CC Annual Comprehensive Financial Report

Fiscal Years Ended September 30, 2022 and 2021

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



DC Water distributes 95 million gallons of clean drinking water per day...



. . . through 1300 miles of pipes









Blue Plains Wastewater Treatment Plant

1937 - 2022





DC Water distributes drinking water and collects and treats wastewater for more than 712,000 residents and **24.6 million annual visitors** in the District of Columbia.

92 ACRES OF LAND MANAGED BY GREEN INFRASTRUCTURES







District of Columbia Water and Sewer Authority

Annual Comprehensive Financial Report

Fiscal Years Ended September 30, 2022 and 2021

Prepared by: Department of Finance, Accounting, and Budget

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

INTRODUCTORY SECTION (UNAUDITED)1

Overview of DC Water 3 Economic Condition 3 Major Initiatives 4 Capital Improvement Program 4 Blueprint 2.0 4 Green Bond Framework 4 Lead Removal Initiative 4 New Customer Assistance Program 4 Revision to Investment Policy 5 Clean Rivers Project 5 Blue Drop 5 Implementation of Oracle Payroll Module 5 Fleet and Sewer Relocation 6 Certified Business Utilization 6 Local Workforce 6 DC Water Apprenticeship Program 6 Acknowledgements 7 Board of Directors 8 Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FlinAnciAL SECTION 1 Independent Auditors' Report 12 Management's Discussion & Analysis (Unaudited) 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Reven	Letter of Transmittal	2
Major Initiatives 4 Capital Improvement Program 4 Blueprint 2.0 4 Green Bond Framework 4 Lead Removal Initiative 4 New Customer Assistance Program 4 Revision to Investment Policy 5 Clean Rivers Project 5 Blue Drop 5 Implementation of Oracle Payroll Module 5 Fleet and Sewer Relocation 6 Certified Business Utilization 6 DC Water Apprenticeship Program 6 Strong Credit Ratings 6 ACFR Award 6 Acknowledgements 7 Board of Directors 8 Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FINANCIAL SECTION 1 Independent Auditors' Report 12 Management's Discussion & Analysis (Unaudited) 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Revenues, Expenses, and Changes in Net Position 26	Overview of DC Water	3
Capital Improvement Program 4 Blueprint 2.0 4 Green Bond Framework 4 Lead Removal Initiative 4 New Customer Assistance Program 4 Revision to Investment Policy 5 Clean Rivers Project 5 Blue Plains Floodwall 5 Blue Drop 5 Implementation of Oracle Payroll Module 5 Fleet and Sewer Relocation 6 Certified Business Utilization 6 Local Workforce 6 DC Water Apprenticeship Program 6 Strong Credit Ratings 6 Acknowledgements 7 Board of Directors 8 Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 12 Management's Discussion & Analysis 12 Management's Discussion & Analysis 26 Statements of Net Position 26 Statements of Net Position 26 Statements of Cash Flows 30 Notes to the Financial Statements 31 <	Economic Condition	3
Blueprint 2.0	Major Initiatives	4
Green Bond Framework 4 Lead Removal Initiative 4 New Customer Assistance Program 4 Revision to Investment Policy 5 Clean Rivers Project 5 Blue Plains Floodwall 5 Blue Drop 5 Implementation of Oracle Payroll Module 5 Fleet and Sewer Relocation 6 Certified Business Utilization 6 Local Workforce 6 DC Water Apprenticeship Program 6 ACFR Award 6 ACFR Award 6 Acknowledgements 7 Board of Directors 8 Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FINANCIAL SECTION 1 Independent Auditors' Report 12 Management's Discussion & Analysis 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Revenues, Expenses, and 14 Changes in Net Position 26 Statements of Cash Flows	Capital Improvement Program	4
Lead Removal Initiative 4 New Customer Assistance Program 4 Revision to Investment Policy 5 Clean Rivers Project 5 Blue Plains Floodwall 5 Blue Drop 5 Implementation of Oracle Payroll Module 5 Fleet and Sewer Relocation 6 Certified Business Utilization 6 Local Workforce 6 DC Water Apprenticeship Program 6 Strong Credit Ratings 6 ACFR Award 6 ACFR Award 6 Acknowledgements 7 Board of Directors 8 Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FINANCIAL SECTION 1 Independent Auditors' Report 12 Management's Discussion & Analysis 26 Statements of Net Position 26 Statements of Revenues, Expenses, and 26 Changes in Net Position 26 Statements of Cash Flows 37 Notes to the Financial St		
New Customer Assistance Program	Green Bond Framework	4
Revision to Investment Policy 5 Clean Rivers Project 5 Blue Plains Floodwall 5 Blue Drop 5 Implementation of Oracle Payroll Module 5 Fleet and Sewer Relocation 6 Certified Business Utilization 6 Local Workforce 6 DC Water Apprenticeship Program 6 Strong Credit Ratings 6 Acknowledgements 7 Board of Directors 8 Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FINANCIAL SECTION 1 Independent Auditors' Report 12 Management's Discussion & Analysis (Unaudited) 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Revenues, Expenses, and Changes in Net Position 26 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 87 Exhibit 1: Change in Net Posit		
Clean Rivers Project		
Blue Plains Floodwall 5 Blue Drop 5 Implementation of Oracle Payroll Module 5 Fleet and Sewer Relocation 6 Certified Business Utilization 6 Local Workforce 6 DC Water Apprenticeship Program 6 Strong Credit Ratings 6 Awards and Acknowledgements 6 ACFR Award 6 Acknowledgements 7 Board of Directors 8 Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FINANCIAL SECTION 1 Independent Auditors' Report 12 Management's Discussion & Analysis (Unaudited) 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Revenues, Expenses, and 26 Changes in Net Position 26 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 87		
Blue Drop 5 Implementation of Oracle Payroll Module 5 Fleet and Sewer Relocation 6 Certified Business Utilization 6 Local Workforce 6 DC Water Apprenticeship Program 6 Strong Credit Ratings 6 Awards and Acknowledgements 6 ACFR Award 6 Acknowledgements 7 Board of Directors 8 Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FINANCIAL SECTION 1 Independent Auditors' Report 12 Management's Discussion & Analysis 26 Statements of Net Position 26 Statements of Revenues, Expenses, and 26 Changes in Net Position 26 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 87 Exhibit 1: Change in Net Position 87 Financial Trends 87 <td< td=""><td></td><td></td></td<>		
Implementation of Oracle Payroll Module 5 Fleet and Sewer Relocation	Blue Plains Floodwall	5
Fleet and Sewer Relocation 6 Certified Business Utilization 6 Local Workforce 6 DC Water Apprenticeship Program 6 Strong Credit Ratings 6 Awards and Acknowledgements 6 ACFR Award 6 Acknowledgements 7 Board of Directors 8 Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FINANCIAL SECTION 1 Independent Auditors' Report 12 Management's Discussion & Analysis 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Revenues, Expenses, and 26 Changes in Net Position 26 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 87 Exhibit 1: Change in Net Position 32 for FY 2013-2022 32		
Certified Business Utilization		
Local Workforce 6 DC Water Apprenticeship Program 6 Strong Credit Ratings 6 Awards and Acknowledgements 6 ACFR Award 6 Acknowledgements 7 Board of Directors 8 Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FINANCIAL SECTION 1 Independent Auditors' Report 12 Management's Discussion & Analysis 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Revenues, Expenses, and 26 Changes in Net Position 26 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 87 Exhibit 1: Change in Net Position 32 for FY 2013-2022 32		
DC Water Apprenticeship Program		
Strong Credit Ratings 6 Awards and Acknowledgements 6 ACFR Award 6 Acknowledgements 7 Board of Directors 8 Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FINANCIAL SECTION 1 Independent Auditors' Report 12 Management's Discussion & Analysis (Unaudited) 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Revenues, Expenses, and Changes in Net Position 26 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 87 Exhibit 1: Change in Net Position 87 Function 10 For FY 2013-2022 82		
Awards and Acknowledgements 6 ACFR Award 6 Acknowledgements 7 Board of Directors 8 Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FINANCIAL SECTION 1 Independent Auditors' Report 12 Management's Discussion & Analysis 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Revenues, Expenses, and 26 Changes in Net Position 26 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 87 Exhibit 1: Change in Net Position 87 Exhibit 1: Change in Net Position 32 for FY 2013-2022 32		
ACFR Award	Strong Credit Ratings	6
ACFR Award	Awards and Acknowledgements	6
Board of Directors 8 Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FINANCIAL SECTION 1 Independent Auditors' Report 12 Management's Discussion & Analysis 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Revenues, Expenses, and 26 Changes in Net Position 26 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 87 Exhibit 1: Change in Net Position 87 for FY 2013-2022 82	ACFR Award	6
Principal Staff Members 8 Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FINANCIAL SECTION 11 Independent Auditors' Report 12 Management's Discussion & Analysis (Unaudited) 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Revenues, Expenses, and Changes in Net Position 26 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 87 Exhibit 1: Change in Net Position for FY 2013-2022 82	Acknowledgements	7
Governance and Organizational Structure 9 GFOA Certificate of Achievement 10 FINANCIAL SECTION 11 Independent Auditors' Report 12 Management's Discussion & Analysis (Unaudited) 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Revenues, Expenses, and Changes in Net Position 26 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 87 Exhibit 1: Change in Net Position 87 for FY 2013-2022 82	Board of Directors	8
GFOA Certificate of Achievement	Principal Staff Members	8
FINANCIAL SECTION 1 Independent Auditors' Report 12 Management's Discussion & Analysis 14 Management's Discussion & Analysis 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Revenues, Expenses, and 26 Changes in Net Position 26 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 84 Exhibit 1: Change in Net Position 84 for FY 2013-2022 82	Governance and Organizational Structure	9
Independent Auditors' Report	GFOA Certificate of Achievement	10
Management's Discussion & Analysis 14 Basic Financial Statements 26 Statements of Net Position 26 Statements of Revenues, Expenses, and 26 Changes in Net Position 26 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 84 Exhibit 1: Change in Net Position 84 for FY 2013-2022 82	FINANCIAL SECTION	1
(Unaudited) 14 Basic Financial Statements 28 Statements of Net Position 28 Statements of Revenues, Expenses, and 29 Changes in Net Position 29 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 84 Exhibit 1: Change in Net Position 84 for FY 2013-2022 82	Independent Auditors' Report	12
Basic Financial Statements 28 Statements of Net Position 28 Statements of Revenues, Expenses, and 26 Changes in Net Position 29 Statements of Cash Flows 30 Notes to the Financial Statements 31 STATISTICAL SECTION (UNAUDITED) 7 Financial Trends 84 Exhibit 1: Change in Net Position 60 for FY 2013-2022 82		
Statements of Net Position	(Unaudited)	14
Statements of Net Position	Basic Financial Statements	28
Statements of Revenues, Expenses, and Changes in Net Position		
Changes in Net Position		
Statements of Cash Flows		29
STATISTICAL SECTION (UNAUDITED)7 Financial Trends		
Financial Trends	Notes to the Financial Statements	31
Exhibit 1: Change in Net Position for FY 2013-202282	STATISTICAL SECTION (UNAUDITED)	7
Exhibit 1: Change in Net Position for FY 2013-202282	Financial Trends	84
for FY 2013-2022		0
	_	82
	Exhibit 2: Summary of Net Position	

