers Project (aka Combined Sewer Overflow Long Term Control Plan) that includes federally enforceable consent decree driven milestones



FUNCTIONS

DCCR Planning and Design	DCCR Construction	DCCR Green Infrastructure (GI)
Manage and oversee the planning and design phase of the \$2.7 billion, 25 year Clean Rivers Program	Manage and oversee the construction phase of the 20 year Clean Rivers Project	Manage and oversee the completion of the Green Infrastructure (GI) Program, siting and planning for GI projects
Oversee the program consultant’s management of design contracts; and guide value engineering efforts to improve the quality and design cost effectiveness	Ensure adherence to all construction related consent decree requirements and guide constructability review efforts	Manage collaboration with external stakeholders including Memorandum of Understanding development and negotiation with District
Develop risk mitigation strategies for all Clean Rivers projects and ensure adherence to all design related consent decree milestones	Develop risk mitigation strategies for all Clean Rivers projects, inspect tunnel construction and other CSO abatement facilities	Manage the design and construction of GI Challenge
Provide assistance in creating an accurate DC Clean Rivers Engineering Assets inventory with the integration of DC Water’s operating facilities	Identify and mitigate potential project delay and scope growth	Ensure adherence to all GI consent decree milestones

Department: Clean Rivers

BUDGET

The \$1.1 million increase in FY 2022 compared to the FY 2021 budget is for maintenance of the Green Infrastructure (GI) facilities and certification program

\$000's	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
Description	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	15	11	11	9	-2	22%
Headcount: Filled	8	8				
Total Personnel Services	\$1,760	\$1,753	\$2,266	\$2,179	-\$87	-4%
Supplies & Chemicals	1	2	22	22	0	0%
Utilities & Rent	44	118	114	108	-6	-5%
Contractual Services	371	55	549	1,789	1,240	226%
Small Equipment	0	0	0	0	0	0%
Total Non-Personnel Services	415	174	685	1,918	1,233	220%
Department Total	\$2,175	\$1,927	\$2,951	\$4,097	\$1,146	39%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Meet all CSO LTCP consent decree milestones	100%	100%	100%	100%

Department: Clean Rivers

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue construction of Northeast Boundary Tunnel (NEBT)
- Continue development for the Potomac River Tunnel (PRT) system —Tunnel System Construction (TSC) Request for Proposal (RFP) documents
- Begin procurement for PRT-Contract B -TSC
- Continue the geotechnical field investigation for PRT-Contract B -TSC
- Complete the procurement for CSO-025/026 Sewer Separation
- Begin construction for CSO-025/026 Sewer Separation
- Complete the design and procurement of Potomac River Tunnel (PRT) - Advanced Utility Construction (AUC)
- Begin construction for PRT
- Continue implementation of National Green Infrastructure Certification Program (NGICP)
- Begin planning and procurement for Rock Creek Green Infrastructure (GI) Project B (RC-B)
- Continue the deployment of Clean Rivers’ assets into DC Water’s enterprise asset management system
- Continue the coordination of preventive maintenance of Clean Rivers assets
- Complete the procurement for new GI maintenance contracts
- Continue the maintenance of GI facilities
- Begin National Environmental Policy Act (NEPA) Studies for Rock Creek control facilities
- Regulatory requirements compliance

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue construction of Northeast Boundary Tunnel (NEBT)
- Continue planning and design for Potomac River Tunnel (PRT)
- Complete development of RFP documents for PRT – Contract B – TSC
- Complete construction of CSO-025/026 Sewer Separation
- Complete construction of PRT – Contract A - AUC Contract
- Procure and begin construction of Rock Creek GI Project B (RC-B)
- Continue the deployment of Clean Rivers assets into DC Water’s enterprise asset management system
- Continue the coordination of preventive maintenances of Clean Rivers assets
- Continue the maintenance of GI facilities
- Complete NEPA Studies for Rock Creek Storage/Tunnel
- Regulatory requirements compliance

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- Green Infrastructure (GI) was determined to be practicable in Rock Creek sewer shed, Clean Rivers is in the process of rehiring a GI Planning Coordinator to oversee the program management staff in the development and execution of contract documents, bid support, design support during construction, construction oversight management

CLUSTER: OPERATIONS AND ENGINEERING

DEPARTMENT: Permit Operations

PURPOSE: Support the District of Columbia’s construction permit process through coordinated effort with the Department of Consumer and Regulatory Affairs (DCRA), the District Department of Transportation (DDOT) and the Department of Environment and Energy (DOEE). This is done through the review and approval of plans for new construction and/or renovations that impact the water or sewer system

MISSION: To manage DC Water’s development and permit services

Authorized Positions: 21
FY 2022 Budget = \$4.3 million

FUNCTIONS
Review and approve permit applications, issue work orders for the inspection of proposed work
Ensure development community compliance with DC Water design standards, criteria and specifications
Assess and collect fees for permit review, fixed fee services, inspection services, System Availability Fees, and manage the fee collection process
Create accounts for collected fees and manage return of unused reimbursable fees
Evaluate impact of proposed development on water and sewer infrastructure for capacity and hydraulic grade
Ensure compliance with combined sewer system/DC Clean Rivers program initiatives; current CIP and proposed improvements
Coordinate with various DC agencies (DCRA, DDOT and DDOE) in support of the District's permit procedures
Update and/or create customer service records (Premises) and the GIS database

Department: Permit Operations

BUDGET

The \$0.2 million increase in FY 2022 compared to FY 2021 budget is for personnel cost adjustments

Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	15	20	21	21	0	0%
Headcount: Filled	19	21				
Total Personnel Services	\$2,205	\$2,957	\$3,085	\$3,232	\$147	5%
Supplies & Chemicals	38	4	41	36	-5	-12%
Utilities & Rent	353	353	403	400	-3	-1%
Contractual Services	153	70	636	660	24	4%
Small Equipment	11	0	0	0	0	0%
Total Non-Personnel Services	555	427	1,080	1,096	16	1%
Department Total	\$2,760	\$3,693	\$4,165	\$4,328	\$163	4%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Process all permit applications in accordance with the service level agreement timeframe (85%)	85%	85%	85%	85%

Department: Permit Operations

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Assess permit review fees and adjust as needed to meet future needs
- Implement an email permit application process and electronic review and plan signature to accommodate working remotely
- 50% Development of Oracle ERP Permits solution integrating Maximo and Customer Information system to streamline receipt and deposit of fees, plan review, and construction inspection requests
- Initiate the construction inspection account refund and forfeiture policy
- Decrease the response time on Developer Request For Information (RFI) from 30 days to 5 days in order to meet customer service expectations and need

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Final 50% development of Oracle Permits ERP and first stage testing and implementation of integrated ERP that combines on line payments, with Permit Processing, with work order tracking
- Increase the in-field participation of the Permits Operations' staff to include an as-built field validation and meter sets
- Reduce the residence time of customer accounts and process refunds within 2 years of project initiation approximately 50% of the time and within 5 years 100% of the time

IMPACT OF CAPITAL PROJECTS ON CAPITAL BUDGET

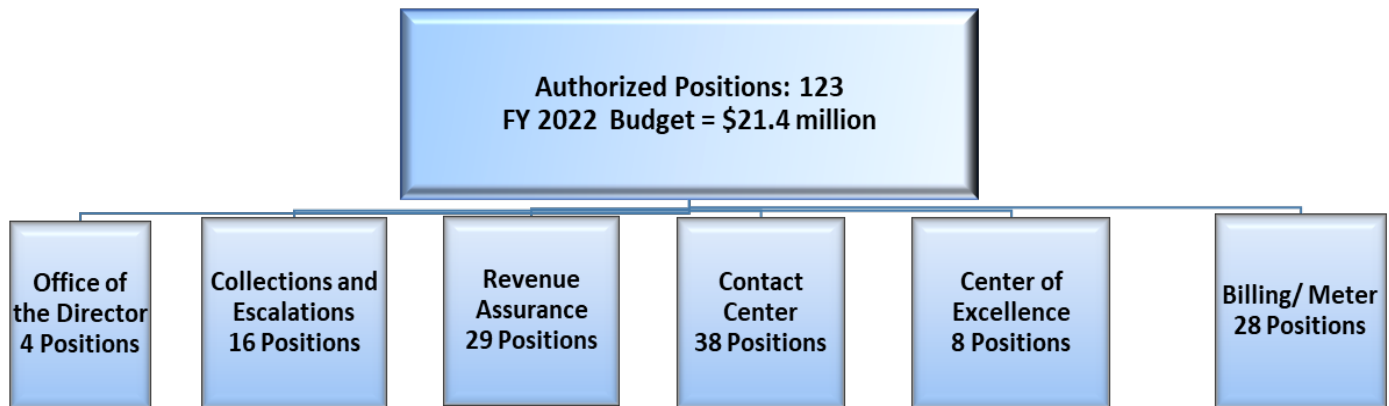
- None

CLUSTER: CUSTOMER EXPERIENCE

DEPARTMENT: Customer Care

PURPOSE: To ensure that DC Water delivers a satisfying experience for customers by providing timely and accurate billing, appropriate meter replacement and maintenance as well as responding to customer inquiries through multiple channels in compliance with District of Columbia laws and regulations

MISSION: To provide superior, equitable and responsive customer service to the diverse community we serve



FUNCTIONS

Office of the Director	Collections and Escalations	Revenue Assurance	Contact Center	Center of Excellence	Billing/ Meter
Leads Customer Service operations	Monitors delinquent accounts based on customer payment history	Manages large customer accounts and billing processes. Processes bill exceptions, adjustments and cancellations	Provides timely responses to customer inquiries across multiple channels	Defines and documents new processes. Identifies gaps and improves existing processes	Manages mass market customer accounts and billing processes. Processes bill exceptions, adjustments and cancellations
Defines and manages department initiatives and strategic programs	Manages disputes, hearings, and external requests Manages property lien filing, dunning process, receivership, and tax sale	Manages the new accounts creation including impervious area GIS database	Addresses billing issues and inquires	Supports the Customer Information System (CIS) Administers Automated Meter Infrastructure (AMI) System	Obtains manual meter reads. Performs field turn on and disconnect
	Administers the DC Water Customer Assistance Programs (CAP) and Serving People By Lending A Supporting Hand (SPLASH) programs	Maintains, installs, tests, repairs and replaces large meters. Manages meter lab and inventory	Provides 24/7 Emergency customer call response and dispatch	Manages and analyzes department budget and revenue	Maintains, installs, tests, repairs and replaces mass market meters

Department: Customer Care

BUDGET

The \$1 million increase in FY 2022 compared to the FY 2021 budget is mainly for contractual services associated with the Water Leak Repair Program

Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	126	122	123	123	0	0%
Headcount: Filled	107	103				
Total Personnel Services	\$13,034	\$12,587	\$15,300	\$15,393	\$93	1%
Supplies & Chemicals	60	64	69	86	16	24%
Utilities & Rent	874	419	394	394	0	0%
Contractual Services	6,668	6,493	4,587	5,462	875	19%
Small Equipment	8	0	10	32	23	229%
Total Non-Personnel Services	7,609	6,976	5,060	5,974	914	18%
Department Total	\$20,643	\$19,563	\$20,360	\$21,367	\$1,007	5%
Capital Equipment	\$3,658	\$5,105	\$2,930	\$3,079	\$149	5%

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Calls answered within 40 seconds	86%	85%	85%	85%
Abandonment rate (lower is better)	3%	5%	5%	5%

Department: Customer Care

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Implement Qualtrics customer satisfaction survey
- Upgrade to cloud-base Advanced Metering Infrastructure (AMI) system, Aclara One
- On-going replacement of small and large meters
- Manage the post public health emergency collection initiative
- Improve customer master data quality
- Implement billing quality assurance program

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Upgrade Interactive Voice Response customer phone system
- Incorporate feedback from customer satisfaction surveys
- Impervious area data refresh
- Implement additional software—SAP S4/Hana customer relationship management functionality

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- Annual maintenance and support fees for new/upgraded software systems

CLUSTER: CUSTOMER EXPERIENCE

DEPARTMENT: Information Technology

PURPOSE: To identify, define, develop and support an integrated set of solutions that leverages people, process and technology to improve reliability, increase efficiency, reduce cost, drive innovation and improve the employee and customer experience

MISSION: To provide a safe and reliable state-of-the-art information technology platform capable of adapting to the changing needs of our internal and external customers. To ensure that the Authority's mission is supported by state-of-the-art technology with an infrastructure capable of accommodating all traffic and connectivity demands, and a computing environment that encourages development of efficient business

Authorized Positions: 31
FY 2022 Approved Budget = \$10.9 million

FUNCTIONS

Infrastructure & Operation	Enterprise Solutions	Project Management Office	Office of the CIO & Other
Provide technical support for applications and manage the IT infrastructure; Develop and provide standards for System Architecture/ Integration	Support DC Water's Authority-wide and business unit goals, objectives and business functions	Design and maintain DC Water's website to allow customer e-business access; Develop and support DC Water's intranet and manage project prioritization process	Manage Information Technology initiatives, functions and assets of the enterprise
Maintain DC Water's technology standards. Implement and support radio systems/phone	Support the IT Governance process and maintain information needed to make sound business decisions for Local and Executive IT Steering Committees (ESC and LSCs)	Integrate and provide product support for the financial, payroll, maintenance and customer information and billing, Automated Meter Reader (AMR), Interactive Voice Response (IVR), Asset Management (AM) systems	Manage project implementations, database administration and related budgets
Maintenance of the Enterprise Continuity of Operations (COOP) capabilities	Create, plan, assist and implement enterprise solutions utilizing technology to meet the Authority's needs	Manage the project portfolio and provide program and project management services for the Authority	Design and implement Cyber security strategy for the enterprise. Test and validate Cyber protections
Manage the Solution Center (Help Desk)	Maintain, service and enhance DC Water's enterprise applications	Support project planning, management, and implementation	Support Disaster Recovery for the Authority

DEPARTMENT: Information Technology

BUDGET

The \$0.6 million increase in FY 2022 compared to the FY 2021 budget is mainly for adjustments in personnel services

Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	28	28	28	31	3	11%
Headcount: Filled	28	26				
Total Personnel Services	\$4,660	\$4,864	\$4,822	\$5,327	\$505	10%
Supplies & Chemicals	42	6	4	4	0	0%
Utilities & Rent	152	185	163	179	16	10%
Contractual Services	6,924	6,242	5,319	5,360	42	1%
Small Equipment	94	42	77	67	-10	-13%
Total Non-Personnel Services	7,212	6,476	5,563	5,610	48	1%
Department Total	\$11,541	\$10,913	\$10,384	\$10,937	\$553	5%
Capital Equipment	\$5,871	\$11,673	\$12,050	\$7,269	-\$4,781	-40%

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
98% Network uptime round the clock	99.8%	98%	99%	99%
96% of high priority tickets completed within 4 hours	95%	96%	98%	98%
60% Tickets closed by Tier 1 support	N/A	60%	71%	71%
50% of Projects Completed on-time	65%	50%	80%	80%
98% Network uptime during peak hours	99.9%	98%	99.5%	99.5%

DEPARTMENT: Information Technology

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Field Mobile Applications (Power Apps/Layer Mark)
- Electronic Permits Applications (3PP) Enhancements
- Primavera Contract Manager Replacement Phase 1b
- Fleet Wave migration to Azure
- Lawson backup and continued support
- Water Quality Access DB Conversion
- Trimble Unity Implementation
- EMIS migration & CM14 Archiving
- GIS Asset QA-QC Layer Phase 2
- Sub surface pipeline @ BPL
- Image Now to Open Text migration
- GM's Dashboard Enhancements
- Oracle to MS SQL/Oracle Cloud Migration
- ERP Report enhancements & Enterprise data warehouse
- Asset Creation Workflow enhancement
- Nintex Form Conversion
- Customer Master Data
- Cloud Call Center (Cloud ACD) Phase 2
- Aclara Upgrade
- PSR AP report automation
- Qualtrics Implementation
- Field Meter testing and data integration
- Channel Alignment
- FY21 VertexOne Enhancements
- Payment Gateway Implementation

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- IVR Upgrade
- Vertex One ongoing enhancements
- Expand Self Service Centralization/omni channel
- Payment Gateway
- Mobile Applications Development
- KONA Replacement & Customer Advantage replacement
- iPass/Interface upgrades with GIS, Maximo, ERP, Unifier & Mobile apps
- Lead Service Replacement /WQ/PSR Updates

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- Migration of Oracle databases to MS SQL in Azure cloud or to Oracle Cloud will result in significant savings in our Hardware and Software maintenance costs
- Lawson backup project will reduce the operational cost of maintaining retired Lawson environment
- Nintex form conversion will reduce the operational cost of software licenses starting FY 2022

CLUSTER: INDEPENDENT OFFICES

DEPARTMENT: Office of the Secretary

PURPOSE: Serves as the Authority’s executive level business entity that manages the day to day activities of the Board of Directors

MISSION: To support DC Water’s Blueprint/Strategic Plan by effectively managing assigned resources to accomplish the duties of the Office of the Secretary (Board)

**Authorized Positions: 2
FY 2022 Budget = \$0.6 million**

FUNCTIONS
Manage logistics for the Board of Directors and Committee meetings, Public Hearings, Workshops, the Strategic Planning Process, and all other business activities of the Board
Manage and oversee the day to day operations of the Board of Directors and execute custodial oversight of all books, records and official documents of the board
Administer the subpoena process and provide Notary Service for the Authority

Department: Office of the Secretary

BUDGET

The FY 2022 budget is relatively flat compared to the FY 2021 budget

Description	FY 2019 Actuals	FY 2020 Actuals	FY 2021 Approved	FY 2022 Approved	Change from FY 2021	
					Variance	%
Headcount: Authorized	2	2	2	2	0	0%
Headcount: Filled	2	2				
Total Personnel Services	\$330	\$320	\$338	\$342	\$4	1%
Supplies & Chemicals	26	17	17	17	0	0%
Utilities & Rent	6	4	3	3	0	0%
Contractual Services	204	271	272	270	-2	-1%
Small Equipment	0	0	2	2	0	0%
Total Non-Personnel Services	236	293	294	292	-2	-1%
Department Total	\$567	\$613	\$632	\$634	\$2	0%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Provide timely and accurate Board and Committee agendas, reports and minutes	100%	100%	100%	100%
Follow-up and complete Board actions	100%	100%	100%	100%

Department: Office of the Secretary

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue to draft and submit notices and agendas for all Board and Committee meetings and Public Hearings for publication in the District of Columbia Register as required by the Open Meetings Act of 2010
- Continue to publish all Board and Committee agendas, meeting materials and meeting minutes on DC Water’s website as required by the Open Meetings Act of 2010
- Continue to coordinate logistics for the Board’s Strategic Planning Session (retreat)
- Continue to coordinate the process to fill the expired and/or vacant Board appointments, as needed
- Continue to effectively monitor follow-up requests from the Board and Committees to ensure timely responses
- Continue to enhance data dissemination process for the Board, DC Water employees, the general public and stakeholders by use of state-of-the-art technology that supports the Board’s Strategic Plan
- Continue to manage recordkeeping process by ensuring accuracy, comprehensiveness and effective maintenance of all Board related documents and materials
- Continue to work with Information Technology to secure, install and utilize state-of-the-art technology to ensure efficient and effective recording of proceedings for all Board and Committee meetings
- Continue accomplishing all duties as required and further enhance processes, as needed

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue to draft and submit notices and agendas for all Board and Committee meetings and Public Hearings for publication in the District of Columbia Register as required by the Open Meetings Act of 2010
- Continue to publish all Board and Committee agendas, meeting materials and meeting minutes on DC Water’s website as required by the Open Meetings Act of 2010
- Continue to coordinate logistics for the Board’s Strategic Planning Session (retreat)
- Continue to coordinate the process to fill the expired and/or vacant Board appointments, as needed
- Continue to effectively monitor follow-up requests from the Board and Committees to ensure timely responses
- Continue to enhance data dissemination process for the Board, DC Water employees, the general public and stakeholders by use of state-of-the-art technology that supports the Board’s Strategic Plan
- Continue to manage recordkeeping process by ensuring accuracy, comprehensiveness and effective maintenance of all Board related documents and materials
- Continue to work with Information Technology to secure, install and utilize state-of-the-art technology to ensure efficient and effective recording of proceedings for all Board and Committee meetings

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- No direct impact

CLUSTER: INDEPENDENT OFFICES

DEPARTMENT: Office of the Chief Executive Officer (CEO)

PURPOSE: The CEO/General Manager’s Office administers, plans, organizes, and directs the operations of DC Water

MISSION: To provide DC Water customers with access to affordable, safe and reliable utility infrastructure and services

Authorized Positions: 4
FY 2022 Budget = \$2.1 million

FUNCTIONS

Strategic Planning	Operations	Performance
Provide overall operational and policy direction in support of the Board of Directors’ Strategic Plan	Organize, plan and direct all operations of the Authority Ensure development and implementation of improvement processes to increase operational efficiencies	Facilitate development of cross-functional Enterprise Performance Plans Establish and maintain an Enterprise Program Management Office to enhance collaboration, governance, and accountability across the Authority

Department: Office of the Chief Executive Officer (CEO)

BUDGET

The \$3.1 million decrease is the result of the separation of two new departments: Strategy & Performance and Office of the Chief Operating Officer departments from the Office of the CEO

\$000's Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actual	Actual	Approved	Approved	Variance	%
Headcount: Authorized	18	15	15	4	-11	275%
Headcount: Filled	15	11				
Total Personnel Services	\$3,524	\$3,152	\$4,184	\$908	-\$3,277	361%
Supplies & Chemicals	13	32	13	5	-8	156%
Utilities & Rent	31	28	24	13	-11	83%
Contractual Services	1,309	683	985	1,188	203	-17%
Small Equipment	0	0	0	0	0	0%
Total Non-Personnel Services	1,353	743	1,021	1,206	185	222%
Department Total	\$4,877	\$4,326	\$5,206	\$2,114	-\$3,092	146%
Capital Equipment					\$0	N/A

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Implement all policies and directives of the Board of Directors	100%	100%	100%	100%

Department: Office of the Chief Executive Officer (CEO)

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Active engagement, leadership, and partnership with global industry leaders in the utility sector
- Development and execution of an efficient and effective OCEO administrative system for information flow that strategically guides day-to-day operations and supports data-driven, executive decision-making across the Authority
- Continue improving our labor management partnership
- Expand the strategic direction of the Chief Executive by designing new support roles (e.g., Chief of Staff, Director) for execution
- Continue/expand engagement with the community through the Stakeholder Alliance and other forums
- Continue development of executive leadership to build a high performing leadership team and culture
- Support the Board of Directors and Senior Executive Team (SET) relationships through quarterly joint engagement efforts
- Watershed-based stakeholder engagement, including continued support of the Anacostia freshwater mussel project to improve water quality and protect our investment in cleaning the Anacostia River
- Participation in a sector-wide initiative with leading water utilities to capture best-practices in Business Case Evaluation and CIP Prioritization
- Support the development and delivery of a national Women of Water event in the DC Region to showcase and recognize women leaders in the water sector

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Active engagement, leadership, and partnership with global industry leaders in the utility sector
- Continue development and execution of an efficient and effective OCEO administrative system for information flow that strategically guides day-to-day operations and supports data-driven, executive decision-making across the Authority
- Continue improving our labor management partnership
- Continue development of executive leadership to build a high performing leadership team and culture
- Support the Board of Directors and Senior Executive Team (SET) relationships through quarterly joint engagement efforts
- Watershed-based stakeholder engagement, including continued support of the Anacostia freshwater mussel project to improve water quality and protect our investment in cleaning the Anacostia River
- Participation in a sector-wide initiative with leading water utilities to capture best-practices in Business Case Evaluation and CIP Prioritization
- Support the development and delivery of a national Women of Water event in the DC Region to showcase and recognize women leaders in the water sector

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- No major items identified

CLUSTER: INDEPENDENT OFFICES

DEPARTMENT: Office of the Chief Operating Officer (COO)

PURPOSE: To support and provide oversight, guidance and strategic direction for the Departments of the Administration, Customer Experience and Operations and Engineering Clusters to ensure alignment with the vision and strategic direction cast by the CEO and Board of Directors.

MISSION: Effectively, efficiently and reliably manage the core operations of the Authority to provide critical services to internal and external customers; oversight and direction for the authority’s capital improvement program planning and implementation; and working to achieve resilience and mitigate risks to day to day operations and critical infrastructure

Authorized Positions: 4
FY 2022 Budget = \$0.9 million

FUNCTIONS
Chief of Operations for the Authority serve as the representative of the Authority, CEO and Senior Executive Team on matters related to the operations of the Authority including engaging in boards, associations and other stakeholder groups on policy and operational matters
Planning, development and implementation of key programs, projects and initiatives
Establish/monitor key performance indicators
Advisement to CEO and other Chief Executives
Participation in internal and external policy development and decisions
Oversight, planning and implementation of DC Water’s Capital Improvement Program
Provide support, oversight and guidance to the Administration, Customer Experience, and Operations
Support for strategic planning and implementation
Provide oversight, review and guidance for all compliance requirements related to local and federal

Department: Office of the Chief Operating Officer (COO)

BUDGET

This is a newly established department with functions previously undertaken as part of the Office of the Chief Executive Officer

\$000's	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
Description	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized				4	4	0%
Headcount: Filled						
Total Personnel Services				\$799	\$799	0%
Supplies & Chemicals				0	0	0%
Utilities & Rent				0	0	0%
Contractual Services				125	125	0%
Small Equipment				0	0	0%
Total Non-Personnel Services				125	125	0%
Department Total				\$924	\$924	0%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Result	FY 2020 Result	FY 2021 Targets	FY 2022 Targets
KPIs established by clusters	N/A	N/A	N/A	N/A

Department: Office of the Chief Operating Officer (COO)

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue the Authority's Lead Free DC compliance initiative to replace over 28,000 lead service lines by 2030
- Develop the Water Equity Roadmap to describe the equity challenge we face and create solutions for how we overcome them & uplift our current equity initiatives and shared priorities
- Oversight and monitoring of the COVID-19 Recovery efforts to ensure the safe return of employees to their workspace consistent with the Centers for Disease Control and Prevention (CDC) and District guidelines
- Continue to make improvements in our operations, policies and coordination with other agencies following the September 10, 2020 storm event
- Deploy the Post Public Health Emergency Customer Care in coordination with Office of Government & Legal Affairs, Finance and others to connect our customers to multiple categories of customer assistance
- Develop a Comprehensive Fleet Management Plan to update as well as pursue electrification of our fleet
- Develop an Enterprise Health and Safety Plan that conveys our approach to maintaining a healthy and safe working environment for all of Team Blue
- Establish the AEG Energy Opportunities Challenge to address carbon, equity, and resilience challenges
- Obtain an Organizational Assessment of DC Water's existing organizational structure to determine its alignment with DC Water's mission

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue the Authority's Lead Free DC compliance initiative to replace over 28,000 lead service lines by 2030
- Continue the Water Equity Roadmap to describe the equity challenge we face and create solutions for how we overcome them & uplift our current equity initiatives and shared priorities
- Continue development of the Comprehensive Fleet Management Plan
- Continue to make improvements in our operations, policies and coordination with other agencies following the September 10, 2020 storm event

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- None

CLUSTER: STRATEGY AND PERFORMANCE

DEPARTMENT: Strategy and Performance

PURPOSE:	Provide the framework for the development and execution of the Blueprint which includes Strategic Management, Enterprise Program Management, Sustainability, Innovation and Resilience Program development, and Enterprise Risk Management
MISSION:	To enable the Senior Leadership Team to effectively develop, manage, monitor, and execute the Authority’s Blueprint

Authorized Positions: 9
FY 2022 Budget = \$2.5 million

FUNCTIONS

Strategic Management	Enterprise Program Management Office	Sustainability, Innovation and Resilience
Develop, publish, and socialize the Authority’s Blueprint. Continuously monitor the Blueprint and provide quarterly status updates, including providing an Enterprise Performance Plan and an Enterprise Accountability Report. In addition, oversee the program management of the EPMO, Enterprise Risk, Sustainability, Innovations and Resilience program activities, policies, and procedure administration	The EPMO creates an operational environment whereby programs and projects are managed in a consistent manner to obtain predictable results and delivers strategic programs established by the Blueprint. The EPMO applies management policies, procedures and industry best practices to all activities associated with the Blueprint; monitoring, reviewing, and analyzing risk alignment	Leverages a multi programmatic approach to ensure the long-term provisions of DC Water’s services to achieve the vision of the Blueprint, to include enterprise resilience to address physical and IT infrastructure; financial resilience from economic disruption; and Human Capital resilience due to social and public health disruptions. In addition, to establish an enterprise-wide innovation program to provide: <ul style="list-style-type: none"> • Mechanism to promote, collect, evaluate and test innovation ideas • Break-down organizational silos • Build internal capabilities in data analytics and design

Department: Strategy and Performance

BUDGET

This is a newly established department with functions previously undertaken as part of the Office of the Chief Executive Officer

\$000's	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
Description	Actuals	Actual	Approved	Approved	Variance	%
Headcount: Authorized				9	9	0%
Headcount: Filled						
Total Personnel Services				\$2,000	\$2,000	0%
Supplies & Chemicals				6	0	0%
Utilities & Rent				13	0	0%
Contractual Services				435	435	0%
Small Equipment				0	0	0%
Total Non-Personnel Services				454	454	0%
Department Total				\$2,454	\$2,454	0%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Implement all policies and directives of the Board of Directors	100%	100%	100%	100%

Department: Strategy and Performance

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

Strategic Management

- Continuously monitor the Blueprint and publish quarterly status updates of progress on the six strategic programs
- Prepare and submit the Enterprise Performance Accountability Report for FY 2020
- Prepare the Enterprise Performance Plan for FY 2021 and monitor enterprise performance with quarterly updates
- Prepare the new strategic plan, The Blueprint 2.0
- Continue training efforts in Strategy, Strategic Planning, Performance Planning and Performance Management

Enterprise Program Management Office

- Advance the implementation of Authority-wide programs including Enterprise Resource Planning, Lead Free DC, Department of Consumer and Regulatory Affairs Compliance, Strategic Management, Procurement, Innovation, Enterprise Risk Management and Policies and Procedures Administration
- Establish and promote the Program Management Office Center of Excellence
- Develop an enterprise executive dashboard

Enterprise Risk Management

- Develop a risk management policy
- Conduct an Enterprise-wide Annual Risk Assessment
- Establish a comprehensive approach for the compliance function
- Direct and manage the internal audit function

Sustainability

- Prepare and deliver the innovation program policy and strategy model.
- Refine the indices leveraged to monitor reliability, resilience and sustainability.
- Maintain relationships in support of the watershed management strategy.
- Develop framework for an integrated planning function

Department: Strategy and Performance

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

Strategic Management

- Publish the new strategic plan, The Blueprint 2.0
- Support the communications and roll out the new strategic plan, The Blueprint 2.0
- Monitor the Blueprint 2.0 and publish quarterly status updates of progress on the five strategic imperatives.
- Prepare and submit the Enterprise Performance Accountability Report for FY 2021.
- Prepare the Enterprise Performance Plan for FY 2022 and monitor enterprise performance with quarterly updates.
- Continue training efforts in Strategy, Strategic Planning, Performance Planning and Performance Management.

Enterprise Program Management Office

- Continue to advance the function of the Enterprise Program Management Office to ensure the delivery of mission critical, enterprise programs are delivered in a consistent and cost effective manner
- Continue to promote the Program Management Office Center of Excellence
- Continue monitoring the enterprise executive dashboard

Enterprise Risk Management

- Develop and maintain DC Water Enterprise Risk Register
- Develop and maintain DC Water Enterprise Risk Management Action Plans
- Provide leadership and execution of the enterprise compliance function
- Continue to direct and manage the internal audit function

Sustainability

- Roll out the innovation program policy and strategy model. Monitor innovation program performance
- Refine the indices leveraged to monitor reliability, resilience and sustainability
- Maintain relationships in support of the watershed management strategy
- Implement an integrated planning function bundled with efforts to advance the organization's sustainability imperative

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- No major items identified

CLUSTER: INDEPENDENT OFFICES

DEPARTMENT: Marketing and Communications

PURPOSE: To promote and enhance the value of our services by listening to and engaging with our customers

MISSION: To provide information about DC Water services and programs and to raise awareness about DC Water’s efforts and achievements to improve the quality of life in the region by protecting the environment in which it operates and supporting the community it serves



FUNCTIONS

Marketing, Production and Operations	Communications	Public Outreach
Produce graphics, collateral and videos that support a wide range of trainings and programs across the Authority. Compose script for the Authority’s Stars of Water Event	Prepare speeches, testimony, editorials, special reports and stakeholder presentations. Respond to customer and stakeholder inquiries	Maximize partnerships with local agencies, organizations and other critical community stakeholders; Manage the Authority’s participation in a host of community outreach activities and initiatives; coordinate annual town hall meetings and special media events; Manage Speakers Bureau
Manage the production of the Annual Report, Water Quality Report, newsletters, Leadership Updates, exhibits, marketing materials and the content of specific segment of the DC Water website	Produce reports, newsletters, brochures, DC Water exhibits and materials. Provide editing support for other departmental communication projects and produce special high-profile project communications materials	Manage outreach program to engage community stakeholders such as Mayor’s Office of Community Relations and Services (MOCRS), DC Council, Advisory Neighborhood Commissioners (ANCs), civic associations, residents and businesses about upcoming and ongoing construction projects, increase their understanding of the condition of our aged infrastructure, and better understand their needs and concerns as they relate to projects affecting quality of life
Produce Public Service Announcements, commercials, videos as well as produce live and archived webcasts of Board meetings and manage stakeholder presentations. Manage Plant tours and develop departmental budget	Respond to local/national media inquiries, manage website content; track and strategically influence relevant policy proposals. Establish and enhance working relationships with elected and appointed officials. Pursue state and federal government funding opportunities	Coordinate stakeholder presentations and community events; conduct Sewer Science and other public school programs

Department: Marketing and Communications

BUDGET

The approved FY 2022 budget remains flat compared to FY 2021

\$000's Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actual	Actual	Approved	Approved	Variance	%
Headcount: Authorized	14	13	13	13	0	0%
Headcount: Filled	13	11				
Total Personnel Services	\$1,905	\$1,970	\$2,083	\$2,048	-\$35	-2%
Supplies & Chemicals	15	8	14	3	-11	-79%
Utilities & Rent	34	32	26	25	-1	-3%
Contractual Services	773	816	732	733	1	0%
Small Equipment	2	0	12	12	0	0%
Total Non-Personnel Services	823	856	784	773	-11	-1%
Department Total	\$2,728	\$2,614	\$2,867	\$2,821	-\$46	-2%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Publication of DC Water's Annual Report	1	1	1	1
Publication of Customer Newsletter	10	4	4	4
Publication of Clean River's Update	2	2	2	2
Publication of Employee Newsletter	11	11	11	11
Publication of Water Quality Report	1	1	1	1
Community meetings/outreach re: lead, rates, CSO/CIP projects, etc.	173	100	100	100

Department: Marketing and Communications

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Develop and implement a Strategic Communications Plan to support The Blueprint, DC Water's strategic plan
- Expand our customer engagement and crisis communications capabilities, utilizing the additional support of an outside public relations firm
- Launch a campaign to demonstrate the value of DC Water's services and build support for needed investments in infrastructure
- Work with the DC Clean Rivers Project team to engage with residents, businesses and commuters impacted by construction on the Northeast Boundary Tunnel Project
- Expand DC Water's internal (employee) engagement, working closely with People and Talent, the Office of the CEO and other departments
- Create a unified planning calendar for all marketing and communications activities

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- No major changes anticipated