	0	Datia for EV 0040 0000	~ 4
DC Water Apprenticeship Program	6	Ratios for FY 2013-2022	94
Strong Credit Ratings	6	Exhibit 12: Calculation of Debt Service	
rds and Acknowledgements	6	Coverage for FY 2022	95
ACFR Award		Demographic and Economic Information	96
Acknowledgements		Exhibit 13: Population of Service Area	
-		Jurisdictions for CY 2013-2022	97
rd of Directors	8	Exhibit 14: Personal Income of Service	
cipal Staff Members	8	Area Jurisdictions CY 2013-2022	98
ernance and Organizational Structure.	9	Exhibit 15: Per Capita Personal Income of	
-		Service Area Jurisdictions	
A Certificate of Achievement	10	CY 2013-2022	99
ANCIAL SECTION	11	Exhibit 16: Unemployment Rates	
pendent Auditors' Report	12	for CY 2013-2022	100
	12	Exhibit 17: Employment by Sector	101
agement's Discussion & Analysis		Operating Information	102
naudited)	14	Exhibit 18: Water Delivered (Pumped) and	
c Financial Statements	28	Billed (Sold) for FY 2013-2022	103
Statements of Net Position	28	Exhibit 19: Water Demand	
Statements of Revenues, Expenses, and		for FY 2013-2022	104
Changes in Net Position	29		104
Statements of Cash Flows	30	Exhibit 20: Miscellaneous Statistics About	405
Notes to the Financial Statements	31	Authority Operations for FY 2013-2022	105
ATISTICAL SECTION (UNAUDITED)	79	Exhibit 21: Schedule of Insurance	400
		as of September 30, 2022	109
ncial Trends	81	Exhibit 22: Summary of Major Permits and	
Exhibit 1: Change in Net Position		Administrative Orders as of September	-
for FY 2013-2022	82	2022	110
Exhibit 2: Summary of Net Position		Exhibit 23: Budgetary Comparison Schedule for FY 2022	111
for FY 2013-2022	83		
Exhibit 3: Capital Disbursements			
for FY 2013-2022	84		

Revenue Capacity85

Exhibit 5: Number and Type of Customer

Accounts for FY 2013-2022 87

of Median Household Income......91

Local and Regional Utilities92

Exhibit 9: Residential Water and Wastewater Bill Comparisons as a Percentage

Wastewater Bill Comparisons to

Debt Capacity......93 Exhibit 11: Outstanding Debt and Debt

Exhibit 4: Operating Revenues and

Exhibit 6: Ten Largest Commercial

Exhibit 7: Ten Largest Government

Exhibit 8: Retail Water and Sewer

Exhibit 10: Residential Water and

i



(Unaudited)

1|



David L. Gadis, Chief Executive Officer

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY | 1385 CANAL STREET, SE | WASHINGTON, DC 20003

March 1, 2023

Board of Directors District of Columbia Water and Sewer Authority 1385 Canal Street, SE Washington, D.C. 20003

Dear Members of the Board:

I am pleased to present the District of Columbia Water and Sewer Authority's ("DC Water" or the "Authority") Annual Comprehensive Financial Report ("ACFR") for the fiscal years ended September 30, 2022 and 2021. The Authority's financial statements were prepared in accordance with U.S. generally accepted accounting principles ("GAAP"), as promulgated by the Governmental Accounting Standards Board ("GASB") and audited by a firm of independent certified public accountants retained by DC Water. In accordance with the Authority's enabling legislation, DC Water is required to perform an annual audit of its financial statements and submit it to the District of Columbia's Mayor and Chief Financial Officer, and the District of Columbia Council.

Responsibility for the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with DC Water's management. To the best of my knowledge and belief, the information contained in this report is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the Authority. All disclosures necessary for the reader to gain an understanding of DC Water's financial activity have been included.

DC Water's management is responsible for establishing and maintaining an internal control structure designed to ensure that its assets are adequately safeguarded against loss, theft, or misuse and to maintain accurate and reliable financial records for the preparation of financial statements and the representations made by management. The internal control structure is designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that: 1) the cost of internal controls should not exceed the benefits derived from the controls; and 2) the evaluation of costs and benefits requires management's exercise of judgment. To the best of my knowledge and belief, DC Water's internal accounting controls adequately safeguard its assets and provide reasonable assurance of the proper recording of financial transactions in accordance with GAAP.

KPMG LLP, Certified Public Accountants, has been retained by DC Water to serve as its independent auditors and has issued an unmodified ("clean") opinion on DC Water's financial statements for the years ended September 30, 2022 and 2021. The independent auditors' report is located at the front of the financial section of this report.

GAAP requires that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis ("MD&A"). This letter of transmittal is designed to supplement the MD&A and should be read in conjunction with it. DC Water's MD&A is located immediately following the independent auditors' report.