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

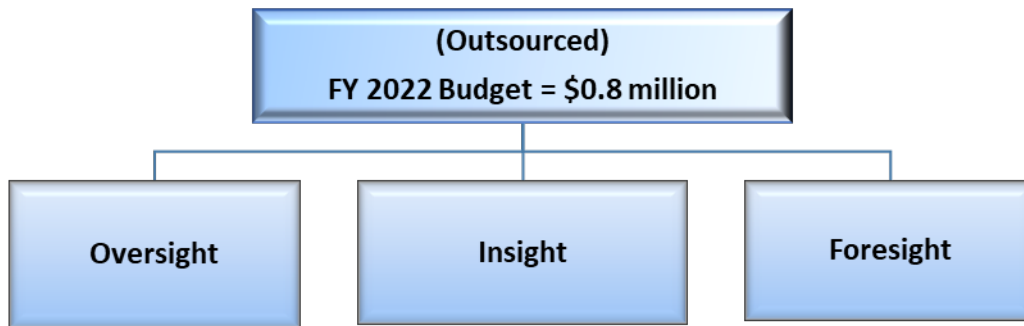
- No direct impact

CLUSTER: INDEPENDENT OFFICES

DEPARTMENT: Internal Audit

PURPOSE: Assists the Authority in accomplishing its objectives by bringing a systematic and disciplined approach to evaluate and improve the effectiveness of the organization's risk management, control and governance processes

MISSION: To provide independent, objective assurance and consulting activity that is guided by a philosophy of adding value to improve the operations of DC Water



FUNCTIONS

Oversight	Insight	Foresight
Conduct periodic audits	Assess programs and policies	Identify trends and challenges before they become crises
Conduct audits requested by the Board of Directors and/or the Chief Executive Officer & General Manager	Share best practices and benchmarking information	Identify risks and opportunities
Review of corporate governance	Provide ongoing feedback for re-engineering management practices and policies	Risk-based auditing

Department: Internal Audit

BUDGET

The FY 2022 budget is relatively flat compared to the FY 2021 budget

\$000's	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
Description	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized						
Headcount: Filled						
Total Personnel Services	\$0	\$0	\$0	\$0	\$0	0%
Supplies & Chemicals	0	0	0	0	0	0%
Utilities & Rent	11	3	7	7	0	0%
Contractual Services	845	559	735	743	8	1%
Total Non-Personnel Services	856	562	742	750	8	1%
Department Total	\$ 856	\$ 562	742	\$750	8	1%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Internal Audit Work Planned	16	14	13	13

Department: Internal Audit

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Conduct an updated risk assessment and internal audit plan for the Authority
- Continue to manage DC Water's hotline and implement the hotline protocol
- Report to the Board of Directors via the Audit Committee on the status of prior internal audit findings and management action plans
- Conduct follow-up procedures on newly presented audit findings and determine status of management action plans
- Implement committee and Board approved audit plans

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue to manage DC Water's hotline and implement the hotline protocol
- Report to the Board of Directors via the Audit Committee on the status of prior internal audit findings and management action plans
- Conduct follow-up procedures on newly presented audit findings and determine status of management action plans

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- No direct impact

CLUSTER: INDEPENDENT OFFICES

DEPARTMENT: Legal Affairs

PURPOSE: To provide legal advice and services to the Board of Directors, CEO and General Manager and the DC Water departments

MISSION: To provide professional, timely, and useful legal advice and services, manage the services of outside counsel as needed, and to minimize liability exposure by recommending and implementing appropriate policies, practices, and procedures

Authorized Positions: 18
FY 2022 Budget = \$7.5 million

FUNCTIONS

Litigation	Administrative Law
Appellate	Board of Directors Support
Bankruptcy	Organize, plan and direct all operations of the Authority
Contract	Ensure development and implementation of improvement processes to increase operational efficiencies
Construction	Construction Claims
Environmental	Safe Drinking Water Act & Regulatory Compliance
Procurement	Employment Law Matters
Tort	Intra-Governmental & Inter Jurisdictional Agreements
Receivership	Municipal Law & Real Property Matters
Employment	Pretreatment Enforcement Support
Foreclosures	Procurement Protests, Claims & Internal Appeals

Department: Legal Affairs

BUDGET

The approved FY 2022 budget is higher than the approved FY 2021 budget by \$0.8 million primarily due to personnel services adjustments and increased legal contingency

\$000's	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	15	15	17	18	1	6%
Headcount: Filled	8	12				
Total Personnel Services	\$2,827	\$2,004	\$2,844	\$3,097	\$253	9%
Supplies & Chemicals	6	0	3	3	0	0%
Utilities & Rent	21	32	20	30	10	47%
Contractual Services	3,889	3,611	3,776	4,325	548	15%
Small Equipment	0	0	0	0	0	0%
Total Non-Personnel Services	3,916	3,642	3,800	4,357	558	15%
Department Total	\$6,743	\$5,646	\$6,644	\$7,454	\$811	12%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Hours of employee time spent on direct work 1,700	1,700	1,700	1,700	1,700

Department: Legal Affairs

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue to manage and support litigation to include complex matters
- Continue to provide support to Clean Rivers Project and other long term Capital Improvement Program (CIP) Projects
- Provide legal support for Green Infrastructure (GI) activities
- Support Innovative initiatives
- Support environmental permits – National Pollutant Discharge Elimination System (NPDES), Total Maximum Daily Limit (TMDL), Municipal Separate Storm Sewer System (MS4)
- Continue to review and revise regulations
- Provide support to Anacostia Sediment Circle action
- Enforcement actions to collect delinquent revenues

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- No major changes anticipated

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

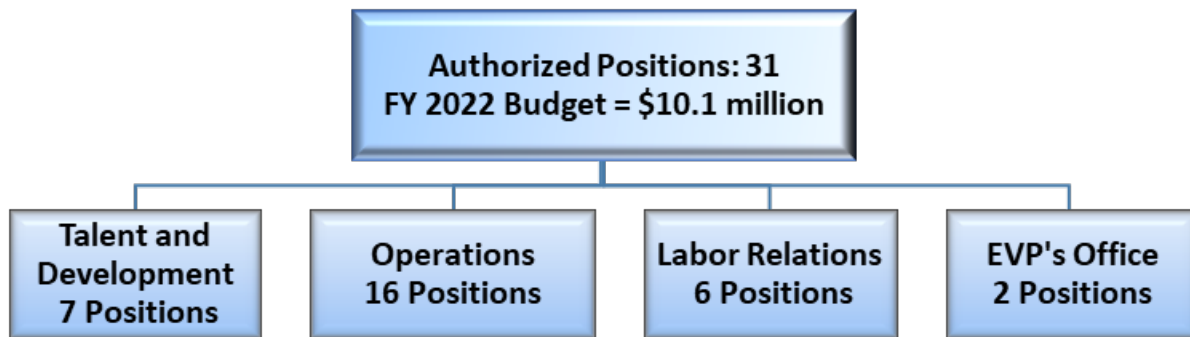
- Provide legal support in environmental and financial issues affecting DC Water CIP Projects and on-going operations
- Provide legal support to ongoing Long Term Control Plan (LTCP), Green Infrastructure, and TDML litigation activities

CLUSTER: PEOPLE AND TALENT

DEPARTMENT: Human Resources

PURPOSE: Support the Authority and Executive Team by creating organizational alignment and line of sight; work collaboratively with all Departments to improve the employee experience; recruit talent who will embrace DC Water; and focus on employee strengths

MISSION: To deliver high quality, innovative, valued and timely labor resources that are responsive to the needs of DC Water employees and departments, in order to help facilitate employees to achieve their individual and organizational goals



FUNCTIONS

Talent and Development	Operations	Labor Relations	Executive Vice President's Office
Recruitment, onboarding, training and development	Market analysis, Performance pay, job evaluation and position control	Labor Relations, Arbitration, and grievance resolution	Strategic initiatives
Performance management, succession planning and employee engagement	Administration of Benefits, Wellness, American with Disabilities Act, Drug and Alcohol testing, Workers Compensation, and Employee Assistance Programs	Employee relations	Change management
Education assistance, internship, rewards and recognition	Systems, data integrity, records management and predictive analytics	Equal Employment Opportunity and Workplace Violence	Management of resources and operations

DEPARTMENT: Human Resources

BUDGET

The approved FY 2022 budget is higher than the approved FY 2021 budget by approximately \$0.5 million primarily due to one additional FTE and personnel services adjustments, partly offset by reduction in workers' compensation claims

Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	27	29	30	31	1	3%
Headcount: Filled	24	29				
Total Personnel Services	\$4,167	\$4,755	\$4,772	\$5,612	\$840	18%
Supplies & Chemicals	13	1	29	29	0	0%
Utilities & Rent	53	30	27	27	0	0%
Contractual Services	2,262	3,885	4,790	4,428	-362	-8%
Small Equipment	0	0	0	0	0	0%
Total Non-Personnel Services	2,328	3,916	4,846	4,484	-362	-7%
Department Total	\$6,495	\$8,671	\$9,619	\$10,096	\$ 477	5%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
120 days from job posting to hire	112	112	107	107
10 days to initiate disciplinary action	7	7	7	7
14 days new hire benefit set-up	13	13	10	10
22.5 Average number training hours per FTE	22.7	22.7	25	25
Comparison DC Water Employees Compensation (100%) vs Market 50 th -%tile	100%	100%	100%	100%

DEPARTMENT: Human Resources

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Recalibrate resources used for job posting and position listing
- Revise or implement new Performance Management System for Union employees
- Succession Development program will extend training to programs, talent assessments, executive coaching and new manager training
- Conduct train-the-trainer activities in support of the new ERP (Enterprise Resource Planning) system

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Implement Enterprise Resource Planning (ERP) application as the core HR, Payroll, Benefits, Self Service, and Applicant Tracking enterprise system
- Coordinate management and team building trainings for DC Water employees
- Expand virtual wellness program for Employees of DC Water
- Extending research capabilities for Compensation with the purpose of addressing grade and salary structure across the organization
- Incorporate professional development assessments focused on Diversity and Inclusion across the Authority
- Develop and Launch a Developing Leaders Program
- Continue to review and update DC Water policies and procedures with the Unions after impacts and effects of collective bargaining agreement
- Negotiate two Working Conditions Agreements for the American Federation of Government Employees (AFGE) Locals 631 and 872
- Continue impact and effects bargaining with the Unions over 24 DC Water Safety policies and procedures
- Explore using ERP to receive and record beneficiary designations
- Explore using ERP to implement Annual Non-Union Merit and Bonus programs
- Build an internal and external inclusion communication platform, branding DC Water as an employer of choice
- Build a council of senior leaders and strategic partner from each division to connect inclusion activities to a broader business drive, results-oriented strategy, foster teamwork, and drive accountability
- Explore and review best practices related to Market-Based pricing. Begin the process of creating Market-Based pricing for each DC Water position

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- No direct impact

DEPARTMENT: Human Resources

FY 2021 AND FY 2022 TALENT DEVELOPMENT PLAN

TALENT DEVELOPMENT OVERVIEW

At DC Water, our talent is our people, Team Blue. Talent Development consists of training and development strategies, solutions and programs that motivate, engage, and educate our employees to cultivate a high performing workforce and results driven culture across the employee life cycle here at DC Water. Our ability to meet demands, realize our vision and fulfill our mission relies on the character and competence of our talent. Simply put, achieving world-class relies on Team Blue!

The vision of DC Water states that “we will be known for superior service, ingenuity and stewardship to advance the health and well-being of our diverse workforce and communities”. The Talent Management Team supports this vision by leading “The Employee Experience” strategic program. Enhancing our Employee Experience depends on the relationship between our management team and the employees they lead. To achieve this, we are connecting the strategies of leadership and employee development with tools and activities that build and support a culture of coaching based performance management. Effective coaching provides specific, timely, and actionable feedback to employees. We believe the role of the management team is much deeper than simply providing direction. We aim to provide our leaders with the tools that they need to achieve the following goals:

- Optimize the employee experience by consistently engaging the employee throughout their lifecycle at DC Water
- Improved individual performance through coaching
- Increased trust and accountability by creating new possibilities for team members
- Accountability for self and employees by removing obstacles in the way of success
- Leading the ongoing development of the employees under their supervision

At DC Water, our management team leads by managing performance. On-going coaching-based performance management unleashes the full array of talent and ingenuity our team possesses that would otherwise be untapped.

Other forms of talent development at DC Water include:

In-House Training – classes and programs designed in-house. In-house training may focus on non-technical courses, skills development, or new processes

eLearning – online courses housed within our learning management system (LMS), Cornerstone. The content for this site is developed in-house and by external vendors

DEPARTMENT: Human Resources

FY 2021 AND FY 2022 TALENT DEVELOPMENT PLAN

External Training – classes and programs developed by external vendors that support individual employee development needs and requirements, not designed by an external vendor. This is an effective means of providing highly specialized or special focus training to individuals or a small group of employees. DC Water’s education assistance and tuition reimbursement program is included in this category

Learning Events - conferences, retreats, and virtual programs. These events boost employee morale and help to increase productivity

Engagement Activities- events held virtually or in-person, that allow DC Water employees the opportunity to get to know each other through collaboration and fun

FY 2020 ACCOMPLISHMENTS

In FY 2020 our organizational structure allowed us to have a comprehensive approach to managing the Authority’s talent. We continued with **Leading Blue** Cohort III participants in 2020. The feedback thus far has been very positive. To adjust to virtual environment, a series of interactive leadership and career development sessions were facilitated to forge connections in our new virtual environment, build essential career development skills for our employees and collaborate with stakeholders across DC Water to highlight authority-wide programs and initiatives. The streamlined virtual New Hire Orientation program is providing employees with the skills needed to add work value immediately.

The Authority continued to leverage colleges and universities relationships through the Tuition Assistance Program. We started a year long journey creating our College Vendor Partner Program. The goal is to reduce tuition costs and establish paths to pay the schools directly. This reduces paperwork and streamlines the payment process for all. In FY 2020, our employees continued to pursue critical infrastructure certifications in the areas of Professional Engineering and Program Management. Lastly, in 2020, a total of 220 employees participated in the Education and Tuition Assistance Reimbursement benefit programs. DC Water provided \$372,264 to assist employees with their continued education programs.

FY 2021 AND FY 2022 TALENT DEVELOPMENT BUDGET

The approved FY 2022 training budget totals \$1.7 million, which is approximately \$0.1 million higher than the approved FY 2021 budget.

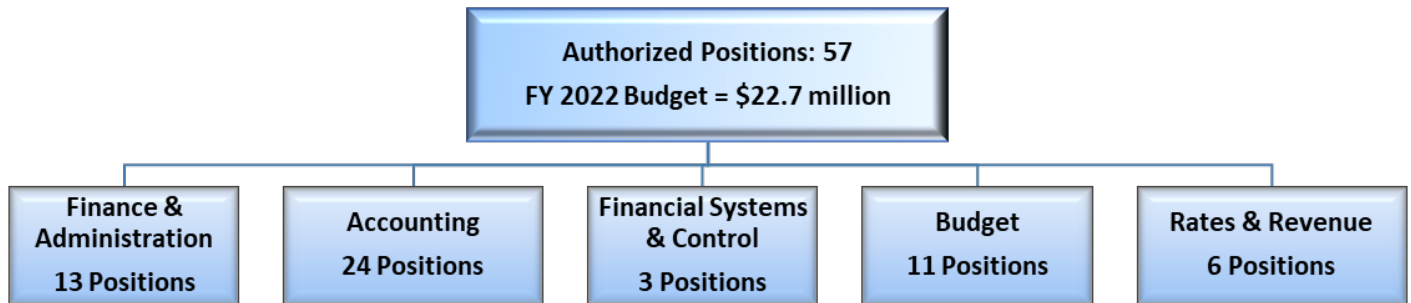
The Talent Development branch of People & Talent Department is positioned to help the Authority transform and will continue to focus on the need to develop our workforce beyond the initial job qualifications. The Talent Development branch will lead the charge in the development of a high performing organization.

CLUSTER: FINANCE AND PROCUREMENT

DEPARTMENT: Finance

PURPOSE: Responsible for the financial integrity of the Authority’s assets and liabilities, funds acquisition, budget execution, and management and planning of expenditures for all programs and initiatives

MISSION: Stewardship of DC Water’s financial activities to ensure financial integrity and ensure performance that meets the expectations of the Board of Directors, Stakeholders, and the broader financial community



FUNCTIONS

Finance & Administration	Accounting	Financial Systems & Control	Budget	Rates & Revenue
<p>Oversight and management of Finance, Accounting, Budget, Financial Systems & Control, and Rates & Revenue;</p> <p>Manage and oversee Treasury, Debt, insurance and Risk Management functions of the organization</p>	<p>Manage accounting and financial reporting functions of the organization, Comprehensive Annual Financial Report (CAFR), and financial transactions;</p> <p>Establish accounting and reporting policies, maintain financial records and effective internal control structure</p>	<p>Manage and Support organization-wide Financial System and related applications;</p> <p>To ensure accountability and safeguarding of the Authority’s assets</p>	<p>Develop, monitor and report the annual operating and 10 Year Capital Improvements Program (CIP) budgets;</p> <p>Board Committees’ reporting process and Financial relationship with the Washington Aqueduct</p>	<p>Manage short and long-range financial planning, revenue forecasting, and monitoring and establishing rates;</p> <p>Manage cost of service studies for water & sewer, Clean Rivers Impervious Area Charge (CRIAC), fire protection service fee, Potomac Interceptor, operating reserves, renewal & replacement reserves, rate stabilization fund and engineering study</p>
<p>Debt and investment portfolios, operations of cashiering and banking services;</p> <p>Administer all insurance and risk management activities, manage all general liability and tort claims for DC Water’s Operations</p>	<p>Payroll operations, vendor payment operation and asset management finance and accountability;</p> <p>Manage the billing activities of the organization, including grants and county billing operations</p>	<p>Management of Financial System, including upgrades and enhancements;</p> <p>Financial System user support/access control/user training and Business Intelligence and Reporting</p>	<p>Prepare quarterly reports and monthly Financial Reports;</p> <p>Perform ongoing financial management of critical programs and maintain department’s web page</p>	<p>Monitors consumption, revenue, collections, accounts receivable and delinquencies greater than 90 days;</p> <p>Manages independent budget and rate review for public hearing</p>

DEPARTMENT: Finance

BUDGET

The \$4.2 million decrease in FY 2022 compared to the FY 2021 budget is for contractual services, and mostly relates to Payment for Success for the Social Impact Bond which is no longer required due to the performance of the Green Infrastructure in managing stormwater

\$000's Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	53	52	53	57	4	8%
Headcount: Filled	49	48				
Total Personnel Services	\$8,129	\$7,887	\$9,662	\$9,656	-\$7	0%
Supplies & Chemicals	16	23	20	15	-5	-25%
Utilities & Rent	68	56	53	53	0	0%
Contractual Services	6,641	7,945	17,149	12,950	-4,199	-24%
Small Equipment	0	635	4	0	-4	-100%
Total Non-Personnel Services	6,725	8,025	17,225	13,018	-4,208	-24%
Department Total	\$14,853	\$15,912	\$26,888	\$22,673	-\$4,214	-16%
Capital Equipment	\$610	\$297	\$5,610	\$8,623	\$3,013	54%

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Manage DC Water's financial operations to ensure revenue projections and O&M expenditures are within budget	103.2% 97.8%	99% 95%	99% 95%	99% 95%
Comply with the Board's investment policy and strategy	100%	100%	100%	100%
Benchmarks: Short-Term Funds - ML 3 months US T-Bill Index and Core Funds - ML 1 - 3 year	226 225	219 242	119 117	119 117
Manage DC Water's financial operations to ensure 140% senior debt service coverage	561%	545%	544%	544%
Meet or exceed the 120 day operating and maintenance expense with the objective of maintaining at least \$125.5 million in operating reserves as set by Board policy	\$186.8 million	\$180 million	\$185 million	\$185 million
Issue Annual Financial Report in accordance with Generally Accepted Accounting Principles (GAAP)	February	February	February	February
Pay 97% of all undisputed invoices within 30 days	96%	97%	97%	97%
Publish Annual Budgets within 90 days of Board adoption	< 90 days	90 days	90 days	90 days

DEPARTMENT: Finance

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

Finance:

- Analyze and evaluate operating reserve level requirements for liquidity needs
- Implement new Financial Enterprise Resource Planning (ERP) system for Finance to include treasury, Debt, Investments, and Accounts Receivable
- Prepare Request for Proposal (RFP) to implement new Payment Gateway services to replace Merchant Card services to reduce costs to the Authority
- Implementation of digital disbursements software to upgrade current refund process allowing refunds via ACH to retail customers, also reducing time frame for customers to receive refunds
- Administer post compliance reporting for all outstanding debt and monitor bond market for Green Bond issuance and performance
- Continue implementation and management process to automate the integration of Fleet data into SRS, the Authority's Safety and Risk Management Information System
- In partnership with Budget and Accounting, review and upgrade the Authority's Rolling Owner-Controlled Insurance Program (ROCIP) Funding methodologies

Rates and Revenue:

- FY2021 Cost of Service Study for Fire Service Protection Fee
- FY 2021 Cost of Service Study for Water, Sewer, and Clean Rivers Impervious Area Charge (CRIAC)
- Implementation of multi-year Rates for FY 2021 and FY 2022
- Continue to monitor economic conditions and customer support (care)

Financial Systems & Controls:

- Maintain and support a new Enterprise Resource Planning (ERP) system – Oracle Cloud ERP: Financials and Procurement, Advanced Procurement, HCM, and Budgeting, minimize or eliminate use of third-party consultants

Accounting:

- Participate in the implementation of ERP
- Coordinate and support Internal Auditors
- Provide PBC's to external auditors and clarify any issues/questions on Financials
- Obtain unmodified external audit opinion
- Complete A-133 audit
- Issue Annual Financial Report
- Issue Green Bond Report
- Minimize/eliminate paper check payments to vendors

DEPARTMENT: Finance

Budget:

- Develop, monitor and report the annual operating and 10 year CIP budgets
- Ongoing financial management of critical programs
- Continue monitoring of key financial performance targets
- Roll-out of the Oracle Budgeting System to departments for the development of the FY 2023 budgets
- Advance and implement enhancements to the position request workflow
- Implement streamlined and continue improvements to the budget planning process
- Support implementation of new Financial Enterprise Resource Planning (ERP) system
- Implement the Enterprise Planning and Budgeting Cloud Service (EPBCS) system
- Implement the Enterprise Performance Reporting Cloud Service (EPRCS) system

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Explore alternative revenue generating initiatives
- FY 2021 Cost of Service Study for Water, Sewer, and Clean Rivers Impervious Area Charge (CRIAC)
- FY 2021 Cost of Service Study for Miscellaneous Fee
- FY 2021 Cost of Service Study for Potomac Interceptor (PI)
- Utilize EPBCS to streamline FY 2023 budget development process

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

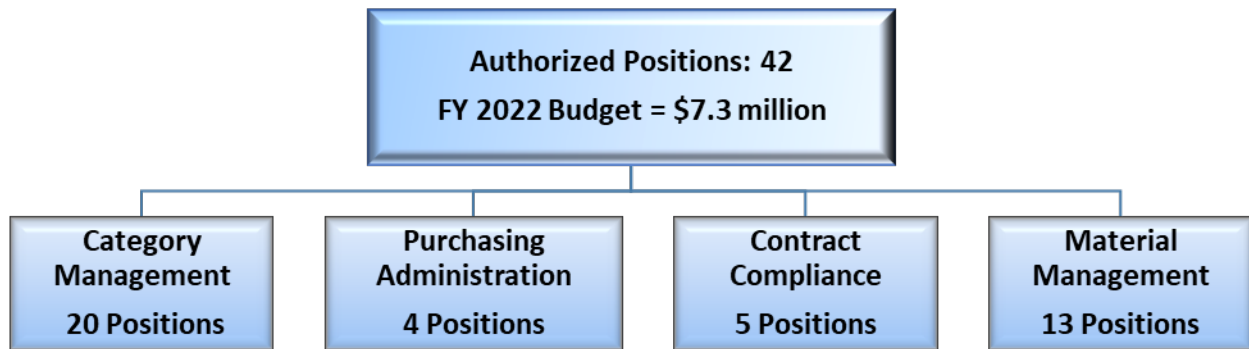
- Limited consultant support (if needed), training and related subscription costs for new ERP system

CLUSTER: FINANCE AND PROCUREMENT

DEPARTMENT: Procurement and Compliance

PURPOSE: The department is responsible for the acquisition of goods and services in support of the Authority’s business activities in accordance with approved procurement policies and guidelines

MISSION: To procure the best value products and services, with the highest degree of procurement integrity, utilizing efficient and cost-effective procurement methods, with a continuing focus on Local, Small and Disadvantaged Business Enterprises (LSDBE) contracting participation



FUNCTIONS

Category Management	Purchasing Administration	Contract Compliance	Material Management	Capital Procurement
Manage DC Water’s procurement process for products and services	Manage requisition process and purchasing operations	Manage DC Water’s small business development, outreach programs, and local hiring initiative	Provide direction and guidance on inventory policies and procedures, disposal of excess and obsolete inventory	Manage all DC Water’s procurement process for capital projects
Develop category and sourcing strategies	Provide procurement system administrative support	Manage the DC WaterWorks program, purchase and travel cards and other contract compliance programs	Administer the material control system and associated functions, conduct spot, cycle and annual physical inventory	
Manage vendor relationships	Manage all IT system projects that impacts Procurement System	Maintain the department’s web page	Manage the warehouse and associated functions	

DEPARTMENT: Procurement and Compliance

BUDGET

The \$1.2 million increase in FY 2022 compared to the FY 2021 budget is for personnel services cost adjustments, slightly offset by lower contractual services costs

Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	35	35	36	42	6	17%
Headcount: Filled	32	35				
Total Personnel Services	\$4,362	\$4,814	\$5,126	\$6,507	\$1,381	27%
Supplies & Chemicals	38	20	30	28	-2	-6%
Utilities & Rent	56	40	53	54	1	2%
Contractual Services	658	1,273	866	700	-167	-19%
Small Equipment	0	0	3	3	0	0%
Total Non-Personnel Services	752	1,334	953	785	-168	-18%
Department Total	\$5,114	\$6,148	\$6,079	\$7,292	\$1,212	20%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Timely processing of small purchases within 7 working days	95%	95%	95%	95%
Issue Invitation for Bid (IFB) and award contracts within 90 calendar days	95%	95%	95%	95%
Issue Requests for Proposal (RFP) and award contracts within 120 calendar days	95%	95%	95%	95%
Issue Procurement request for inventory restock within one (1) business day of approval	95%	95%	95%	95%
System and physical issue of all stock request within same day of authorized request	95%	95%	95%	95%

DEPARTMENT: Procurement and Compliance

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Stabilize new ERP system and integrate with business processes and procurement policies
- Establish capital procurement team and manage all procurement process for capital projects
- Generate, capture, and report cost savings through category management and strategic sourcing projects
- Continuously improve category strategies to improve vendor base while lowering cost and supply risk
- Continuously improve local and minority business outreach and spending
- Provide continuous training of procurement staff and Contracting Officer's Technical Representative (COTRs) to improve vendor relationships and performance

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- No major updates

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- None

CLUSTER: FINANCE AND PROCUREMENT

FUND: Non-Ratepayer Revenue Fund

PURPOSE: The Non-Ratepayer Revenue Fund (NRRF) is being established as part of the Authority’s total operating budget starting with the proposed FY 2021 budget cycle. This fund would be used to budget for additional operating funds in the Authority’s appropriation that are not specifically budgeted or allocated to individual departments. This will provide the flexibility for departments to undertake projects using new revenues to be generated from non-ratepayer sources. This includes rental of DC Water facilities, fleet equipment maintenance for non-DC Water agencies, etc.

MISSION: NRRF is budgeted under contractual services and captured in a designated cost center under the Finance and Procurement Cluster. Funding from this account would be reprogrammed to offset costs in other user departments once the specific requirements are met. The associated revenues must be realistic and obtainable from new non-ratepayer sources and are not factored into the development of the retail water and sewer rates

BUDGET

This new fund was established in FY 2021 for \$0.5 million to provide support for departments based on costs incurred in revenue generation from non-ratepayer sources

\$000's	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
Description	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized						
Headcount: Filled						
Total Personnel Services			\$0	\$0	\$0	0%
Supplies & Chemicals			0	0	0	0%
Utilities & Rent			0	0	0	0%
Contractual Services			500	515	15	3%
Small Equipment			0	0	0	0%
Total Non-Personnel Services			500	515	15	3%
Department Total			\$500	\$515	\$15	3%
Capital Equipment						

CLUSTER: ADMINISTRATIVE SERVICES

DEPARTMENT: Administration Office

PURPOSE: To oversee and direct the administrative functions that support the achievement of DC Water’s goals

MISSION: Ensure continuity of operations and a safe, secure and healthy working environment by providing a foundation of resources and support to DC Water employees through the management of facility, security, safety, emergency management, and fleet services

Authorized Positions: 3
FY 2022 Budget = \$0.7 million

FUNCTIONS

Facilities Management	Security	Occupational Safety & Health	Emergency Management	Fleet Management
Ensure continuity of operations and a safe, secure and healthy working environment by providing a foundation of resources and support to DC Water employees through the management of facility, security, safety, emergency management, and fleet services				
Provide a healthy, safe and secure environment for DC Water to operate, through high-quality and cost-effective services and trainings, delivering an exceptional customer experience for our workforce and community				

DEPARTMENT: Administration Office

BUDGET

The Approved FY 2022 budget is relatively flat compared to the FY 2021 budget

\$000's Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actual	Actual	Approved	Approved	Variance	%
Headcount: Authorized	3	3	3	3	0	0%
Headcount: Filled	3	3				
Total Personnel Services	\$496	\$549	\$573	\$636	\$63	11%
Supplies & Chemicals	7	1	1	1	0	0%
Utilities & Rent	8	4	4	4	0	0%
Contractual Services	56	32	57	48	-9	-16%
Small Equipment	4	0	0	0	0	0%
Total Non-Personnel Services	75	37	61	52	-9	-15%
Department Total	\$570	\$586	\$634	\$688	\$48	8%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Security Camera operational uptime (cannot go below 90%)	N/A	95%	90%	90%
Smart card readers operational uptime (cannot go below 90%)	N/A	100%	90%	90%
Percent of security investigations completed within 21 days	N/A	83%	95%	95%
DC Water Employee Recordable Incident Rate (RIR) (CY)	N/A	3.3	< 5.8	< 5.8
DC Water Employee Lost Time Incident (LTI) (CY)	N/A	2	< 1.9	< 1.9
Fleet Preventive Maintenance (PM) Completed on Schedule **	N/A	6%	96%	96%
Priority Vehicles*/Equipment Availability (In-Service)	N/A	91%	96%	96%
% of Facilities Service requests completed within 30 days	N/A	11%	tbd	tbd

*Priority vehicles: heavy equipment such as back hoe, dump truck, crew cab

**Low percentage due to pandemic; limited DCW staff available to bring units to Fleet for schedule PM

DEPARTMENT: Administration Office

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Establish, implement, and monitor compliance with the safety, emergency response and workplace violence prevention training curriculum required for all DC Water employees
- Analyze business processes and implement activities to improve efficiency and increase resiliency, as we move towards a shared-services model to better track costs by department/program
- Development and implementation of an Environmental, Health and Safety (EHS) program at DC Water
- Finalize a Land Use Master Plan, to provide guidance and structure to standardizing and improving facilities based on the implementation of the EHS program and other cluster initiatives related to continuity of operations and resiliency
- Development and implementation of a Comprehensive Fleet Management Plan

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Creation of a Business Operations function, to further streamline and coordinate all Administration cluster activities, and better socialize them throughout DC Water
- Develop and implement an improved asset management and standardized, proactive maintenance program for all DC Water assets under the Administration's purview

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

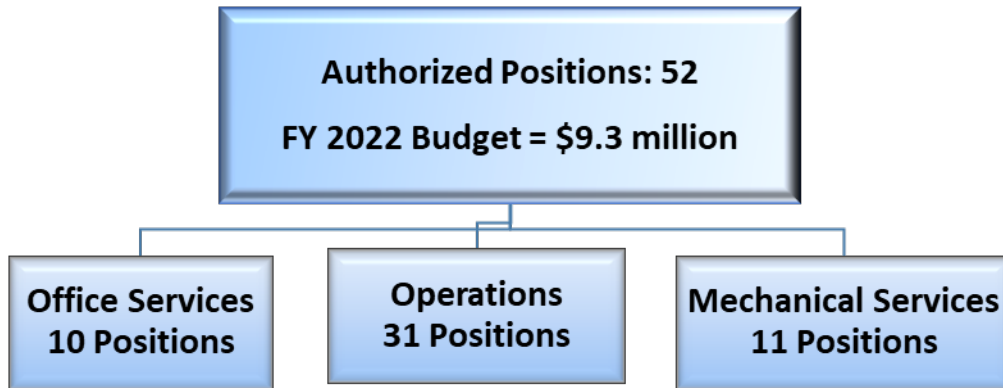
- None

CLUSTER: ADMINISTRATIVE SERVICES

DEPARTMENT: Facilities Management

PURPOSE: Administers programs for construction, operation, maintenance and continuous improvement of the Authority’s physical infrastructure and building services

MISSION: To support the operation of the Authority through routine maintenance, custodial services, repair and improvement of its facilities, buildings, grounds and roadways for DC Water’s operations



FUNCTIONS

Office Services	Operations	Mechanical Services
Mail, courier and freight services	Building operations/maintenance, procure and assign furniture, repair fences and rollup doors	Predictive/preventive maintenance
Motor pool services	Coordinate workspace assignments and moves	Adequate indoor air quality
Manage DC Water’s recycling program (paper, cans, bottles)	Janitorial service, landscaping, trash removal, and pest control	Engage in project management of major construction and renovation projects
Coordinate work order requests and surveys for facilities	Adequate ground direction and building signage	Elevator and HVAC systems maintenance
Manage DC Water’s copy services	Manage cafeteria operations	Plumbing

DEPARTMENT: Facilities Management

BUDGET

The \$0.6 million increase in FY 2022 compared to the FY 2021 budget is primarily due to personnel services adjustments, mechanical and nursery supplies, and contractual services

Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	56	52	51	52	1	-2%
Headcount: Filled	46	45				
Total Personnel Services	\$2,205	\$5,174	\$5,864	\$6,115	\$251	4%
Supplies & Chemicals	38	282	118	362	244	207%
Utilities & Rent	353	105	171	158	-13	-8%
Contractual Services	153	2,324	2,508	2,623	115	5%
Small Equipment	11	39	0	3	3	300%
Total Non-Personnel Services	555	2,751	2,797	3,146	349	12%
Department Total	\$2,760	\$7,925	\$8,661	\$9,262	\$601	7%
Capital Equipment	\$1,458	\$1,255	\$1,845	\$2,168	\$323	18%

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Annual Work Orders Closed	6911	8500	8500	8500

DEPARTMENT: Facilities Management

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue to pursue the reorganization of the Facilities Department
- Continue alignment of DC Water Facilities Department with best-practices in the facilities industry
- Identify and provide training related to best practices in the facilities industry
- Implement the Architectural & Engineering (A/E) contract to provide program management services in support of the Land Use budget: Develop program to manage the Land Use CIP and asset management system
- In Coordination with IT, utilize, review, report and refine the use of the tablet based, automated service request to work order system
- Continue to provide Facilities Recovery Team in support of pandemic recovery/return to work
- Prioritize, procure, execute and complete contracts for the replacement of the roofs and HVAC systems that can be budgeted in FY 2021
- Prioritize, procure, execute and complete contracts for the replacement of the roofs that can be budgeted in FY 2021
- Continue to implement new industry innovations to support efficiency and sustainability
- Continue to design the new home for the Facilities Department at SB-1, Blue Plains