Overview of DC Water

The District of Columbia Water and Sewer Enterprise Fund (the "Fund") was established in 1979 and was operated by the Water and Sewer Utility Administration, a division of the Government of the District of Columbia (the "District") Department of Public Works. The Authority, an independent authority of the District, was created in April 1996 and began operating on October 1, 1996 under and pursuant to an act of the Council of the District entitled the "Water and Sewer Authority and Department of Public Works Reorganization Act of 1996 (as amended)", and an Act of the United States Congress entitled the "District of Columbia Water and Sewer Authority Act of 1996". The Authority is considered a related organization of the District for purposes of presentation in the District's financial statements.

DC Water provides retail drinking water distribution and wastewater conveyance and treatment services to approximately 670,050 DC residents as well as to commercial and governmental customers in the District of Columbia, and wholesale wastewater conveyance and treatment services to approximately 1.6 million users in Montgomery and Prince George's Counties in Maryland, and Fairfax and Loudoun Counties in Northern Virginia.

DC Water is 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.

Budgets are prepared annually and reviewed and approved by The Authority's Board of Directors. After approval by the Board, DC Water submits its annual budget to the District for inclusion in the Mayor's annual budget. The District then includes DC Water's budget as an enterprise fund as part of its own budget submission to the U.S. Congress.

Economic Condition

Washington, D.C., is not only known as the nation's capital, but it is also an international city with a vibrant tourist industry and business climate. The U.S. Census Bureau estimated that there were 670,050 residents in Washington, D.C. in 2021. The Washington Metropolitan Region has a population of more than 6.3 million individuals and is the sixth largest metropolitan area in the country.

The District's economic base is driven by the federal and local governments as well as diplomatic embassies and international organizations. The federal civilian workforce in the District averaged 237,817 employees, while thousands more are estimated to work elsewhere in the metropolitan area. The District is host to 19 colleges and universities and more than 185 foreign embassies and other recognized diplomatic missions. A number of international organizations, such as the International Monetary Fund, World Bank, Inter-American Development Bank and Organization of American States are headquartered in the District. An estimated 24.6 million people visit the Washington Metropolitan Region on an annual basis, not only to do business with the federal government and local firms, but also to visit the national monuments, historic sites, museums and other major cultural attractions.

Personal income has grown considerably in the District in recent years, from \$48.7 million in 2013 to \$64.6 million in in 2021, an increase of 32.6%. The unemployment rate in the District decreased from 7.3% in 2013 to 4.6% in 2022. The District's economy grew consistently faster than the national economy for much of this decade and is expected to continue to grow in 2023. The District's economy is relatively more information and service industry dependent than most states, accounting for the region's relative insulation from the most recent national housing and credit centric recession.

DC Water continues to invest in its infrastructure to benefit District residents and the region and to support continued economic growth. DC Water is guided in both its operations and its infrastructure investments by the strategic plan, Blueprint 2.0.

Major Initiatives

Capital Improvement Program

The funding for DC Water's capital program comes mainly from its retail and wholesale customers. However, over the next several years additional federal funding is anticipated from the Environmental Protection Agency (EPA) through the American Recovery Plan Act (ARPA) and the Bipartisan Infrastructure Law (BIL). ARPA is expected to provide DC Water with grant funding for lead service line removal on the homeowner's private side of the property for approximately \$10 million per fiscal year from FY2022 to FY2024, totaling \$30 million. BIL is expected to provide grant funding to DC Water for both private and public side projects for approximately \$29 million per fiscal year from FY2023 to FY2027, totaling approximately \$143 million. Additional federal funding of more than \$170 million will enhance the District of Columbia's drinking water, wastewater, and stormwater infrastructure.

Blueprint 2.0

The Blueprint 2.0 was adopted as DC Water's strategic plan in October 2021. The plan provides five interconnected organizational Imperatives which are: Healthy, Safe and Well; Reliable; Resilient; Sustainable; and Equitable. Each Imperative is defined by Themes and each Theme is measured via one or more goals to assess progress. Baselines were established in FY2022 and examples of goals DC Water advanced during the year include: reducing the Total Recordable Incident Rate (3.1 down from 3.7 baseline), Healthy, Safe, and Well goal 1.03); increasing the percentage of certified firms working as prime contractors (21% up from 14% baseline, Equitable goal 4.04), and increasing the total revenue generated from alternative sources (\$6.1M up from \$4.0M baseline, Sustainable goal 2.01).

Green Bond Framework

DC Water delivered its inaugural Environmental, Social, and Governance (ESG) Report in 2022. This report highlights the close connection between DC Water's strategic plan and our ESG goals. In 2022, work started on the second annual ESG report which will have an additional focus on enterprise resilience and will utilize the Task Force on Climate-Related Disclosures framework for disclosing climate-related risks and opportunities. Through this continued, transparent reporting, DC Water hopes to remain a leader in the Green Bond space. In 2021, DC Water adopted a Green Bond Framework aligned with the four International Capital Market Association (ICMA) Principles regarding use of proceeds, project selection, management of proceeds, and reporting. The purpose of the Green Bond Framework is to formalize the process and commitments that govern DC Water's issuance of Green Bonds. DC Water is in the process of implementing the Framework.

Lead Removal Initiative

DC Water has launched the Lead Free DC Initiative, which aims to replace more than 28,000 lead and galvanizediron pipe service lines with copper pipe by 2030. The Authority developed a model to use water quality and health equity data to prioritize lead service line replacement projects. This approach prioritizes lead replacement for: (1) vulnerable populations most impacted by lead exposure (children and seniors) and (2) communities that are historically underserved, and experience disproportionately poorer health outcomes in comparison to other communities in the District. The model scores and ranks blocks according to the health benefit and social impact of lead service line replacement so that projects can be funded and executed equitably.

New Customer Assistance Program

DC Water launched the Low Income Household Water Assistance Program (LIHWAP) during FY2022 to provide assistance to low income resident households with water and wastewater bills. The LIHWAP was carved out of the Consolidated Appropriations Act and the American Rescue Plan Act of 2021. The Department of Energy and Environment (DOEE) will administer the program allocation of \$2.4 million; \$2.0 million will be available to provide assistance to low income residents and \$0.4 million will be used to cover administrative costs.

Revision to the Investment Policy

During FY2022, DC Water revised its Investment Policy. The revised policy authorizes investments to US Treasury and agencies with durations of maximum maturity versus the previous limitation of less than two years. Additionally, investing in commercial paper with maximum maturity of one year versus the previous limit of 270 days. These changes allow for greater portfolio diversification to help mitigate investment risks.

Clean Rivers Project

Construction of Northeast Boundary Tunnel (NEBT) is underway and on track to be placed in operation by Summer 2023. Construction at all sites nears completion of shaft/tunnel connections and surface diversion facilities. The NEBT is the longest and final segment of the Anacostia River Tunnel (ART) system. Once placed in service, the added capacity to the combined system will reduce overflows to the Anacostia River by 98 percent and reduce flooding and sewer backups in Northeast DC. The ART system that was commissioned in 2018 has already captured more than 14.7 billion gallons of combined sewage and 9,230 tons of trash. The Potomac River Tunnel is the next major phase of the DC Clean Rivers Project. Request for Proposal (RFP) for this Contract was issued to shortlisted design-build teams in June 2022 with Notice to Proceed anticipated in November 2023; it will be placed in operation by February 2030. The Advance Utility Construction contract to provide electrical services and relocate utilities in advance of the tunnel construction is underway and estimated to be completed by July 2023. Construction is underway for CSO 025/026 Sewer Separation project, which is estimated to be placed in operation by May 2023. Finally, the construction is underway for the second Rock Creek Green Infrastructure Project B and it is estimated to be placed in operation by January 2024.