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue the implementation of the Building Automation Program (HVAC systems)
- Assess and refine the organization of the Facilities Department: Continue to develop the Land Use Branch of Facilities
- Refine the campus management team to support proactive maintenance throughout DC Water facilities
- Define and establish the facilities management program for the headquarters building
- Support Matrix contributors with office work area updates
- Define and support the new normal for janitorial services at all DC Water campuses
- Continue to provide grounds keeping services throughout DC Water campuses
- Provide stakeholder support/coordination for Central Office Facilities (COF) Building renovation by DETS (Department of Engineering and Technical Services)
- Provide stakeholder support/coordination for Bryant Street Campus renovation by DETS
- Identify roof replacement needs for DC Water facilities and estimate the associated costs
- Identify HVAC replacement needs for DC Water facilities and estimate the associated costs
- Continue to implement new industry innovations to support efficiency and sustainability

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

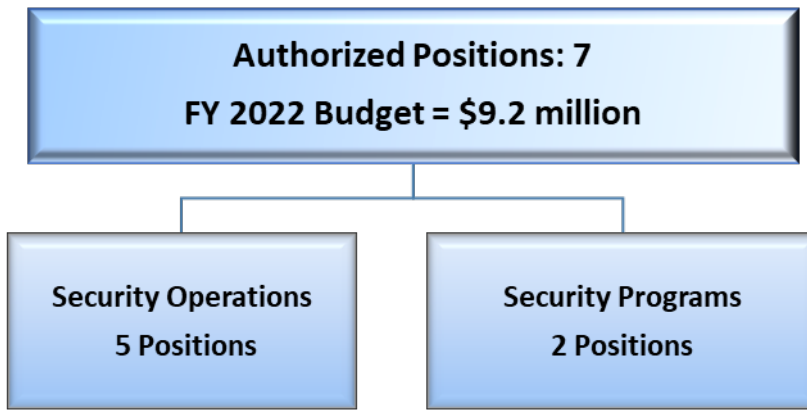
- Continued improvement of CMF, COF, Bryant Street and 125 O Street systems and buildings, will reduce the overall maintenance efforts and ultimately expenditures

CLUSTER: ADMINISTRATIVE SERVICES

DEPARTMENT: Department of Security

PURPOSE: To deliver best-in-practice security services that safeguard and protect DC Water's mission-critical resources and employees in meeting the enterprise commitment to our communities and the environment

MISSION: To support and maintain a safe and welcoming workplace that is customer focused and intended to enhance the well-being of staff and visitors



FUNCTIONS

Security Operations	Security Asset Protection
Locksmith, Key Control	Electronic security asset testing and maintenance
Guard force and traffic management Identification and Badge Control	Management of security related Capital Improvement Plan projects
Emergency Management & First Response and community awareness/training	Loss prevention, asset protection, vulnerability assessments, and hazardous threat training/awareness
Investigations, local and federal liaison, and Security work order requests	Information security, site surveys, and Key management

DEPARTMENT: Department of Security

BUDGET

The \$1.3 million increase in FY 2022 compared to the FY 2021 budget is primarily in professional services contract for guard services including two new operational facilities

Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	9	8	8	7	-1	-13%
Headcount: Filled	10	5				
Total Personnel Services	\$1,119	\$901	\$1,059	\$1,062	\$3	0%
Supplies & Chemicals	66	18	54	49	-5	-9%
Utilities & Rent	304	319	325	325	0	0%
Contractual Services	6,268	6,420	6,410	7,770	1,360	21%
Small Equipment	50	3	40	30	-10	-25%
Total Non-Personnel Services	6,688	6,759	6,829	8,174	1,345	20%
Department Total	\$7,807	\$7,660	\$7,888	\$9,236	\$1,348	17%
Capital Equipment	\$392	\$841	\$850	\$1,407	\$557	66%

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Completion times to initial security investigation report. Target = 21 days	21 days	3 days	3 days	3 days
Response times to register/complete initial incident reports. Target = 24 hours	24 hours	24 hours	24 hours	24 hours
Number of DC Water community trained/briefed on Security/Parking/Crime Prevention issues: Target = 8.3% of population per month	5%	5%	6%	6%
Turnover rate of Guard Force Officers = NTE 25% per month	<10%	<5%	<4%	<4%
Camera Operational Uptime: Target = 95%	98%	99%	95%	95%
Smart Card Readers Operational Uptime: Target = 95%	98%	99%	95%	95%

DEPARTMENT: Department of Security

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue with Phase III of Hardening Project at Blue Plains
- Initiate license plate reader (LPR) at Bryant Street and Head Quarter compounds
- Initiate concept design of Blue Plains Main Entrance modifications
- Continue integration of operations cameras at 'off-Blue Plains' locations
- Continue to develop and populate Department of Security's proprietary asset protection software
- Increase the ability to initiate and support internal investigations via cross training existing personnel
- Analyze throughout the Authority areas in need of additional and/or new traffic control devices

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Implement 'Self-Service' visitor temporary pass management system at new Head Quarters Building
- Replace/Upgrade Fire Protection systems at Blue Plains
- Initiate recommendations of new Office of Emergency Management (OEM) Vulnerability Assessment product incorporating operational elements
- Integrate additional departments into the asset protection program for enhancing protective protocols throughout the Authority. Specifically, the Head Quarters Building is targeted to receive increased asset protective measures via the use of "best practices" for asset protection
- Improvements with restructuring and cross training of Department of Security (DSEC) personnel in investigations, with direct impact on the ability to network with our regional, Federal and State law enforcement partners as a professional colleague
- Integrate key electronic traffic control devices at all major access control traffic points throughout the Authority. Additional enhancements via integrating these electronic control devices into the Physical Security Information Management (PSIM) located within the Security Command Center

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

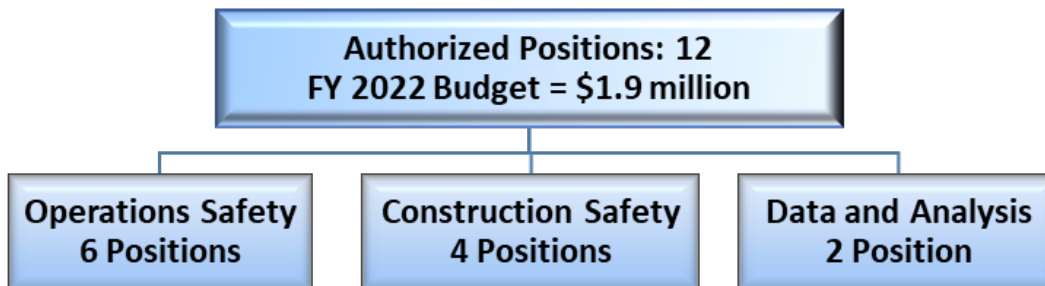
- Continued improvement of security systems will reduce overall maintenance, improve response time, and decrease threat levels
- Mega-projects require significant security upgrades and enhancements which will require increased manning to provide full support
- The new Fleet Facility is expected to increase security operations costs in future years

CLUSTER: ADMINISTRATIVE SERVICES

DEPARTMENT: Occupational Safety and Health

PURPOSE: Oversight of the Authority’s Comprehensive Health and Safety Program, to accomplish a safe and healthy work environment, as well as, compliance with environmental health and safety regulations

MISSION: To support DC Water’s Blueprint /Strategic Plan by effectively managing Department resources to accomplish a healthy work environment for all DC Water employees



FUNCTIONS

Operations Safety	Construction Safety	Data and Analysis
Compliance with environmental health and safety management system	Compliance with environmental health and safety management system	Compliance with environmental health and safety management system
Implement comprehensive safety program; including facility and crew safety inspections, and accident and incident investigations	Oversight of the implementation of comprehensive construction safety program	Develop and analyze safety metrics
Support DC Water’s Emergency Response activities and serve as the Safety Officer when the Incident Management Team (IMT) is activated	Coordinate with and support the Office of Risk Management, Emergency Management, Emergency Preparedness of Contractors, and the Department of Engineering and Technical Services, including the Rolling Owner Controlled Insurance Program (ROCIP), Safety Program, and Non-ROCIP contracts	Generate and provide required safety reports
Oversight of hazardous waste program and storage tank compliance. Identify, develop, schedule and deliver required safety training	Implement initiatives to prevent and reduce accidents, occupational illnesses, and exposure to health and physical hazards	Administer and maintain safety database

DEPARTMENT: Occupational Safety and Health

BUDGET

The \$0.4 million decrease in the Approved FY 2022 budget is mainly for personnel services adjustments and a slight decrease in contractual services

\$000's Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	11	11	11	12	1	9%
Headcount: Filled	11	9				
Total Personnel Services	\$1,503	\$1,308	\$1,861	\$1,471	-\$390	-21%
Supplies & Chemicals	9	6	20	10	-10	-50%
Utilities & Rent	27	27	26	25	-1	-5%
Contractual Services	274	229	428	393	-35	-8%
Small Equipment	4	99	0	0	0	0%
Total Non-Personnel Services	314	361	474	427	-47	-10%
Department Total	\$1,817	\$1,669	\$2,335	\$1,898	-\$437	-19%
Capital Equipment						

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
OSHA recordable accidents per hours worked (Reduce 10%)	3.7	3.5	3.5	3.5
Lost time work cases due to non-fatal accidents per hours worked	3	2.8	2.8	2.8
No. of time work stopped due to unplanned unsafe conditions	1	1	1	1
No. of formally raised safety related employee concerns reported	57	170	170	170
No. of Vehicle Accidents	38	38	35	35

DEPARTMENT: Occupational Safety and Health

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue to implement safety goals and initiatives in association with the Strategic Plan
- Continue implementation and management process for the upgrade/replacement of the Authority's Safety and Risk Management Information System
- Continue to provide support to the Office of Risk Management for the Rolling Owner Controlled Insurance Program (ROCIP), and People and Talent for the Workers' Compensation program
- Begin implementation of damage prevention initiative to reduce the occurrence of utility strikes by both in-house and contractor crews
- Continue to review and update safety and health policies
- Focus on the full implementation of the safety training program

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue to implement safety goals and initiatives in association with the Strategic Plan
- Continue to provide support for ROCIP and Workers' Compensation programs
- Implement the approved safety and health policies
- Focus on adopting an implementing a Safety Management System (ISO 45001)
- Explore the usage of virtual reality technology for training purposes

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

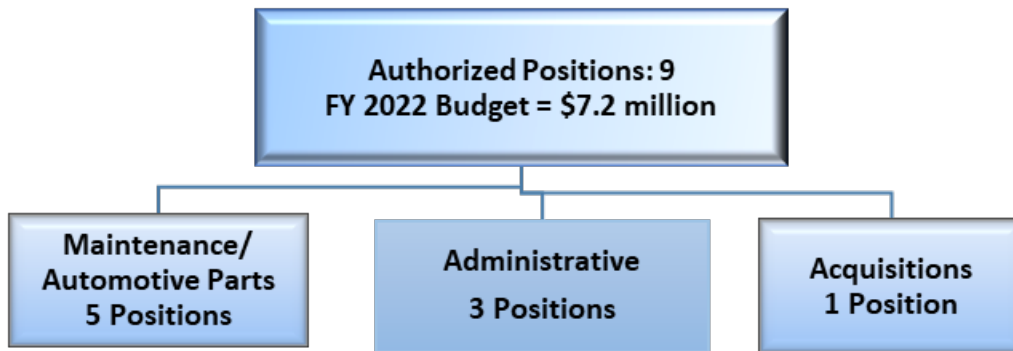
- No major items identified

CLUSTER: ADMINISTRATIVE SERVICES

DEPARTMENT: Fleet Management

PURPOSE: Ensure DC Water’s fleet and equipment are safe and functioning to meet the operational needs of the Authority

MISSION: To provide safe, reliable and cost effective vehicles and equipment to DC Water for use by all departments in performance of their missions



FUNCTIONS

Maintenance/Automotive Parts	Administrative	Acquisitions
Preventive and repair maintenance	Manage fleet maintenance contractor and vendors	Acquisition/Disposal of vehicles/equipment
Inventory control of automotive parts	Manage and support the Fleet Wave System, and monitor fuel usage	
Performance Measurements - percent of uptime/availability	Management of vehicles, equipment, parts and DC Water loaner pool program	
Integration and retrofitting of vehicles Integration mobile technology support	Commercial Driver’s License (CDL) Safe Drivers Program	
Apprentice-trainees (vehicle/equipment maintenance; quality assurance)		

DEPARTMENT: Fleet Management

BUDGET

The \$0.2 million increase in FY 2022 compared to FY 2021 is mainly for contractual services costs for automotive maintenance and repairs on DC Water's aging vehicle fleet, offset in part by reduced utilities & rent and personnel services adjustments

\$000's	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
Description	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	8	10	10	9	-1	-10%
Headcount: Filled	6	7				
Total Personnel Services	\$952	\$1,142	\$1,444	\$1,217	-\$227	-16%
Supplies & Chemicals	9	27	19	25	6	29%
Utilities & Rent	795	536	893	767	-126	-14%
Contractual Services	4,933	4,161	4,564	5,131	567	12%
Small Equipment	28	46	45	55	10	22%
Total Non-Personnel Services	5,765	4,770	5,521	5,977	456	8%
Department Total	\$ 6,717	\$5,911	\$6,965	\$7,194	\$229	3%
Capital Equipment	\$ 4,421	\$3,344	\$6,000	\$6,148	\$148	2%

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Preventative Maintenance Completed on Schedule	91%	96%	96%	96%
Vehicles available for use	89%	96%	96%	96%
DC Water priority vehicle in-service	86%	98%	98%	98%

DEPARTMENT: Fleet Management

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue with planning for relocation and transition to the new Fleet Facility
- Reassess all major equipment repair contracts
- Continue implementation and upgrade of Field Services Mobile Support Technology Programs meshing, smart Infrastructure and vehicle sensor technology
- Continue systems integration and upgrades to Fleet Management Information System (WAVE) Geotab and rideshare program
- A reassessment of the Priority Equipment and major change outs according to departmental programs
- Continue utilization of grants and enterprise collaborations for the purchase of Alternative Fueled Vehicles (AFV's), Hybrid Plug-in Electric
- Continue the "Right Sizing- Effective Efficiency Use" Program as well as reduce the carbon footprint and the re-issuance of underutilized units
- Continue purchasing of Customized Smart Infrastructure and Advanced Technology, Clean Idle, certified clean diesel, and electric vehicles, where possible to reduce carbon emission
- Continue increased usage of environmentally friendly soy and bio-based products and cleaners, where applicable
- Increase employee training and certifications of Fleet personnel

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Continue with transition to the new Fleet Facility
- Continue utilization of grants and enterprise collaborations for the purchase of Alternative Fueled Vehicles (AFV's), Hybrid Plug-in Electric
- Continue the "Right Sizing- Effective Efficiency Use" Program as well as reduce the carbon footprint and the re-issuance of underutilized units
- Continue systems integration and upgrades to Fleet Management Information System (WAVE) Geotab and rideshare program
- Continue the reassessment of the Priority Equipment and major change outs according to Departmental Programs
- Continue purchasing of Customized Smart Infrastructure and Advanced Technology, Clean Idle, certified clean diesel, and electric vehicles, where possible to reduce carbon emission
- Continue increased usage of environmentally friendly soy and bio-based products and cleaners, where applicable
- Continue implementation and upgrade of Field Services Mobile Support Technology Programs meshing, smart Infrastructure and vehicle sensor technology
- Begin to transition Fleet Maintenance In-House

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- Our ability to perform certain tasks will be greatly reduced and our vehicle downtimes will increase

CLUSTER: ADMINISTRATIVE SERVICES

DEPARTMENT: Office of Emergency Management

PURPOSE: To provide planning and operational support to the entire Authority during emergencies and to ensure DC Water complies with the American Water Infrastructure Act

MISSION: To facilitate the development and sustainment of a disaster resilient utility

Authorized Positions: 6
FY 2022 Budget = \$1.6 million

FUNCTIONS

Emergency Management – Planning	Emergency Management - Training and Exercises	Critical Infrastructure Protection	Hazard Mitigation and Grants
Manage and implement DC Water’s mitigation, planning, response, and recovery emergency procedures and plans in compliance and aligned with America’s Water Infrastructure Act (AWIA), National Incident Management System (NIMS), Emergency Management Accreditation (EMAP), and District plans	Provide tailored emergency management trainings and exercises through a multi-year training and exercise plan and calendar which utilizes federal funding through EPA and collaboration with regional partnerships	Facilitate Authority’s Risk and Resilience Assessment for compliance to America’s Water Infrastructure Act (AWIA) and continuous improvement efforts such as integration into hazard mitigation plan and capital improvement projects	Identify, secure, and facilitate hazard mitigation funding sources for Authority’s hazard mitigation efforts which lower financial obligations and help to implement critical risk mitigation measures for resilience and reliable services
Facilitate local, regional, and federal partnerships to support DC Water’s emergency management efforts and submit resource requests to DC HSEMA and NCR Water/Wastewater Agency Response Network	Provide continual support to ensure employees and contractors are prepared, trained, and equipped to respond to emergencies by developing and maintaining an emergency response training calendar and matrix	Provide support to the DC Fusion Centre, assessment of data, sharing of information, and development of threat briefings. Administer the Authority’s activities with the NCR Critical Infrastructure Protection Program	Manage DC Water’s Hazard Mitigation Plan and Task Force
Assist in providing after action reviews and reports for multiple operational period emergencies that utilized an activated IMT and provide improvement planning tracking measures	Partner with regional partner agencies on training and exercise efforts to sustain readiness and resilience	Identify, propose, and access federally available funding, including the development and submission of Urban Areas Security Initiative (UASI) grant proposals	Coordinate and manage grant submittals, awards, correspondence, compliance reports, and to maintain confidential files
Facilitate and continually improve upon multimodal emergency communications, documentation systems, response kits, 24/7 contacts and command vehicle units	Manage DC Water’s Incident Management Team (IMT) and Emergency Liaison Officers (ELOs)	Develops and implements various threat response procedures in conjunction with physical and logical security departments	Conduct research for potential funding sources including partnering with fellow agencies and maintain tracking databases unique to DC Water

DEPARTMENT: Office of Emergency Management

BUDGET

The FY 2022 Approved budget for the Office of Emergency Management (OEM) is relatively flat compared to the FY 2021 budget