Blue Plains Floodwall

The DC Water Office of Emergency Management completed a grant application for FEMA's Building Resilient Infrastructure and Communities program to fund the remaining sections of the Blue Plains Advanced Wastewater Treatment Plant (AWTP) Floodwall Project. This project has been selected by FEMA for funding and will result in \$20.3 million in Federal funds for the design and construction of Segments A, B, and D of the floodwall around the Blue Plains AWTP. This award will cover 70% of the total project cost, which is expected to be \$29 million, and will be received in early 2023. The Authority previously received \$2.4 million from FEMA for the construction of Segment C of the floodwall, which was completed in June 2021. Once completed, the floodwall will protect the Blue Plains AWTP to the 500-year flood elevation, plus additional freeboard to account for sea level rise and wave action. This will ultimately ensure that the plant can operate at full capacity and DC Water can continue to deliver its critical wastewater treatment services during storm events.

Blue Drop

In FY2022, 56,675 tons of Bloom, Class A Exceptional Quality biosolids, were sold resulting in \$320 thousand of revenue and almost \$1.8 million in net savings, a 19% increase in production from the previous year. Bloom has resulted in a total net savings of \$6.1 million since production started in 2017. In addition, Blue Drop hosted 60 events attended by almost 9,000 individuals and released its third children's book, Wendy and the Water Cycle. Bloom is a precious asset that returns value to our ratepayers, reduces our carbon footprint, provides long term benefits to soils, and protects the Chesapeake Bay by reducing the use of chemical fertilizers.

Implementation of Oracle Payroll Module

On March 13, 2022, DC Water launched the Oracle Enterprise Planning System (ERP) payroll components, including Time, Time and Labor, and Absence Management applications. Ever since its launch, the deployment has proven to be an outstanding success. Oracle Corporation acknowledged the DC Water Sewer & Authority ERP implementation as the most successful public sector implementation; such that, DC Water is Oracle's top public sector reference. The industry benchmark for error rates in a major payroll conversion is 10% for the initial run, but DC Water achieved an error rate of 8% on the initial run, 5% on the second run, and only 1% on the third payroll run.

Fleet and Sewer Relocation

On January 4, 2018, the District and the Authority entered into a Relocation Funding Agreement whereby the District has agreed to fund up to \$29,681 of costs associated with the Authority's relocation of its Fleet Maintenance and Sewer Service operations. As of September 30, 2022, the District has disbursed \$27,842 to DC Water pursuant to this agreement.

Certified Business Utilization

As part of its strategic initiatives, DC Water continues to ensure certified businesses (Disadvantaged Business Enterprises, Local Small Business Enterprises, and Women Business Enterprises) have meaningful participation in its procurement activities. In FY2022, DC Water approved seventy-five (75) large procurement actions, totaling \$468.5 million. Of this total, certified firms were awarded \$210.3 million (45%) in prime and subcontracting opportunities.

Local Workforce

DC Water Works is the Authority's initiative designed to empower local and District residents to establish meaningful employment on DC Water construction and service projects. As part of this program, DC Water established a goal that 75% of the new jobs created on its projects would be filled by local residents. In 2022, 125 new positions were created on DC Water projects. Of this amount, 106 positions were filled by local residents (85%). This includes forty-five (45) positions that were specifically filled by District residents.

DC Water Apprenticeship Program

In 2018, DC Water established a registered Apprenticeship Program designed to empower District of Columbia and local residents to establish a long-term career with DC Water. In FY2022, DC Water launched its second cohort, recruiting fifteen (15) District residents as apprentices in one of five trade areas: Buildings and Grounds, Maintenance Mechanics, Painting, Utility Services, and Utility Systems Operations.

Strong Credit Ratings

Throughout FY2022, the Authority maintained an AA+ credit rating by Fitch Ratings for senior lien revenue bonds, 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.

Combined, these ratings made DC Water's bonds highly desirable. Strong credit ratings enable the Authority to issue debt at lower borrowing costs, which in turn reduces ratepayer costs in the long run. These notable results are due to the Authority's solid financial team, outstanding financial performance, and management of our capital program.

Awards and Acknowledgements

ACFR Award

The Authority's 2021 ACFR received the Government Finance Officers Association's ("GFOA") Certificate of Achievement for Excellence in Financial Reporting. The ACFR was judged based on its conformity to GAAP and its compliance with other financial, legal, and contractual provisions. The Certificate of Achievement is the highest form of recognition in governmental accounting and financial reporting, and its attainment represents a significant accomplishment for any municipality or government agency. To date, DC Water has received the GFOA's ACFR award for every year of its existence as an independent Authority, for a total of 25 consecutive awards. In addition, DC Water also received the Distinguished Budget Presentation Award from GFOA for its fiscal year 2021 budget, for a total of 22 consecutive years.

Acknowledgements

With deep appreciation, I wish to recognize the outstanding leadership and personal commitment of Controller Genes Malasy through fiscal year 2022 as well as DC Water's dedicated team of finance professionals for their collective effort in drafting DC Water's FY2022 Annual Comprehensive Financial Report.

Respectfully submitted,

ten Beren

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



BOARD OF DIRECTORS

PRINCIPAL MEMBERS

Tommy Wells, Chair, District of Columbia Rachna Butani-Bhatt, District of Columbia David Franco, District of Columbia Anthony Giancola, District of Columbia Fariba Kassiri, Montgomery County, MD Floyd Holt, Prince George's County, MD Tara Jackson, Prince George's County, MD Christopher Herrington, Fairfax County, VA

ALTERNATE MEMBERS

JED ROSS, DISTRICT OF COLUMBIA HOWARD GIBBS, DISTRICT OF COLUMBIA IVAN FRISHBERG, DISTRICT OF COLUMBIA JOE LEONARD, JR., DISTRICT OF COLUMBIA ADRIANA HOCHBERG, MONTGOMERY COUNTY, MD STEVEN SHOFAR, MONTGOMERY COUNTY, MD ANDREA CROOMS, PRINCE GEORGE'S COUNTY, MD JARED MCCARTHY, PRINCE GEORGE'S COUNTY, MD SARAH MOTSCH, FAIRFAX COUNTY, VA

PRINCIPAL STAFF MEMBERS

SENIOR EXECUTIVE TEAM

DAVID GADIS, CEO AND GENERAL MANAGER

MARC BATTLE, EXECUTIVE VICE-PRESIDENT, OFFICE OF LEGAL AFFAIRS

MATTHEW T. BROWN, CHIEF FINANCIAL OFFICER AND EXECUTIVE VICE PRESIDENT, FINANCE AND PROCUREMENT

WAYNE GRIFFITH, CHIEF STRATEGY AND PERFORMANCE OFFICER AND EXECUTIVE VICE PRESIDENT, STRATEGY AND PERFORMANCE

KEITH J. LINDSEY, CHIEF OF STAFF

KISHIA L. POWELL, CHIEF OPERATING OFFICER AND EXECUTIVE VICE PRESIDENT

LISA STONE, CHIEF PEOPLE AND INCLUSION OFFICER AND EXECUTIVE VICE PRESIDENT, PEOPLE AND TALENT

KIRSTEN WILLIAMS, CHIEF COMMUNICATIONS & STAKEHOLDERS ENGAGEMENT OFFICER AND EXECUTIVE VICE PRESIDENT

OFFICE OF FINANCE AND PROCUREMENT

DAN BAE, VICE PRESIDENT, PROCUREMENT AND COMPLIANCE

KOREY GRAY, VICE PRESIDENT, CONTRACT COMPLIANCE AND BUSINESS DEVELOPMENT

IVAN BOYKIN, FINANCE DIRECTOR

SYED KHALIL, DIRECTOR, RATES AND REVENUE

GENES MALASY, CONTROLLER

LOLA OYEYEMI, BUDGET DIRECTOR

KEY LEADERSHIP

MAUREEN HOLMAN, VICE PRESIDENT, SHARED SERVICES JASON HUGHES, VICE PRESIDENT, WATER OPERATIONS THOMAS KUCZYNSKI, VICE PRESIDENT, INFORMATION TECHNOLOGY JOHN LISLE, VICE PRESIDENT, MARKETING AND COMMUNICATIONS KENRICK ST. LOUIS, VICE PRESIDENT, SEWER AND PUMPING OPERATIONS AKLILE TESFAYE, VICE PRESIDENT, WASTEWATER OPERATIONS



Governance and Organizational Structure





Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

District of Columbia Water and Sewer Authority

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

September 30, 2021

Christopher P. Morrill

Executive Director/CEO



Financial Section



KPMG LLP Suite 12000 1801 K Street, NW Washington, DC 20006

Independent Auditors' Report

Board of Directors District of Columbia Water and Sewer Authority

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the District of Columbia Water and Sewer Authority (the Authority) as of and for the years ended September 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements for the years then ended as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of September 30, 2022 and 2021, and the changes in its financial position and its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Authority and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.



In performing an audit in accordance with GAAS, we:

- 1) Exercise professional judgment and maintain professional skepticism throughout the audit.
- 2) Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- 3) Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, no such opinion is expressed.
- 4) Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- 5) Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audits, significant audit findings, and certain internal control related matters that we identified during the audits.

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance.

Other Information

Management is responsible for the other information included in the annual comprehensive financial report. The other information comprises the introductory and statistical sections but does not include the basic financial statements and our auditors' report thereon. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audits of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

KPMG LIP

Washington, D.C. December 21, 2022

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

This section of the Authority's annual financial report presents our discussion and analysis of the Authority's financial position and changes in financial position as of and for the fiscal years ended September 30, 2022 and 2021. The Management's Discussion and Analysis ("MD&A") should be read in conjunction with the Authority's basic financial statements and the related notes to the financial statements, which immediately follow this section.

Financial Highlights – Fiscal 2022

- In February 2022, the Authority issued subordinate lien revenue bonds with a face value of \$439.7 million. The bonds were structured in four Series: 2022 Series B (Green Bonds) consisted of \$79.6 million, with average interest rates at 5.0% maturing in 2048; revenue and revenue refunding bonds 2022 Series C-1 consisting of \$206.7 million with average interest rates ranging from 4% to 5% maturing in 2052; revenue refunding bonds 2022 Series C-2 consisting of \$4.4 million with average interest rates at 4% maturing in 2041; revenue and revenue refunding bonds 2022 Series D consisting of \$148.9 million with average interest rates ranging from 1.7% to 3.5% maturing in 2045. Gross proceeds from the four series of 2022 Bonds totaled \$499.1 million including \$59.8 million of the original issue premium.
- In March 2022, the Authority issued \$96.3 million of tax-exempt 2022 Series E variable rate multimodal subordinate lien revenue bonds, maturing in 2027 to fund the Authority's capital improvement program. Net proceeds from the bond issuance totaled approximately \$100.7 million including \$0.7 million of underwriter's discount and cost of issuance. Initially, the 2022 Series E bonds will bear interest at a soft tender long term rate. Upon expiration of the initial interest period, the bonds may be converted into a daily, weekly, index, short term, or fixed rate period, or a subsequent long term rate period.
- In April 2020, DC Water entered into an agreement with DNT Asset Trust (an affiliate of JPMorgan Chase Bank, N.A.) to purchase a Subordinate Lien Revenue Refunding Bond, Series 2022A in the amount of \$294.3 million to (a) refund \$127.4 million Subordinate Lien Revenue Bonds, Series 2012A and \$163.2 million Subordinate Lien Revenue Refunding Bonds, Series 2012C; and (b) pay the costs of issuance of the bond. July 2022, the Authority issued the 2022 Series A bonds for \$294.3 million, with interest rates ranging from 1.56% and 2.53% and maturing in 2037. The refunding provided an annual debt service savings averaging \$3.8 million annually from fiscal year 2022 to fiscal year 2037.
- Operating revenues increased by \$61.7 million to \$832.2 million or 8%, primarily due to the retail rate increase of 7.8% offset by the 6.0% decrease in the Clean Rivers Impervious Area Charge (CRIAC) and the post effects of Covid-19 pandemic.
- Operating expenses increased by \$28.5 million to \$500.4 million, or 6.0%, primarily due to increases in costs for personnel services, chemicals and electricity.
- Capital assets, net of depreciation and amortization, increased by \$195.9 million to \$7.9 billion, or 2.5%, as a result of capital additions of \$366.2 million offset by depreciation and amortization of \$140.3 million. Capital additions incurred in 2022 were in line with the Authority's approved 10-year capital improvement program.
- Current assets increased by \$10.9 million to \$722.7 million or 1.5% primarily due to an increase of \$2.7 million in unrestricted cash and investments, a \$6.8 million increase in receivables from customers, a \$3.0 million increase in receivables from the Federal government, offset by an \$3.9 million decrease in restricted cash and cash equivalents.

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

- The Authority's net position increased by \$205.6 million to \$2.9 billion, or 7.7%, as a result of current year operations and capital contributions.
- Effective October 1, 2021, the Authority raised its retail water and wastewater rates by 7.8% and decreased its CRIAC by 6.0%.

Financial Highlights – Fiscal 2021

- Operating revenues increased by \$33.7 million to \$770.6 million, or 4.6%, primarily due to the retail rate increase of 9.9% offset by the 6.8% decrease in the Clean Rivers Impervious Area Charge (CRIAC) and the effects of the COVID-19 pandemic.
- Operating expenses increased by \$18.2 million to \$471.9 million, or 4.0%, primarily due to increases in personnel services, chemicals, supplies, and small equipment, utilities and rent, depreciation expense, and water purchases.
- Capital assets, net of depreciation and amortization, increased by \$261.1 million to \$7.7 billion, or 3.5%, as a result of capital additions of \$399.2 million offset by depreciation and amortization of \$138.1 million. Capital additions incurred in 2021 were in line with the Authority's approved 10-year capital improvement program.
- Current assets decreased by \$17.0 million to \$711.8 million, or 2.4%, primarily due to a \$12.2 million decrease in restricted cash and investments, an \$8.3 million decrease in receivables from other jurisdictions, a \$5.9 million decrease in receivables from the Federal government offset by an \$8.7 million increase in unrestricted cash and investments and a \$4.7 million increase in customer receivables.
- The Authority's net position increased by \$187.8 million to \$2.7 billion, or 7.6%, as a result of current year operations and capital contributions.
- Effective October 1, 2020, the Authority raised its retail water and wastewater rates by 9.9%. and decreased CRIAC by 6.8%.

Using This Annual Report

This annual report consists of three sections: Management's Discussion and Analysis; the Financial Statements; and Notes to the Financial Statements that explain in more detail some of the information in the Financial Statements.

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

Required Financial Statements

The Statements of Net Position include the Authority's assets plus deferred outflows of resources and liabilities plus deferred inflows of resources and provides information about the nature and amounts of investments in resources (assets) and nature and extent of obligations (liabilities) with the difference between them being reported as net position. It also provides the basis for computing the rates of return, evaluating the capital structure of the Authority, and assessing the liquidity and financial flexibility of the Authority.

The Statements of Revenues, Expenses, and Changes in Net Position present the changes in net position from one reporting period to another by accounting for revenues and expenses and measuring the financial results of operations. This statement measures the profitability of the Authority's operations over the past year and can be used to determine whether the Authority has successfully recovered all of its costs through its user fees and other charges.

The Statements of Cash Flows provide information about the Authority's cash receipts, cash payments, and net changes in cash and cash equivalents resulting from operating, investing, and capital and non-capital financing activities. It also provides information regarding sources of cash, uses of cash, and changes in cash balances during the reporting period.

Notes to the financial statements include information essential to understand the above statements, such as the Authority's significant accounting policies and information about certain financial statement account balances.

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

Financial Analysis of the Authority

Net Position

The Authority's total net position at September 30, 2022 was approximately \$2.9 billion, a \$205.6 million, or 7.7%, increase from September 30, 2021. Total assets increased \$539.6 million, or 6.3%, to \$9.1 billion and total liabilities increased \$301.7 million, or 5.0%, to \$6.3 billion.

The Authority's total net position at September 30, 2021 was approximately \$2.7 billion, a \$187.8 million, or 7.6%, increase from September 30, 2020. Total assets increased \$141.5 million, or 1.7%, to \$8.6 billion and total liabilities increased \$50.9 million, or 0.8%, to \$6.0 billion.