Description	FY 2019	FY 2020	FY 2021	FY 2022	Change from FY 2021	
	Actuals	Actuals	Approved	Approved	Variance	%
Headcount: Authorized	6	6	6	6	0	0%
Headcount: Filled	4	3				
Total Personnel Services	\$500	\$739	\$949	\$1,010	\$ 61	6%
Supplies & Chemicals	6	2	15	13	-2	-13%
Utilities & Rent		2	21	17	-4	-17%
Contractual Services	450	476	493	518	25	5%
Small Equipment	4	-	20	25	5	25%
Total Non-Personnel Services	460	480	549	574	25	4%
Department Total	\$ 960	\$1,219	\$1,498	\$1,583	\$85	6%
Capital Equipment			\$50	\$50	\$0	0%

TARGETED PERFORMANCE MEASURES	FY 2019 Results	FY 2020 Results	FY 2021 Targets	FY 2022 Targets
Maintain compliance with American's Water Infrastructure Act every five years 100%	NA	NA	100%	NA
Maintain Emergency Management Accreditation with yearly report on measures for accreditation compliance.	NA	100%	100%	100%

DEPARTMENT: Office of Emergency Management

FY 2021 MAJOR PLANNED ACTIVITIES AND CHANGES

- Develop and incorporate a full five year cycle for Authority-wide risk and resilience assessment, hazard mitigation planning, and emergency response and recovery plan reviews to keep the Authority in continuous compliance with America’s Water Infrastructure Act (AWIA)
- Support DC Water’s overall emergency response and incident management capabilities
- Continue to develop and provide robust and comprehensive emergency management training and exercise programs
- Develop procedures and implement Earth Networks weather alert and data dashboard for operations and emergency management
- Establish Emergency Management Accreditation standards into department’s strategies, goals, and procedures
- Seek reaccreditation in ISO 22301 Business Continuity Management System, expires in 2021
- Provide updates to all nine emergency management, mitigation, response, and recovery plans
- Ensure continuous compliance with Emergency Management Accreditation and annual report
- Facilitate source support and implement FEMA Hazard Mitigation Grants

FY 2022 MAJOR PLANNED ACTIVITIES AND CHANGES

- Fully implement a sustainable Program Manager, Hazard Mitigation Grants position for grant funding identification and facilitation
- Establish a suite of virtual emergency management training courses, specific to DC Water, to assist staff in obtaining a knowledge base at their own pace and to assist in establishing incident management competencies
- Develop confidential Critical Infrastructure Protection guidance manual for the Authority
- Implement a complete inventory and maintenance system for emergency management resources
- Implement an IMT management and documentation software solution for quicker emergency documentation and plan references
- Expand on regional water emergency response and communication capabilities
- Build out mobile incident command post capabilities and coordinated situational awareness information sharing measures
- Begin the process to complete an Authority wide update to the risk and resilience assessment which needs to be completed within 2023 for AWIA compliance
- Provide updates to all nine emergency management, mitigation, response, and recovery plans
- Ensure continuous compliance with Emergency Management Accreditation and annual report

IMPACT OF CAPITAL PROJECTS ON OPERATING BUDGET

- No direct impact



Approved FY 2022 Budgets

Section VIII: GLOSSARY AND ACRONYMS



GLOSSARY

ACCRUAL BASIS: The method of accounting under which revenues are recorded when they are earned (whether or not cash is received at that time) and expenditures are recorded when goods and services are received (whether or not cash disbursements are made at that time).

ADVANCED METERING INFRASTRUCTURE (AMI): Also known as Smart meters, are updated, digital versions of the traditional electrical meter attached to the outside of your home. Smart meters are also designed to transmit pricing and energy information from the utility company to the consumer (two-way communication).

ADVANCED RESEARCH & TESTING PROGRAM: Specialized wastewater treatment services to outside entities.

A/E CONTRACT: Architectural and Engineering Contracts.

AERATION: The process that forces compressed air into wastewater. The oxygen keeps the microorganisms alive and sets off a chain reaction; live, eat, and work. Oxygen is an essential ingredient in “activating” sludge.

ALTERNATIVE FUELED VEHICLE: An alternative fuel vehicle is a vehicle that runs on a fuel other than traditional petroleum fuels (petrol or Diesel fuel); and also refers to any technology of powering an engine that does not involve solely petroleum.

AMERICAN RECOVERY AND REINVESTMENT ACT: Is an economic stimulus package enacted by the 111th United States Congress in February 2009. The stimulus was intended to create jobs and promote investment and consumer spending during the recession.

ANAEROBIC DIGESTION: A biological process that uses microorganisms to reduce the volume of biosolids.

ANAMMOX: An abbreviation for ANaerobic AMMonium OXidation, is a globally important microbial process of the nitrogen cycle.

APPROPRIATION: An authorization by Congress, which permits officials to incur obligations and expend Authority resources. Appropriations are usually made for fixed amounts, which extend for a fiscal year. Appropriations for capital improvement projects, however, extend until completion, usually beyond the current fiscal year.

ARBITRAGE: The simultaneous purchase and selling of an asset in order to profit from a differential in the price. This usually takes place on different exchanges or marketplaces. Also known as "riskless profit".

AS-BUILT: A revised set of drawings submitted by a contractor upon completion of a construction project. As-built drawings show the dimensions, geometry, and location of all components of the project.

ASSETS: Property with monetary value owned by the Authority.

AUDIT: An independent systematic examination of resource utilization concluding in a written report. It is a test of management’s internal accounting records. It also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statements.

AUTOMATED METER READING (AMR): System that automatically read customers’ meters using radio frequencies, allowing for more accurate and frequent meter readings and transfer of data to a central database for billing and analysis. It is an older technology that only collects electrical energy consumption and transfers that data from the electric meter on the home to the utility (one-way communication).

BALANCED BUDGET: A budget in which the income equals expenditure.

BIOCHEMICAL OXYGEN DEMAND (BOD): An indicator of the amount of biodegradable contaminants in wastewater.

BIOSOLIDS: Sludge that has been treated to reduce pathogens, organics, and odors, forming a reusable agricultural product.

BLUE PLAINS ADVANCED WASTEWATER TREATMENT PLANT: Located in Washington, DC, Blue Plains is the world’s largest advanced wastewater treatment plant, and has a permitted capacity of 370 million gallons per day.

BOARD OF DIRECTORS: DC Water’s governing board (the Board), which includes 11 primary and 11 alternate members; six members from the District of Columbia, two members each from Montgomery and Prince George’s Counties in Maryland, and one member from Fairfax County, Virginia.

BLOOM: a soil conditioner made from Class A biosolids.

BOND: An obligation issued by DC Water promising to pay a specified sum of money (called principal or face value) at a specified future date (called the maturity date) along with periodic interest paid at a specified percentage of the principal (interest rate). Bonds are typically issued to fund specific capital improvement expenditures.

BUDGET: A plan of financial operations including an estimate of proposed expenditures and revenues for a fiscal period. The budget establishes funding levels for continuing service programs, operation and maintenance of public facilities, and principal and interest payments on bonded indebtedness. Recurring replacement of capital outlay and minor new capital outlay items are included.

CA PPM: Represents a single platform that enables management of the entire innovation lifecycle and make more informed strategic investments.

CAPACITY MANAGEMENT OPERATION and MAINTENANCE (CMOM): A standard framework for municipal sewer collection systems to identify and incorporate widely-accepted wastewater industry practices to meet regulatory compliance.

CAPITAL BUDGET: A plan for investment in long-term assets such as buildings, plant, and equipment. DC Water’s capital budget includes project schedules and funding needed to acquire, improve or construct properties or facilities to enhance water and sewer services to our customers.

CAPITAL EQUIPMENT: A capital asset with a useful life of at least 3 years, a cost exceeding \$5,000 and is financed with short-term debt or cash. Examples include rolling stock and computer equipment.

CAPITAL EXPENDITURES: Are expenditures associated with acquiring, upgrading, and maintaining physical assets such as property, plants, buildings, technology, or equipment to increase the scope of operations or add some economic benefit to the operation.

CAPITAL IMPROVEMENT PROGRAM (CIP): A plan, which identifies the nature, schedule and cost of long-term improvements to DC Water’s infrastructure.

CCF (Ccf): Hundred cubic feet or 748 gallons.

CERIDIAN: DC Water’s fully integrated payroll and personnel system designed to accommodate a variety of pay, leave, and work rules and to provide a comprehensive set of human resource applications.

CHLORAMINATION: The process of adding chloramines to drinking water. Chloramine, a form of chlorine and ammonia, is used as a disinfectant by the Washington Aqueduct.

CLASS A BIOSOLIDS: Class A Biosolids is a designation for dewatered and heated sewage sludge that meets U.S. EPA guidelines for land application with no restrictions. Thus, class A biosolids can be legally used as fertilizer on farms, vegetable gardens, and can be sold to home gardeners as compost or fertilizer.

CLEAN RIVERS IMPERVIOUS AREA CHARGE (CRIAC): DC Water uses information contained in the District of Columbia’s GIS plainmetric database, which includes tax and property records to determine impervious surface areas. (All surfaces are classified as either pervious or impervious). An impervious charge is billed to DC Water customers based on Equivalent Residential Unit (ERU). This is the amount of impervious surface area measured in square feet based on a statistical median for a single family residential property.

CLEAN WATER ACT (CWA): Act passed by the U.S. Congress in 1972 to control water pollution.

COMBINED HEAT AND POWER FACILITY (CHP): The facility provides steam necessary for the thermal hydrolysis process that uses intense heat and pressure to treat wastewater solids, producing a much cleaner biosolids, and onsite generation of up to one third of Blue Plains’ electricity needs.

COMBINED SEWER OVERFLOWS (CSO): Discharge of untreated wastewater (a mixture of storm water and sanitary waste) directly to waterways during periods of significant rainfall.

COMBINED SEWER OVERFLOW LONG-TERM CONTROL PLAN (CSO LTCP): This Program encompasses projects designed to reduce overflows into the local waterways by 98%, and is now known as the Clean Rivers Project.

COMBINED SEWER SYSTEM LONG-TERM CONTROL PLAN (CSS LTCP): Final plan submitted by DC Water in July 2002 and approved by EPA in March 2005 to control Combined Sewer Overflow (CSO’s) to the Districts waterways.

COMMERCIAL PAPER: Short-term (less than 270 days) notes issued by DC Water to provide interim financing of its capital improvement program. Commercial paper typically carries lower interest rates than long-term debt and is issued on a subordinate basis.

CONTINUITY OF OPERATIONS (COOP): A plan, which identifies operational schedules. and puts in place a strategy to ensure uninterrupted operations during emergencies at DC Water.

CRIAC NON-PROFITS RELIEF PROGRAM: District funded program to provide CRIAC credits to non-profit organizations as determined by the District Department of the Environment (DDOE).

CUSTOMER ASSISTANCE PROGRAM (CAP): Existing program that uses LIHEAP (Low Income Home Energy Assistance Program) criteria to provide DC Water-funded discounts to low-income residential customers with incomes up to 60 percent of the State Median Income (SMI from Health and Human Services (HHS)).

CUSTOMER ASSISTANCE PROGRAM II (CAP2): CDC Water’s proposed expanded program for low-income residential customers who do not qualify for CAP with household income up to 80% Area Median Income (AMI).

CUSTOMER ASSISTANCE PROGRAM III (CAP3): District-funded program to provide benefits to DC Water customers with household income greater than 80% and up to 100% Area Median Income (AMI) who do not qualify for CAP or CAP2.

CUSTOMER CLASS-BASED VOLUMENTRIC RATES: Rate differentiation based on the peaking demands of each customer class (residential, multi-family and non-residential).

CUSTOMER INFORMATION SYSTEM (CIS): System which DC Water utilizes for customer billing and information and other related services.

DC CLEAN RIVERS PROJECT: New name for the COMBINED SEWER OVERFLOW LONG TERM CONTROL PLAN (CSO LTCP), which is a program that encompasses projects designed to reduce overflows into the local waterways by 98%.

DC WATER WORKS: local hiring initiatives for DC Water projects.

DEAMMONIFICATION: This involves Anammox bacteria working synergistically with Ammonia Oxidizing Bacteria to oxidize ammonia without organic carbon to produce nitrogen gas.

DEBT RATING: An independent opinion, based on a comprehensive quantitative and qualitative evaluation, of a company's financial position, operating performance, business profile and management. Specifically, the debt rating reflects a company’s ability to meet its obligations to repay interest and principal on outstanding obligations to investors.

DEBT SERVICE: Amount of money necessary to pay principal and interest on senior outstanding notes and bonds in any given fiscal year.

DEBT SERVICE COVERAGE: Requirement of DC Water’s master trust indenture and Board policy that provides that annual revenue available to pay debt service must exceed annual debt service by a certain percentage. DC Water’s master trust indenture requires 120 percent senior debt service coverage; DC Water Board policy requires 140 percent senior debt service coverage.

DEWATERED SLUDGE LOADING FACILITY: Is a facility used to minimize waste and reduce the weight and volume of the sludge so that disposal costs, including transportation are kept to a minimum.

EFFLUENT: Treated wastewater discharged from the Blue Plains Advanced Wastewater Treatment Plant.

ENABLING ACT: Legislation which established DC Water and defined its purpose and authority. DC Water’s enabling legislation was initially enacted in 1996.

ENCUMBRANCES: Obligations in the form of purchase orders, contracts or salary commitments which are chargeable to an appropriation and for which a part of the appropriation is reserved. They cease to be encumbrances when paid or when an actual liability is released.

ENHANCED CLARIFICATION FACILITY (ECF): This facility is part of DC Water’s proposed Total Nitrogen-Wet Weather plan, which addresses the requirements of the Long Term Control Plan, as well as the Chesapeake Bay Tributary Strategies for reducing nitrogen discharged in the Chesapeake Bay.

ENHANCED NITROGEN REMOVAL FACILITY: This Program Area represents the new name for the Total Nitrogen Program (BTN) which includes projects for new facilities and upgrades to existing facilities needed at Blue Plains to meet the total nitrogen discharge limit that has been included in DC Water’s 2010 NPDES permit.

ENTERPRISE FUND: A fund established to finance and account for the acquisition, operation, and maintenance of governmental facilities and services, which are entirely or predominantly self-supporting by user charges. This type of fund uses the accrual basis of accounting. DC Water is responsible for two enterprise funds:

- 1) Water and Sewer Enterprise Fund
- 2) The District of Columbia Stormwater Enterprise Fund

ENVIRONMENTAL PROTECTION AGENCY (EPA): Federal agency responsible for environmental regulations and enforcement.

EXPENDITURES: Payment for goods and services received.

EXTENDABLE MUNICIPAL COMMERCIAL PAPER PROGRAM (EMCP): A money-market security issued by large organizations to obtain funds to meet short-term debt obligations, and is backed only by an issuing bank or corporation’s promise to pay the face amount on the maturity date specified on the note.

EXTRACT, TRANSFORM and LOAD (ETL) refers to a process in database usage and especially in data warehousing that:

- Extracts data from homogeneous or heterogeneous data sources
- Transforms the data for storing it in proper format or structure for querying and analysis purpose
- Loads it into the final target (database, more specifically, operational data store, data mart, or data warehouse)

FABRIDAM: A dynamic weir (or dam) that inflates and deflates depending on the structure set point. Set points vary from structure to structure.

FILTRATE TREATMENT FACILITY (FTF): Also known as the Centrate Treatment Facility and is a part of the Total Nitrogen Removal Wet Weather plan, provides a new treatment system that will remove nitrogen from the recycle stream of solids processing at Blue Plains. The facility uses six sequencing batch reactors to treat a nitrogen-rich system from the Final Dewatering Facility’s belt filter presses.

FISCAL YEAR: The twelve-month period used by DC Water, which begins October 1 and ends September 30 of the following calendar year.

FIXED ASSET: Long-lived property owned by an entity used by an entity in the production of its income. Tangible fixed assets include real estate, plant, and equipment.

FUND BALANCE: Is the difference between assets and liabilities in a governmental fund.

GENERAL OBLIGATION DEBT: This is money that DC Water still owes the District of Columbia for bond issuance prior to the enabling act that created DC Water.

HYBRID PLUG-IN VEHICLE: A hybrid electric vehicle that utilizes rechargeable batteries, or another energy storage device, that can be restored to full charge by connecting a plug to an external electric power source (usually a normal electric wall socket).

IMPERVIOUS SURFACE: an area that impedes or retards the percolation of water into the subsoil and impedes plant growth. Impervious surfaces include but are not limited to the following: roofprints, footprints of patios, driveways, private streets, other paved areas, tennis courts, and swimming pools, and any path or walkway that is covered by impervious material.

INFRASTRUCTURE: DC Water's facilities, services, and installations needed for its functioning, such as its water, sewer and customer delivery systems.

INTER-MUNICIPAL AGREEMENT OF 1985 (IMA): This agreement outlines the operating and financial responsibilities for wholesale wastewater treatment services at Blue Plains. Signatories to the IMA include the District of Columbia, Montgomery and Prince George's Counties in Maryland, Fairfax County, Virginia, and the Washington Suburban Sanitary Commission.

INTERCEPTORS: The large pipes that convey wastewater from the collection system to DC Water's wastewater treatment plant, Blue Plains.

INTERNAL IMPROVEMENT PLAN (IIP): Operational improvement plans for various operating departments across DC Water that will result in improved service and cost savings to DC Water's customers. Proposed improvements are a function of new capital projects, investments in technology, and new business processes. IIP's have been developed for the Departments of Wastewater Treatment, Maintenance Services, and Customer Service, and are in process for the Departments of Water and Sewer Services.

INVERTED BLOCK RATE STRUCTURES: Is a schedule of rates applicable to blocks of increasing usage in which the usage in each succeeding block is charged at a higher unit rate than in the previous blocks. Generally, each successive block rate may be applicable to a greater volume of water delivery than the preceding block(s).

JOINT USE SEWERAGE FACILITIES: A list of specific facilities identified in the DC Official Code, Section #34-2202.01(4).