Summary of Net Position (In thousands)

		Fiscal Year		2022 vs 2	2021	2021 vs 2	020
	2022	2021	2020	Amount	%	Amount	%
Current assets	\$ 722,685	\$ 711,797	\$ 694,776	\$ 10,888	1.5	\$ 17,021	2.4
Noncurrent restricted assets	442,980	101,972	233,172	341,008	334.4	(131,200)	(56.3)
Capital assets	7,931,643	7,735,722	7,474,561	195,921	2.5	261,161	3.5
Other noncurrent assets	20,099	28,332	33,774	(8,233)	(29.1)	(5,442)	(16.1)
Total assets	9,117,407	8,577,823	8,436,283	539,584	6.3	141,540	1.7
Deferred outflows of resources	90,196	94,804	99,412	(4,608)	(4.9)	(4,608)	(4.6)
Current liabilities	497,087	497,849	474,538	(762)	(0.2)	23,311	4.9
Long-term debt outstanding	3,914,155	3,616,698	3,716,204	297,457	8.2	(99,506)	(2.7)
Long-term liabilities	1,901,825	1,896,811	1,871,520	5,014	0.3	25,291	1.4
Total liabilities	6,313,067	6,011,358	6,062,262	301,709	5.0	(50,904)	(0.8)
Deferred inflows of resources	27,706				0.0		0.0
Net investments in capital assets Restricted for:	2,480,216	2,305,799	2,129,340	174,417	7.6	176,459	8.3
Capital Projects	7,287	-	-	7,287	100.0	-	0.0
Debt Service	62,586	39,223	35,222	23,363	59.6	4,001	11.4
Unrestricted	316,741	316,247	308,871	494	0.2	7,376	2.4
Total net position	\$ 2,866,830	\$ 2,661,269	\$2,473,433	\$ 205,561	7.7	\$ 187,836	7.6

The following is a discussion of the more significant changes in assets, liabilities, and net position in 2022.

• Capital assets, net of depreciation and amortization, increased by \$195.9 million to \$7.9 billion as a result of capital additions of \$336.2 million offset by depreciation and amortization of \$140.3 million. Capital additions incurred in 2022 were in line with the Authority's approved 10-year capital improvement program which is discussed in more detail on page 14.

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

- Current assets increased by \$10.9 million to \$722.7 million or 1.5% primarily due to an increase of \$2.7 million in unrestricted cash and investments, a \$6.8 million increase in receivables from customers, a \$3 million increase in receivables from the federal government, offset by an \$3.9 million decrease in restricted cash and cash equivalents.
- Long-term debt, including current maturities, increased by \$300.2 million to \$3.9 billion, or 8.2%, primarily due to the issuance of \$294.3 million of 2022 series A, \$79.5 million of 2022 series B, \$206.7 million of series C-1, \$4.4 million of series C-2, \$148.9 million of 2022 series D and \$96.3 million of 2022 series E subordinate lien revenue bonds in fiscal year 2022 offset by principal payments of \$525.7 million.
- Current liabilities decreased by \$0.8 million to \$497.1 million, or 0.2%, primarily due to a \$10.6 million decrease in accounts payable and accrued expenses and a decrease of \$8.3 million in commercial paper notes payable and a \$4.2 million decrease in amounts due to other jurisdictions, offset by a \$16.4 million increase in unearned revenue.
- The Authority's net position increased by \$205.6 million to \$2.9 billion, or 7.7%, as a result of current year operations and capital contributions.

The following is a discussion of the more significant changes in assets, liabilities, and net position in 2021.

- Capital assets, net of depreciation and amortization, increased by \$261.1 million to \$7.7 billion, or 3.5%, as a result of capital additions of \$399.2 million offset by depreciation and amortization of \$138.1 million. Capital additions incurred in 2021 were in line with the Authority's approved 10-year capital improvement program which is discussed in more detail on page 25.
- Current assets decreased by \$17.0 million to \$711.8 million, or 2.4%, primarily due to a \$12.2 million decrease in restricted cash and investments, an \$8.3 million decrease in receivables from other jurisdictions, a \$5.9 million decrease in receivables from the Federal government offset by an \$8.7 million increase in unrestricted cash and investments and a \$4.7 million increase in customer receivables.
- Long-term debt, including current maturities, decreased by \$92.0 million to \$3.7 billion, or 2.4%, primarily due to principal payments of \$76.3 million.
- Current liabilities increased by \$23.3 million to \$497.9 million, or 4.9%, primarily due to a \$28.8 million increase in commercial paper notes payable, an \$8.6 million increase in accounts payable and accrued expenses, and a \$7.5 million increase in current maturities of long-term debt offset by an \$24.2 million decrease in unearned revenue.
- The Authority's net position increased by \$187.8 million to \$2.7 billion, or 7.6%, as a result of current year operations and capital contributions.

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

Changes in Net Position

The increase in net position at September 30, 2022 was \$205.6 million, or 7.7%, as compared with September 30, 2021. The Authority's total operating revenues increased by 8.0% to \$832.2 million and total operating expenses increased by 6.0% to \$500.4 million.

The increase in net position at September 30, 2021 was \$187.8 million, or 7.6%, as compared with September 30, 2020. The Authority's total operating revenues increased by 4.6% to \$770.6 million and total operating expenses increased by 4.0% to \$471.9 million.

			(11)	i inousan	usj							
			F	iscal Year				2022 vs 2	021		2021 vs 2	020
	_	2022		2021		2020	_	Amount	%		Amount	%
Operating revenues	\$	832,210	\$	770,557	\$	736,828	\$	61,653	8.0	\$	33,729	4.6
Operating expenses		500,365		471,902		453,699		28,463	6.0		18,203	4.0
Net non-operating revenues (expenses)		(157,718)		(152,912)		(82,878)		(4,806)	3.1	-	(70,034)	84.5
Change in net position before capital contributions		174,127		145,743		200,251		28,384	19.5		(54,508)	(27.2)
Capital contributions		31,434		42,093		22,727		(10,659)	(25.3)		19,366	85.2
Change in net position		205,561		187,836		222,978		17,725	9.4		(35,142)	(15.8)
Net position - beginning of year		2,661,269		2,473,433		2,250,455		187,836	7.6		222,978	9.9
Net position - end of year	\$	2,866,830	\$	2,661,269	\$	2,473,433	\$	205,561	7.7	\$	187,836	7.6

Change in Net Position (In thousands)

The following provides a discussion as to the primary reasons for the more significant fluctuations in the Authority's revenues and expenses between fiscal years 2022 and 2021, and between fiscal years 2021 and 2020, respectively.

Fiscal Year 2022:

- Operating revenues increased by \$61.7 million to \$832.2 million or 8.0%, primarily due to the retail rate increase of 7.8% offset by the 6.0% decrease in the Clean Rivers Impervious Area Charge (CRIAC) and post effects of the Covid-19 pandemic.
- Operating expenses increased by \$28.5 million to \$500.4 million, or 6.0%, primarily due to increases in costs for personnel services, chemicals and electricity.

Fiscal Year 2021:

- Operating revenues increased by \$33.7 million to \$770.6 million, or 4.6%, primarily due to the retail rate increase of 9.9% offset by the 6.8% decrease in the Clean Rivers Impervious Area Charge (CRIAC) and the effects of the COVID-19 pandemic.
- Operating expenses increased by \$18.2 million to \$471.9 million, or 4.0%, primarily due to increases in personnel services, chemicals, supplies, and small equipment, utilities and rent, depreciation expense, and water purchases.

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

2022 Total Revenues

Total revenues increased \$52.7 million, or 6.5%, to \$868.1 million in fiscal year 2022.



- Revenues from residential, commercial, and multi-family customers increased by \$47.7 million to \$522.1 million, or 10.1%, primarily due to a 7.8% water and wastewater rate increase and offset by a 6.0% decrease in the Clean Rivers Impervious Area Charge (CRIAC) and an increase in consumption due to the effects of the post COVID-19 pandemic.
- Revenues from the Federal government decreased by \$9.7 million to \$76.7 million, or 11.3%, primarily due to an 6.0% decrease in the CRIAC and decrease in consumption offset by a 7.8% water and wastewater rate increase.
- Revenues from the District of Columbia government and the District of Columbia Housing Authority increased by \$1.4 million to \$51.4 million or 2.8%, primarily due to a 7.8% water and wastewater rate increase and an increase in consumption offset by a 6.0% decrease in the Clean Rivers Impervious Area Charge (CRIAC).
- Revenues from wholesale wastewater treatment increased by \$7.9 million, to \$135.2 million or 6.2%, primarily due to a \$6.8 million increase in the Intermunicipal Agreement (IMA) shareable operating costs of the Blue Plains Plant and a \$0.9 million increase in IMA capital reimbursement revenues recognized in fiscal year 2022.
- Other revenues increased by \$14.5 million to \$46.8 million, or 44.7%, primarily due to reinstatement of customer late fees and increase in special billings.
- Capital contributions decreased by \$10.7 million to \$31.4 million, or 25.3%, primarily due a decrease in capital contributions from the District of Columbia and offset by an increase in federal grants contributions.

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

Diversity and Stability of Operating Revenues

The Authority's operating revenue base is very diverse, including established customers such as the Federal government, the District government, surrounding jurisdictions in Maryland and Virginia, and commercial and residential customers within the District. As shown on the chart below, no one category accounts for more than 26% of the Authority's total operating revenues of \$832.2 million for the fiscal year ended September 30, 2022.



Operating Revenues by Source (In thousands)

(a) Other revenues include \$12.9 million from Loudoun County and \$3.4 million from Potomac Interceptor.

- Revenues from commercial and multi-family customers in the District comprise approximately 47% of the Authority's total operating revenues. Commercial revenues are reliable due to the presence of many national associations, law firms, consulting firms, colleges and universities and foreign embassies in the District. The commercial customer category also includes multi-family dwellings.
- The Authority provides wastewater conveyance and treatment services to Montgomery and Prince George's Counties in Maryland through the Washington Suburban Sanitary Commission ("WSSC") and Fairfax and Loudoun Counties in Northern Virginia. Operating revenues from WSSC and Fairfax County account for 14% of the Authority's revenues and are based on their share of operating costs at Blue Plains. Loudoun County and Potomac Interceptor customers account for an additional 2% of the Authority's revenues and are included in other revenues.
- Residential customers in the District account for 17% of total operating revenues.

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

- Revenues from the Federal government comprise 9% of the Authority's total operating revenues and include customers such as the U.S. Congress, the Smithsonian Institution, and a range of federal departments and agencies.
- Revenues from the Government of the District of Columbia and the District of Columbia Housing Authority make up 7% of total operating revenues.

2022 Total Expenses

Total expenses increased by \$34.9 million, or 5.6%, to \$662.5 million in fiscal year 2022.



- Personnel services increased by \$7.3 million to \$149.7 million, or 5%, primarily due to increases in health benefits, overtime, and employee bonuses.
- Contractual services increased by \$2.4 million to \$75.6 million, or 3.2%, primarily due to an increase in fees for various contractual services.
- Chemicals, supplies, and small equipment increased by \$5.6 million to \$40.9 million, or 15.7%, primarily due to increased unit prices in major chemicals.
- Utilities and rent increased by \$10.5 million to \$37.8 million, or 38.4%, due to increases in water and electricity costs.
- Depreciation and amortization increased by \$2.2 million to \$140.3 million, or 1.6%, primarily due to an increase in capital assets in service.
- Water purchases increased by \$0.2 million to \$33.3 million, or 0.6%, primarily due to an increase in consumption. There was no change in the rate from fiscal year 2021.

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

- Payment in lieu of taxes and right of way fee (PILOT/ROW) increased by \$0.3 million to \$22.7 million, or approximately 1.6%, which is in line with the PILOT/ROW agreement.
- Interest expense and other nonoperating expenses increased by \$6.5 million to \$162.2 million, or 4.2%, primarily due to interest incurred in long term debt.

2021 Total Revenues

Total revenues increased \$47.0 million, or 6.1%, to \$815.4 million in fiscal year 2021.



- Revenues from residential, commercial, and multi-family customers increased by \$14.8 million to \$474.4 million, or 3.2%, primarily due to a 9.9% water and wastewater rate increase offset by a 6.8% decrease in the Clean Rivers Impervious Area Charge (CRIAC) and a decrease in consumption due to the effects of the COVID-19 pandemic.
- Revenues from the Federal government increased by \$6.3 million to \$86.4 million, or 7.9%, primarily due to a 9.9% water and wastewater rate increase and an increase in consumption offset by a 6.8% decrease in the Clean Rivers Impervious Area Charge (CRIAC).
- Revenues from the District of Columbia government and the District of Columbia Housing Authority increased by \$3.2 million to \$50.0 million, or 6.9%, primarily due to a 9.9% water and wastewater rate increase and an increase in consumption offset by a 6.8% decrease in the Clean Rivers Impervious Area Charge (CRIAC).
- Revenues from wholesale wastewater treatment increased by \$10.2 million to \$127.4 million, or 8.7%, primarily due to a \$6.3 million increase in the Intermunicipal Agreement (IMA) shareable operating costs of the Blue Plains Plant and a \$2.4 million increase in IMA capital reimbursement revenues recognized in fiscal year 2021.

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

- Other revenues decreased by \$0.9 million to \$32.3 million, or 2.6%, primarily due to a decrease in special billings.
- Capital contributions increased by \$19.4 million to \$42.1 million, or 85.2%, primarily due to recognition of revenue from the District government related to the relocation of the Fleet facilities.

Total Expenses (In thousands)

2021 Total Expenses

Total expenses increased by \$82.1 million, or 15.1%, to \$627.5 million in fiscal year 2021.



- Personnel services increased by \$7.3 million to \$142.4 million, or 5.4%, primarily due to increases in headcount, annual leave, and holiday pay.
- Contractual services decreased by \$0.8 million to \$73.2 million, or 1.1%, primarily due to a decrease in fees for various outside consulting services.
- Chemicals, supplies, and small equipment increased by \$4.8 million to \$35.4 million, or 15.7%, primarily due to increased unit prices in major chemicals.
- Utilities and rent increased by \$2.6 million to \$27.3 million, or 10.6%, due to increases in water and electricity costs.
- Depreciation and amortization increased by \$2.4 million to \$138.1 million, or 1.8%, primarily due to an increase in capital assets in service.

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

- Water purchases increased by \$1.4 million to \$33.1 million, or 4.5%, primarily due to a 14% increase in the water rate.
- Payment in lieu of taxes and right of way fee (PILOT/ROW) increased by \$0.3 million to \$22.4 million, or 1.5%, which is in line with the PILOT/ROW agreement.
- Interest expense and other nonoperating expenses increased by \$63.9 million to \$155.7 million, or 69.7%, primarily due to early adoption of GASB 89 Accounting for Interest Cost Incurred before the End of a Construction Period.

Capital Assets and Debt Administration

Capital Assets

As of September 30, 2022, 2021, and 2020, respectively, the Authority had \$7.9, billion, \$7.7 billion, and \$7.5 billion of capital assets (net of depreciation). This includes wastewater collection, wastewater treatment, water distribution systems, deep tunnel systems, purchased capacity, buildings, capital equipment, and construction in progress. The Authority's net capital assets increased by approximately \$195.9 million or 2.5%, during fiscal year 2022 and increased by approximately \$261.2 million, or 3.5%, during fiscal year 2021, primarily due to continued capital spending in accordance with the Authority's capital improvement program. See note 4 to the financial statements for more information on capital assets.

Capital Assets Net of Accumulated Depreciation (\$ in 000's)

	As of September 30,						
		2022		2021	2020		
Wastewater treatment plant	\$	3,334,860	\$	3,327,554	\$ 3,275,198		
Wastewater collection facilities		1,092,373		1,045,919	1,087,554		
Water distribution system		1,231,610		1,218,468	1,183,800		
Deep tunnel system		1,269,356		1,269,271	1,268,779		
Purchased capacity		410,457		399,651	385,133		
Buildings		84,903		84,904	-		
Capital equipment		405,368		381,431	368,796		
Construction in progress		2,289,874		2,057,773	1,830,830		
Less accumulated depreciation		(2,187,158)		(2,049,249)	(1,925,529)		
Net capital assets	\$	7,931,643	\$	7,735,722	\$ 7,474,561		

The Authority's contractual commitments are primarily associated with the long-term capital improvement program. Outstanding contractual commitments related to the capital improvement program as of September 30, 2022 and 2021 were \$256.7 million and \$192.4 million, respectively, which will be financed primarily with unspent bond proceeds, proceeds from future bond issuances, capital contributions from IMA participants, Federal capital contributions and PAY-GO capital contributions from the Authority.