LIFELINE RATE: A lifeline rate for the first 4 Ccf of Single Family Residential (SFR) water use to reflect baseline usage by residential customers without peaking cost.

LOCAL SMALL DISADVANTAGED BUSINESS ENTERPRISE (LSDBE): Business entities that are encouraged to do business in the District through supportive legislation, business development programs, and agency and public/private contract compliance.

LOW IMPACT DEVELOPMENT (LID): Integrates ecological and environmental considerations into all phases of urban planning, design and construction in order to avoid encroaching on environmentally fragile or valuable lands, and to decrease runoff volumes and peak flow impacts.

MASTER FACILITIES PLAN: A twenty-year plan that outlines proposed capital improvements across DC Water. This plan is updated every three to five years.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4): A regulatory program for controlling stormwater pollution.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES): A permit issued by the EPA that governs effluent discharges into various rivers and waterways by Blue Plains and DC Water's sewer system.

NINE MINIMUM CONTROLS (NMC): Nine EPA-designated activities that DC Water must undertake to reduce Combined Sewer Overflow (CSO) while implementing its Long Term Control Plan (LTCP).

NITRIFICATION: An aerobic process in which bacteria changes the ammonia and organic nitrogen in wastewater into oxidized nitrogen.

OPERATING BUDGET: The budget that encompasses the day-to-day activities for DC Water. The operating budget includes employee salaries, supplies, and other non-personnel items related to current activities. The operating budget also includes other costs including debt service and payment in lieu of taxes/right of way fees.

OPERATING RESERVE: Reserve established by the Board of Directors equivalent to approximately 120 days of budgeted operating and maintenance expenses with the objective of maintaining at least \$125.5 million.

OPERATIONS & MAINTENANCE (O&M): The activities related to the performance of routine, preventive, and predictive, actions aimed at preventing DC Water's equipment and infrastructure from failure or decline, with the goal of increasing efficiency, reliability, and safety.

OUTFALL: The place or structure where effluent is discharged into receiving waters.

PAYMENT IN LIEU OF TAXES (PILOT): Amounts which DC Water pays each fiscal year to the District and institutions in which its facilities are located. Consistent with the provisions of DC Water's Enabling Act, these payments are to be based on services received and certified from the District of Columbia.

PLANT RESIDUALS: In 2003, the EPA issued a revised NPDES permit to the Washington Aqueduct (WAD) and entered into a Federal Facilities Compliance Agreement (the federal agency equivalent of an Administrative Order) requiring WAD, to have in operation, by Dec 31, 2009, a new process, which dewater the residuals on site and trucks them off-site for disposal.

PLUG-IN ELECTRIC VEHICLE: Any motor vehicle that can be recharged from an external source of electricity, such as wall sockets, and the electricity stored in the rechargeable battery packs drives or contributes to drive the wheels.

POTOMAC INTERCEPTOR: Fifty-mile interceptor that carries wastewater from Loudoun and Fairfax Counties in Virginia and Montgomery County in Maryland to Blue Plains.

PRIMARY TREATMENT: A wastewater treatment process that allows those substances in wastewater that readily settles or floats to be separated from the water being treated.

PRINCIPAL: The total amount of money being borrowed or lent.

PROCESS COMPUTER CONTROL SYSTEM (PCCS): Electronically monitors and controls all treatment processes and facilities.

RATE STABILIZATION FUND: A fund established by the Board of Directors, which is used to implement rate increases on a gradual and predictable basis.

RESERVES: An accounting entry that properly reflects contingent liabilities.

REVENUE: An increase in (sources of) fund financial resources other than from inter-fund transfers and debt issue proceeds. Revenues should be classified by fund and source.

REVENUE BONDS: Bonds payable from specific source of revenue and which do not pledge the full faith and credit of the issuer.

RIGHT-OF-WAY FEE (ROW): A permit fee that the District of Columbia Government charges DC Water for water and sewer conduits that it occupies within the District of Columbia.

SAFE DRINKING WATER ACT (SDWA): Act passed by the U.S. Congress (most recently amended in 1996) to control drinking water quality.

SECONDARY TREATMENT: Usually following primary treatment, secondary treatment employs microorganisms to reduce the level of biochemical oxygen demand (BOD) in wastewater.

SENIOR DEBT: Debt whose terms in the event of bankruptcy require it to be repaid before subordinated debt receives any payment.

SLUDGE: Solid residue from wastewater treatment, also known as Biosolids.

SUBORDINATED DEBT: Debt over which senior debt takes priority. In the event of bankruptcy, subordinated debtholders receive payment only after senior debt claims are paid in full.

SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA): Equipment and computer technology used to monitor and control the water distribution and wastewater conveyance systems.

SUPPLEMENTAL ENVIRONMENTAL PROJECT (SEP): A project DC Water is funding as part of its nine minimum control (NMC) CSO consent order.

SYSTEM AVAILABILITY FEE (SAF): Fee assessed to new development (or redevelopment) to recover the investment in available system capacity, based on meter size.

THE BLUEPRINT: DC Water's Strategic Plan.

TUNNEL DEWATERING PUMP STATION (TDPS)/ENHANCED CLARIFICATION FACILITY (ECF): The TDPS facility starts where the DC Clean Rivers Project tunnels end at Blue Plains. The TDPS will pump millions of gallons of combined sewer overflows and the ECF will treat the captured wet-weather flows, previously flowed into the District's waterways during heavy rain storms.

WASHINGTON AQUEDUCT: A division of the U.S. Army Corps of Engineers which owns and operates the water treatment facilities for DC Water, Arlington and Falls Church, Virginia. DC Water purchases treated drinking water on a wholesale basis from the Washington Aqueduct, and is responsible for approximately 73 percent of the Aqueduct's costs.

WATER SYSTEM REPLACEMENT FEE (WSRF): A fixed monthly fee designed to fund the 1 percent renewal and replacement of aging water infrastructure for residential, multi-family and non-residential customers.

WET WEATHER TREATMENT FACILITY: A wet weather event is deemed to start when plant influent is greater than a rate of 511 mgd and deemed to stop four hours after plant influent drops to a rate of 511 mgd or a period of 4 hours has elapsed since the start of a wet weather event, whichever occurs last.

ACRONYMS

3PP: Third Party Portal

CCTV: Closed Circuit TV

ADA: Americans with Disability Act

CFCI: Cash Financed Capital Improvements

AED: Automated External Defibrillator

CHP: Combined Heat and Power

AFV: Alternative Fueled Vehicle

CIP: Capital Improvement Program

AMI: Advanced Metering Infrastructure

CIPP: Critical Infrastructure Protection Plan

AMR: Automatic Meter Reading

CIS: Customer Information System

AMSA: Association of Metropolitan Sewerage Agencies

CMF: Central Maintenance Facility

ANC: Advisory Neighborhood Commission

CMOM: Capacity Management Operation and Maintenance

ART: Advanced Research Testing

COBRA: The Consolidated Omnibus Budget Reconciliation Act Of 1985

ASA: American Shotcrete Association

COF: Central Operations Facility

AWWTP: Advanced Waste Water Treatment Plant

COG: Metropolitan Washington Council of Governments

BABs: Build America Bonds

COOP: Continuity of Operations Plan

BOD: Biochemical Oxygen Demand

COTR: Contracting Officer's Technical Representative

BP: Blue Plains

CRIAC: Clean Rivers Impervious Area Change

CAFR: Comprehensive Annual Financial Report

CSO LTCP: Combined Sewer Overflow Long-Term Control Plan

CAP: Customer Assisted Program

CSO: Combined Sewer Overflows

CC&O: Customer Care & Operations

CSP: Comprehensive Safety Program

ACRONYMS

CSRS: Civil Service Retirement System	EBU: Equivalent Billing Unit
CSS LTCP: Combined Sewer System Long-Term Control Plan	ECF: Enhanced Clarification Facility
CWA: Clean Water Act	EDMC: Engineering Document Management and Control
CWSFR: Clean Water State Revolving Fund	EEOC: Equal Employment Opportunity Commission
DCFEMS: DC Fire and Emergency Medical Services	EIS: Environmental Impact Statement
DCRA: District of Columbia Department of Consumer and Regulatory Affairs	EMA: Emergency Management Agency
DDOT: District of Columbia Department of Transportation	EMAP: Emergency Management Accreditation Program
DEMON: Deammonification Process	EMCP: Extendable Municipal Commercial Paper Program
DETS: Department of Engineering and Technical Services	ENRF: Enhanced Nitrogen Removal Facilities
DMRQA: Discharge Monitoring Report Quality Assurance	EOC: Emergency Operations Center
DOEE: District of Columbia Department of Energy & Environment	EPA: Environmental Protection Agency
DRBCP: Disaster Recovery and Business Continuity Plan	ERDMS: Enterprise Records and Document Management System
DSLFL: Dewatered Sludge Loading Facility	ERP: Enterprise Resource Planning System
DSS: Department of Sewer Services	ERU: Equivalent Residential Unit
DWE: Department of Wastewater Engineer	ESC: Executive Steering Committee
DWS: Department of Water Services	ESF: Emergency Support Function
EA: Environmental Assessment	ETL: Extract, Tool, Load

ACRONYMS

FCPA: Foreign Corruption Practices Act	HVAC: Heating Ventilation and Air Conditioning
fdf: Final Dewatering Facility	I&C: Instrumentation and Controls
FEMA: Federal Emergency Management Agency	I&I: Infiltration and Inflow
FOC: Fiber Optic Cable	IAC: Impervious Area Charge
FOG: Fats, Oil, and Grease	IFB: Invitation for Bid
FONSI: Finding of No Significant Impact	IIP: Internal Improvement Plan
FTE: Full Time Employee	IMA: Inter-Municipal Agreement
FTF: Filtrate Treatment Facility	IOT: Internet of Things
GFOA: Government Finance Officers Association	IR&R: Infrastructure Repair & Replacement
GHG: Green House Gas	IT: Information Technology
GICD: Green Infrastructure Consent Decree	ITA: International Tunnelling Association
GIS: Geographical Information System	IVR: Interactive Voice Response
GMP: Guaranteed Maximum Price	JBAB: Joint Base Anacostia-Bolling
HPEV: Hybrid Plug-In Vehicle	JUDD: Joint Utility Discount Day
HPRP: High Priority Rehabilitation Program	KPI: Key Performance Indicators
HQO: Head Quarters Office	LDWMR: Large Diameter Water Main Rehabilitation
HUNA: High Usage Notification Application	LID: Low Impact Development

ACRONYMS

LOTO: Log Out Tag-Out

NEBT: North East Boundary Tunnel

LSC: Local Steering Committee

NEPA: National Environmental Policy Act

LSDBE: Local Small Disadvantaged Business Enterprise

NFPA: National Fire Protection Agency

LSR: Lead Service Replacement

NHPA: National Historic Preservation Act

LTCP: Long Term Control Plan

NMC: Nine Minimum Controls

MBE: Minority Business Enterprise

NPDES: National Pollutant Discharge Elimination System

MGD: Million Gallons Per Day

NPFMP: Non-Process Facilities Master Plan

MJUF: Multi-Jurisdictional Use Facility

NWBSO: Northwest Boundary Sewer Overflow

MOCRS: Mayor's Office of Community Relations and Services

O&M: Operations & Maintenance

MOU: Memorandum of Understanding

OCIP: Owner Controlled Insurance Program

MPT: Main Process Train

OEM: Original Equipment Manufacturer

MS4: Municipal Separate Storm Sewer System

OMAC: Office of Marketing and Communications

MTA: Messtechnik Associates

OMB: Office of Management and Budget

MTBF: Meantime Between Failures

OSHA: Occupational Safety and Health Administration

MTTR: Meantime to Repair

PBS: Public Broadcasting Service

MW: Mega Watt

PCA: Pipe Condition Assessment

NEB: North East Boundary

PCCS: Process Computer Control System

ACRONYMS

PCS: Process Control System	RCM: Reliability Centered Maintenance
PDMS: Payables Document Management Systems	RFE: Reclaimed Final Effluent
PEV: Plug-In Electric Vehicle	RFP: Request for Proposal
PILOT: Payment In Lieu of Taxes	RFQ: Request for Quotation
PLC: Program Logic Control	RSF: Rate Stabilization Fund
PM: Preventive Maintenance	RWWP: Raw Wastewater Pump Station
PPA: Power Purchase Agreement	SAF: System Availability Fee
PPM: Parts Per Million	SCADA: Supervisory Control and Data Acquisition
PRT: Potomac River Tunnel	SDWA: Safe Drinking Water Act
PRV: Pressure Release Valve	SDWMR: Small Diameter Water Main Replacement
PS: Pumping Station	SEP: Supplemental Environmental Project
PSA: Public Service Announcement	SFR: Single Family Residence
PSIM: Physical Security Information Management	SOP: Standard Operating Procedure
PSSDB: Primary Scum Screening Degrating Building	SOX: Sarbanes Oxley Act
PSW: Process Service Water System	SPLASH: Serving People by Lending a Supporting Hand
PZIP: Pressure Zone Increase Project	SSO: Sanitary Sewer Overflow
QMS: Quality Management System	TDPS: Tunnel Dewatering Pump Station

ACRONYMS

TEAMS: Total Enterprise Asset Management System

TMDL: Total Maximum Daily Pollutant Loads

TN: Total Nitrogen

UAMI: Upper Anacostia Main Interceptor

ULSD: Ultra-Low Sulfur Diesel

USACE: U.S. Army Corps of Engineers

VAV: Variable Air Volume

VEP: Valve Exercise Program

VIT: Vehicle Information Transmitter

WAD: Washington Aqueduct

WaSSP: Water and Sewer Sensor Program

WBE: Women Business Enterprise

WSRF: Water System Replacement Fee

WSSC: Washington Suburban Sanitary Commission

WWTP: Wastewater Treatment Plant

Presented and Adopted: April 1, 2021

Subject: Approval of Proposed Fiscal Year 2022 Operating Budget

**#21-30
RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority, ("DC Water") at the Board meeting on April 1, 2021, upon consideration of a joint-use matter, decided by a vote of ten (10) in favor and none (0) opposed, to take the following action with respect to the Fiscal Year 2022 Proposed Operating Budget.

WHEREAS, during the Fiscal Year 2022 Budget Workshop on February 4, 2021, the Chief Executive Officer and General Manager, and Chief Financial Officer and Executive Vice President, Finance and Procurement, briefed Board members on the Proposed FY 2022 Operating Budget that totaled \$658,423,000; and

WHEREAS, on February 23, 2021, the Finance and Budget Committee in a joint session with the DC Retail Water and Sewer and Rates Committee and reviewed the budget proposals and discussed in detail, the budget drivers, strategic budget decisions, budget assumptions, risks and customer impact; and

WHEREAS, on March 25, 2021, the Finance and Budget Committee further reviewed the budget proposals and discussed in detail the budget drivers, strategic budget decisions, budget assumptions, risks and customer impact, and recommended that the Board adopt the FY 2022 Operating Budget that totals \$658,423,000, including \$15,000 for representation and \$10,000 for official meetings.

NOW THEREFORE BE IT RESOLVED THAT:

The Board hereby approves and adopts DC Water's Proposed Fiscal Year 2022 Operating Budget totaling \$658,423,000, including \$15,000 for representation and \$10,000 for official meetings, and as further detailed in the Chief Executive Officer and General Manager's Proposed Fiscal Year 2022 Budget presented on February 4, 2021 and accompanying materials.

This resolution is effective immediately.


Secretary to the Board of Directors

Attachment A

<i>\$ in thousands</i>	FY 2021 Approved	FY 2022 Proposed
Total Personnel Services	\$ 177,863	\$ 180,353
Chemical & Supplies	36,081	34,201
Utilities	27,911	27,329
Contractual Services	88,532	88,504
Biosolid		
Water Purchases	36,250	35,217
Small Equipment	1,030	1,108
Total Non-Personnel Services	189,804	186,359
Total Operations & Maintenance	\$ 367,667	\$ 366,711
Debt Service	222,268	231,164
PILOT & ROW	22,372	22,718
Cash Financed Capital Improvements	30,355	37,830
Total Non-O& M	274,995	291,712
Total Operating Expenditure	\$ 642,662	\$ 658,423
Capital Labor Charges	(24,382)	(25,086)
Net Operating Expenditure	\$ 618,280	\$ 633,337

Presented and Adopted: April 1, 2021

Subject: Approval of Proposed Fiscal Year 2021 - 2030 Capital Improvement Program

**#21-29
RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority, ("DC Water") at its meeting on April 1, 2021 upon consideration of a joint-use matter, decided by a vote of ten (10) in favor and none (0) opposed, to take the following action with respect to the Fiscal Year 2021 - 2030 Capital Improvement Program.

WHEREAS, pursuant to Resolution #10-76, dated July 1, 2010, the Board's Rate Stabilization Fund Policy requires an annually updated 10-Year Financial Plan, which includes a 10-Year Capital Disbursement Plan; and

WHEREAS, on March 5, 2020, through Resolution #20-15, the Board approved the Proposed Fiscal Year (FY) 2020 - 2029 Capital Improvement Program, which includes the FY 2020 - 2029 Capital Disbursement Plan and related Lifetime Budget; and

WHEREAS, during the FY 2022 Budget Workshop on February 4, 2021, the Chief Executive Officer and General Manager, Chief Financial Officer and Executive Vice President, Finance and Procurement, and Chief Operating Officer and Executive Vice President, briefed Board members on the FY 2021 - 2030 Capital Improvement Program, which includes the proposed Revised FY 2021 CIP Disbursement Budget of \$471,267,000, the proposed 10-Year Disbursement Plan totaling \$5,432,489,000 and the proposed Lifetime Budget of \$12,133,115,000; and

WHEREAS, the COVID-19 pandemic has had an impact on revenues, in response the Chief Executive Officer and General Manager has prioritized operating expenditures and capital projects, and proposed reducing the Approved FY 2021 CIP Disbursement Budget of \$507,590,000 by \$36,323,000 resulting in a proposed Revised FY 2021 CIP Disbursement Budget of \$471,267,000; and

WHEREAS, on February 18, 2021, the Environmental Quality and Operations Committee reviewed the budget proposals and discussed in detail the budget scenarios, budget drivers, strategic budget decisions, budget assumptions and risks; and

WHEREAS, on February 23, 2021, the Finance & Budget Committee and the DC Retail Water and Sewer Rates Committee, in a joint meeting, reviewed the budget proposals

and discussed in detail the budget drivers, strategic budget decisions, budget assumptions, risks, and customer impacts; and

WHEREAS, on March 18, 2021, the Environmental Quality and Operations Committee, reviewed the budget proposals and discussed in detail the budget drivers, budget assumptions, and risks, and recommended that the Board adopt the FY 2021 - 2030 Capital Improvement Program, which includes the proposed Revised FY 2021 CIP Disbursement Budget of \$471,267,000, proposed 10-Year Capital Disbursement Plan totaling \$5,432,489,000, and related Lifetime Budget, totaling \$12,133,115,000; and

WHEREAS, on March 23, 2021, the DC Retail Water and Sewer Rates Committee reviewed the budget proposals and discussed in detail the budget drivers, strategic budget decisions, budget assumptions, risks, and customer impacts; and

WHEREAS, on March 25, 2021, the Finance & Budget Committee, reviewed the budget proposals and discussed in detail the budget drivers, strategic budget decisions, budget assumptions, and customer impacts, and recommended that the Board adopt the FY 2021 - 2030 Capital Improvement Program, which includes the proposed Revised FY 2021 CIP Disbursement Budget of \$471,267,000, proposed 10-Year Capital Disbursement Plan totaling \$5,432,489,000, and related Lifetime Budget, totaling \$12,133,115,000.

NOW THEREFORE, BE IT RESOLVED THAT:

The Board hereby approves and adopts DC Water's FY 2021 - 2030 Capital Improvement Program, which includes the Revised FY 2021 CIP Disbursement Budget of \$471,267,000, Fiscal Year 2021 – 2030 Capital Improvement Program Disbursement Plan totaling \$5,432,489,000, and related Lifetime Budget totaling \$12,133,115,000 provided in Attachment A-1 and as further detailed in the Chief Executive Officer and General Manager's Proposed Fiscal Year 2022 Budget, presented on February 4, 2021 and accompanying materials.

This resolution is effective immediately.


Secretary to the Board of Directors

Presented and Adopted: April 1, 2021

SUBJECT: Approval of Fiscal Year 2021 - 2030 Ten-Year Financial Plan

**#21-28
RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority ("DC Water") at the Board meeting held on April 1, 2021, upon consideration of a joint-use matter decided by a vote of ten (10) in favor and none (0) opposed, to take the following action with respect to the Fiscal Year 2021 - 2030 Ten Year Financial Plan.

WHEREAS, prudent utility financial management requires a long-term financial plan that integrates common elements of the ten-year capital improvement program, future capital financing plans, projected operating and maintenance budgets, revenue requirements and projected rate increases to support long-term capital and operating needs; and

WHEREAS, the Board, in Resolutions #11-10, dated January 6, 2011 and #13-57, dated May 2, 2013, adopted a series of financial policies in the areas of capital financing, long-term financial planning, and rate-setting to assure the short-term and long-term financial health of DC Water; and

WHEREAS, adherence to these financial policies has allowed the DC Water to receive strong bond ratings that will reduce debt service costs over the ten-year planning period; and

WHEREAS, on March 5, 2020, through Resolution #20-16, the Board approved the Proposed Fiscal Year 2020 - 2029 Ten-Year Financial Plan; and

WHEREAS, consistent with the Board policies and management financial targets, the General Manager prepared the proposed Fiscal Year 2021 - 2030 Ten Year Financial Plan consistent with the proposed FY 2022 Operating and Capital Budgets; and

WHEREAS, the proposed Fiscal Year 2021 - 2030 Ten Year Financial Plan is based on assumptions detailed in the proposed Fiscal Year 2022 Operating and Capital Budgets; and

WHEREAS, the proposed Fiscal Year 2021 - 2030 Ten Year Financial Plan presented in Schedule A and reflected in Schedule B FY 2021 - FY 2030 Average Residential Customer Monthly Bill, and the FY 2021 and 2022 Rates, Charges and Fees provided in Schedule C; and

WHEREAS, during the FY 2022 Budget Workshop on February 4, 2021, the Chief Executive Officer and General Manager, Chief Financial Officer and Executive Vice President, Finance and Procurement, and Chief Operating Officer and Executive Vice President, briefed Board members on the Fiscal Year 2021 - 2030 Ten Year Financial Plan and Fiscal Year 2022 Budget; and

WHEREAS, the COVID-19 pandemic has had an impact on revenues, in response the Chief Executive Officer and General Manager has prioritized operating expenditures and capital projects, and proposed reducing the Net Revenues After Debt Services of \$115,456,000 for Fiscal Year 2021 in the approved Fiscal Year 2020 - 2029 Financial Plan Budget by \$16,992,000 resulting in a proposed revised Net Revenues After Debt Services to \$98,464,000 for Fiscal Year 2021 in the proposed Fiscal Year 2021 – 2030 Ten Year Financial Plan; and

WHEREAS, on February 23, 2021, the DC Retail Water and Sewer Rates Committee and Finance and Budget Committee, jointly met and reviewed the proposed Fiscal Year 2020-2030 Ten-Year Financial Plan; and

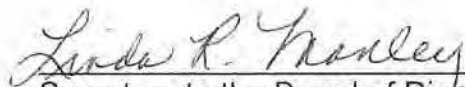
WHEREAS, on March 23, 2021, the DC Retail Water and Sewer Rates Committee met and reviewed the proposed Fiscal Year 2021 - 2030 Ten Year Financial Plan, and recommended that the Board adopt the plan as recommended by the General Manager; and

WHEREAS, on March 25, 2021, the Finance and Budget Committee met and reviewed the proposed Fiscal Year 2021 - 2030 Ten Year Financial Plan, and recommended that the Board adopt the plan as recommended by the General Manager.

NOW THEREFORE BE IT RESOLVED THAT:

1. The Board hereby approves and adopts the proposed Fiscal Year 2021 - 2030 Ten Year Financial Plan as presented in Schedule A and reflected in Schedule B FY 2021 - FY 2030 Average Residential Customer Monthly Bill and the FY 2021 and 2022 Rates, Charges and Fees provided in Schedule C and consistent with the proposed Fiscal Year 2022 Operating and Capital Budgets.

This resolution is effective immediately.


Secretary to the Board of Directors

District of Columbia Water & Sewer Authority

FY 2021 - FY 2030 Financial Plan

(In 000's)

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
OPERATING										
Retail*	\$ 570,055	\$ 620,781	\$ 648,304	\$ 700,728	\$ 727,823	\$ 766,019	\$ 805,865	\$ 850,203	\$ 896,819	\$ 924,823
Wholesale	81,709	84,669	87,209	89,825	92,520	95,295	98,154	101,099	104,132	107,256
Other	37,997	40,435	41,136	44,580	47,256	52,054	54,209	56,710	58,977	59,700
RSF	2,500	10,500	-	-	-	-	-	-	-	-
Operating Receipts ⁽¹⁾	\$ 692,262	\$ 756,385	\$ 776,649	\$ 835,133	\$ 867,599	\$ 913,369	\$ 958,228	\$ 1,008,012	\$ 1,059,928	\$ 1,091,778
Operating Expenses	(345,498)	(364,345)	(375,219)	(386,427)	(397,980)	(409,886)	(422,159)	(434,809)	(447,847)	(461,287)
Debt Service	(217,944)	(231,164)	(240,459)	(250,382)	(270,935)	(285,552)	(303,384)	(322,075)	(339,858)	(352,409)
Cash Financed Capital Improvement	\$ (30,355)	\$ (37,830)	\$ (45,381)	\$ (49,051)	\$ (58,226)	\$ (68,942)	\$ (72,528)	\$ (76,518)	\$ (80,714)	\$ (83,234)
Net Revenues After Debt Service	\$ 98,464	\$ 123,046	\$ 115,889	\$ 149,273	\$ 140,458	\$ 148,988	\$ 160,158	\$ 174,610	\$ 191,509	\$ 194,848
Operating Reserve-Beg Balance	186,827	185,000	194,000	201,000	205,000	215,000	220,000	230,000	240,000	250,000
Other Misc (Disbursements)/Receipts	918	(2,854)	(3,761)	(6,742)	-	-	-	-	-	-
Wholesale/Federal True Up	(4,000)	-	-	-	-	-	-	-	-	-
Project Billing Refunds	-	-	-	-	-	-	-	-	-	-
Transfers To RSF	-	-	-	-	-	-	-	-	-	-
Pay-Go Financing	(97,209)	(111,192)	(104,828)	(138,532)	(130,458)	(143,988)	(150,159)	(164,610)	(181,509)	(189,848)
Operating Reserve - Ending Balance	\$ 185,000	\$ 194,000	\$ 201,000	\$ 205,000	\$ 215,000	\$ 220,000	\$ 230,000	\$ 240,000	\$ 250,000	\$ 255,000
Rate Stabilization Fund Balance RSF ⁽²⁾	\$ (87,744)	\$ (77,244)	\$ (77,244)	\$ (77,244)	\$ (77,244)	\$ (77,244)	\$ (77,244)	\$ (77,244)	\$ (77,244)	\$ (77,244)
Senior Debt Service Coverage	477%	532%	489%	587%	620%	594%	572%	589%	642%	641%
Combined Debt Service Coverage	168%	178%	175%	186%	182%	185%	185%	186%	188%	186%
Actual/Projected Water/Sewer Rate Increases	9.9%	7.8%	8.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
*Operating Receipts \$ Increase/Decrease	(2,680)	50,727	27,523	52,425	27,094	38,196	39,846	44,337	46,617	28,004
Retail	2,553	2,959	2,540	2,616	2,695	2,776	2,859	2,945	3,033	3,124
Wholesale	-	-	-	-	-	-	-	-	-	-
*Operating Receipts % Increase/Decrease	-0.5%	8.9%	4.4%	8.1%	3.9%	5.2%	5.2%	5.5%	5.5%	3.1%
Retail	3.2%	3.6%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Wholesale	-	-	-	-	-	-	-	-	-	-

⁽¹⁾ Includes interest earnings on senior tier revenue bonds; debt service reserve fund
⁽²⁾ FY 2022 planned transfers of \$0.0 million to Rate Stabilization Fund and \$10.5 million utilization will bring the total fund balance to \$77.2 million

District of Columbia Water & Sewer Authority FY 2021 - FY 2030 Average Residential Customer Monthly Bill

	Units	Approved									
		Current FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
DC Water Water and Sewer Retail Rates ⁽¹⁾	Ccf	\$ 73.30	\$ 78.92	\$ 85.61	\$ 92.07	\$ 98.98	\$ 106.40	\$ 114.41	\$ 123.04	\$ 132.26	\$ 142.14
DC Water Clean River's IAC ⁽²⁾	ERU	19.52	18.40	19.58	24.07	23.07	23.82	24.56	25.64	26.78	23.45
DC Water Customer Metering Fee	5/8"	4.96	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75
DC Water Water System Replacement Fee ⁽⁴⁾	5/8"	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30	6.30
Subtotal DC Water Rates & Charges		\$ 104.08	\$ 111.37	\$ 119.24	\$ 130.19	\$ 136.10	\$ 144.27	\$ 153.02	\$ 162.73	\$ 173.09	\$ 179.64
Increase / Decrease		\$ 6.73	\$ 7.29	\$ 7.87	\$ 10.95	\$ 5.91	\$ 8.17	\$ 8.75	\$ 9.71	\$ 10.36	\$ 6.55
District of Columbia PILOT Fee ⁽³⁾	Ccf	\$ 2.93	\$ 3.04	\$ 3.09	\$ 3.14	\$ 3.20	\$ 3.25	\$ 3.31	\$ 3.36	\$ 3.41	\$ 3.47
District of Columbia Right-of-Way Fee ⁽¹⁾	Ccf	1.03	1.03	1.03	1.08	1.08	1.08	1.08	1.08	1.14	1.19
District of Columbia Stormwater Fee ⁽³⁾	ERU	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
Subtotal District of Columbia Charges		\$ 6.63	\$ 6.74	\$ 6.79	\$ 6.89	\$ 6.95	\$ 7.00	\$ 7.06	\$ 7.11	\$ 7.22	\$ 7.33
Total Amount Appearing on DC Water Bill		\$ 110.71	\$ 118.11	\$ 126.03	\$ 137.08	\$ 143.05	\$ 151.27	\$ 160.08	\$ 169.84	\$ 180.31	\$ 186.97
Increase / Decrease Over Prior Year		\$ 6.90	\$ 7.40	\$ 7.92	\$ 11.05	\$ 5.97	\$ 8.22	\$ 8.81	\$ 9.76	\$ 10.47	\$ 6.66
Percent Increase in Total Bill		6.6%	6.7%	6.7%	8.8%	4.4%	5.7%	5.8%	6.1%	6.2%	3.7%

(1) Assumes average monthly consumption of 5.42 Ccf. or (4,054 gallons)

(2) Assumes average 1 Equivalent Residential Unit (ERU)

(3) District Department of the Environment stormwater fee of \$2.67 effective November 1, 2010

(4) DC Water "Water System Replacement Fee" of \$6.30 for 5/8" meter size effective October 1, 2015

District of Columbia Water & Sewer Authority
Retail Rates, Charges and Fees
FY 2021 – FY 2022

	Units	Current		Approved	
		FY 2021		FY 2022	
DC Water Retail Rates Water (Residential Lifeline 0 - 4 Ccf)	Ccf	\$ 3.49	\$	\$ 3.63	
DC Water Retail Rates Water (Residential > 4 Ccf)	Ccf	\$ 4.50	\$	\$ 4.74	
DC Water Retail Rates Water (Multi-Family)	Ccf	\$ 3.96	\$	\$ 4.15	
DC Water Retail Rates Water (Non-Residential)	Ccf	\$ 4.65	\$	\$ 4.91	
DC Water Retail Rates Sewer	Ccf	\$ 9.77	\$	\$ 10.64	
DC Water Clean Rivers IAC	ERU	\$ 19.52	\$	\$ 18.40	
DC Water Customer Metering Fee	5/8"	\$ 4.96	\$	\$ 7.75	
DC Water Water System Replacement Fee	5/8"	\$ 6.30	\$	\$ 6.30	
District of Columbia PILOT Fee	Ccf	\$ 0.54	\$	\$ 0.56	
District of Columbia Right-of-Way Fee	Ccf	\$ 0.19	\$	\$ 0.19	
District of Columbia Stormwater Fee	ERU	\$ 2.67	\$	\$ 2.67	

Presented and Adopted: April 1, 2021

SUBJECT: Fiscal Year 2021-2022 Intent to Reimburse Capital Expenditures with Proceeds of a Borrowing

**#21-31
RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

The Board of Directors ("Board") of the District of Columbia Water and Sewer Authority, ("DC Water") at the Board meeting held on April 1, 2021, upon consideration of a joint-use matter, decided by a vote of ten (10) in favor and none (0) opposed, to take the following action with respect to the Fiscal Year 2021-2022 Reimbursement of Capital Expenditures with Proceeds of a Borrowing.

WHEREAS, DC Water intends to acquire, construct and equip improvements to the "System," which shall be considered "Costs of the System" as both terms are defined in the Master Indenture of Trust between DC Water and Wells Fargo Bank, N.A., dated April 1, 1998, including, but not limited to the items and projects set forth in Exhibit A hereto (collectively, the "Projects"); and

WHEREAS, plans for the Projects have advanced and DC Water expects to advance its own funds to pay expenditures related to the Projects ("Expenditures") prior to incurring indebtedness and to receive reimbursement for such Expenditures from proceeds of tax-exempt bonds or notes or taxable debt, or both.

NOW THEREFORE BE IT RESOLVED THAT:

1. DC Water utilizes the proceeds of tax-exempt bonds, taxable bonds or notes (the "Bonds") or other debt in an amount not currently expected to exceed \$400,000,000 to pay costs of the Projects. These costs include amounts heretofore unreimbursed pursuant to Resolution #20-89 the Board adopted on December 3, 2020, plus amounts projected to be reimbursed during Fiscal Year 2021 – 2022.
2. DC Water intends to use the proceeds of the Bonds to reimburse itself for Expenditures with respect to the Projects made on or after the date that is 60 days prior to the date of this Resolution. DC Water reasonably expects on the date hereof that it will reimburse the Expenditures with the proceeds of the Bonds or other debt.
3. Each Expenditure was or will be, unless otherwise supported by the opinion of bond counsel, either (a) of a type properly chargeable to a capital account under general federal income tax principles (determined in each case as of the date of

the Expenditure), (b) a cost of issuance with respect to the Bonds, (c) a nonrecurring item that is not customarily payable from current revenues, or (d) a grant to a party that is not related to or an agent of DC Water so long as such grant does not impose any obligation or condition (directly or indirectly) to repay any amount to or for the benefit of DC Water.

4. DC Water makes a reimbursement allocation, which is a written allocation by DC Water that evidences DC Water's use of proceeds of the Bonds to reimburse an Expenditure, no later than 18 months after the later of the date on which the Expenditure is paid or the Project is placed in service or abandoned, but in no event more than three years after the date on which the Expenditure is paid. DC Water recognizes that exceptions are available for certain "preliminary expenditures," costs of issuance, certain de minimis amounts, expenditures by "small issuers" and expenditures for any construction, the completion of which is expected to require at least five years.
5. The Board adopts this resolution confirming the "official intent" within the meaning of Treasury Regulations 26 CFR § 1.150-2 promulgated under the Internal Revenue Code of 1986, as amended.

This resolution is effective immediately.


Secretary to the Board of Directors

Exhibit A - List of Projects

Blue Plains Plantwide Projects
Blue Plains Enhanced Nitrogen Removal Facilities
Blue Plains Liquid and Solids Processing Projects
Sanitary Sewer System Projects
Combined Sewer System Projects
DC Clean Rivers Project
Stormwater Sewer System Projects
Water Pumping, Distribution and Storage Projects
Metering and Capital Equipment
Washington Aqueduct Projects