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

Debt Administration

At the end of fiscal year 2022, the Authority had a total of \$4.0 billion in long term debt outstanding, an increase of \$300.2 million, or 8.2%, over fiscal year 2021.

At the end of fiscal year 2021, the Authority had a total of \$3.7 billion in long term debt outstanding, a decrease of \$92.0 million, or 2.4%, over fiscal year 2020.

A schedule of long-term debt activity including current year maturities for the year ended September 30, 2022 is shown below:

(In thousands)

Balance Balance 9/30/2021 9/30/2022 Description Increases Decreases Outstanding bonds and notes 3,422,793 \$ (526,172) \$ 3,726,934 830,313 \$ \$ Unamortized bond premiums 254,284 64,479 (68, 528)250,235 Unamortized bond discounts (1,577)129 (1,448)-Total bonds and notes 3,675,500 \$ 894,792 \$ (594,571) \$ 3,975,721 \$

In February 2022, the Authority issued subordinate lien revenue bonds with a face value of \$439.7 million The bonds were structured in four Series: 2022 Series B (Green Bonds) consisted of \$79.6 million, with average interest rates at 5.0% maturing in 2048; revenue and revenue refunding bonds 2022 Series C-1 consisting of \$206.7 million with average interest rates ranging from 4% to 5% maturing in 2052; revenue refunding bonds 2022 Series C-2 consisting of \$4.4 million with average interest rates at 4% maturing in 2041; revenue and

revenue refunding bonds 2022 Series D consisting of \$148.9 million with average interest rates at 4% maturing in 2041; revenue and revenue refunding bonds 2022 Series D consisting of \$148.9 million with average interest rates ranging from 1.7% to 3.5% maturing in 2045. Gross proceeds from the four series of 2022 Bonds totaled \$499.1 million including \$59.8 of the original issue premium.

In March 2022, the Authority issued \$96.3 million of tax-exempt 2022 Series E variable rate multimodal subordinate lien revenue bonds, maturing in 2027 to fund the Authority's capital improvement program. Net proceeds from the bond issuance totaled approximately \$100.7 million including \$0.7 of underwriter's discount and cost of issuance. Initially, the 2022 Series E bonds will bear interest at a soft tender long term rate. Upon expiration of the initial interest period, the bonds may be converted into a daily, weekly, index, short term, or fixed rate period, or a subsequent long term rate period.

In April 2020, DC Water entered into an agreement with DNT Asset Trust (an affiliate of JPMorgan Chase Bank, N.A.) to purchase a Subordinate Lien Revenue Refunding Bond, Series 2022A in the amount of \$294.3 million to (a) refund \$127.4 million Subordinate Lien Revenue Bonds, Series 2012A and \$163.2 million Subordinate Lien Revenue Refunding Bonds, Series 2012C; and (b) pay the costs of issuance of the bond. In July 2022, the Authority issued the 2022 Series A bonds for \$294.3 million with interest rates ranging from 1.56% and 2.53% and maturing in 2037. The refunding provided an annual debt service savings averaging \$3.8 million annually from fiscal year 2022 to fiscal year 2037.

The increases (decreases) in outstanding bonds and notes payable were related to the new bond issuance, scheduled principal repayments and bond refunding.

Management's Discussion and Analysis (unaudited)

September 30, 2022 and 2021

A schedule of long-term debt activity including current year maturities for the year ended September 30, 2021 is shown below:

	(In th	nousands)					
Description	ç	Balance 9/30/2020	Inc	reases	D	ecreases	Balance 9/30/2021
Outstanding bonds and notes	\$	3,499,065	\$	-	\$	(76,272)	\$ 3,422,793
Unamortized bond premiums		270,117		-		(15,833)	254,284
Unamortized bond discounts		(1,706)		-		129	(1,577)
Total bonds and notes	\$	3,767,476	\$	-	\$	(91,977)	\$ 3,675,499

The decreases in outstanding bonds and notes payable were related to scheduled principal repayments.

A more detailed discussion of long-term debt is provided in the Notes to the Financial Statements on page 56.

Credit Ratings

Short Term C	Credit Ratings
Moody's Investors' Service	P-1
Standard & Poor's Global Ratings	A-1+
Fitch Ratings	F1+

Long Term	Credit Ratings	
Moody's Investors' Service	Aa1	Stable Outlook
Standard & Poor's Global Ratings	AAA	Stable Outlook
Fitch Ratings	AA+	Stable Outlook

Rates

Effective October 1, 2021, the Authority raised its retail water and wastewater rates by 7.8%. The Authority's approved ten-year financial plan includes projected annual retail water and wastewater rate increases each year. The plan also includes projected revisions to its metering, right-of-way fee and payment-in-lieu of taxes pass-through, the Clean River Impervious Area Charge (CRIAC), and the Water System Replacement Fee (WSRF).

Contacting the Authority's Financial Management

This financial report is designed to provide our customers and other stakeholder with a general overview of the Authority's finances. If you have questions about this report or need additional financial information, contact the Office of the Chief Financial Officer at 1385 Canal Street, S.E., Washington D.C. 20003 or call 202-787-2000. A copy of this report is also available on DC Water's web site at <u>www.dcwater.com</u>

Statements of Net Position September 30, 2022 and 2021 (In thousands)

Assets and Deferred Outflows of Resources	2022	2021
Current assets:		
Cash and cash equivalents (note 3)	\$ 160,274	
Investments (note 3)	154,967	118,743
Restricted cash and cash equivalents (note 3)	218,518	222,464
Restricted investments (note 3)	—	
Customer receivables, net of allowance for doubtful accounts	00.070	02 179
of \$32,344 in 2022 and \$29,030 in 2021 (note 7) Due from other jurisdictions (note 8)	99,979	93,178 4,408
Due from Federal government (note 6)	5,181 46,975	43,965
Due from District government (note 13)	9,103	8,720
Inventory	15,823	14,572
Prepaid assets	11,865	12,015
Total current assets	722,685	711,797
Noncurrent assets:		
Restricted assets (note 3):	222 550	
Cash and cash equivalents	232,750	76,937
Investments	210,230	25,035
Total restricted cash and cash equivalents and investments	442,980	101,972
Capital assets (note 4):		
In-service	7,828,927	7,727,199
Less accumulated depreciation	(2,187,158)	(2,049,250)
Net capital assets in service	5,641,769	5,677,949
Construction-in-progress	2,289,874	2,057,773
Net capital assets	7,931,643	7,735,722
Other noncurrent assets:		
Due from District government (note 13)	11,716	17,574
Due from other jurisdictions (note 8)	8,383	10,758
Total other noncurrent assets	20,099	28,332
Total noncurrent assets	8,394,722	7,866,026
Total assets	9,117,407	8,577,823
Total assets and deferred outflows of resources	9,207,603	8,672,627
Liabilities		
Current liabilities:		
Accounts payable and accrued expenses	134,207	144,813
Unearned revenue	80,820	64,336
Accrued interest	75,707	76,411
Commercial paper notes payable (note 10)	99,633	107,952
Current maturities of long-term debt (note 11)	61,566	58,802
Due to jurisdictions	8,491	12,783
Compensation payable (note 9) Other liabilities (note 12)	26,256 10,407	22,165 10,587
Total current liabilities	497,087	497,849
Noncurrent liabilities:	497,087	497,049
Long-term debt, excluding current maturities (note 11)	3,914,155	3,616,698
Unearned revenue	3,914,155 1,871,828	1,865,734
Other liabilities (note 12)	1,871,828	1,803,734
Compensated absences payable (note 9)	12,174	13,946
Total noncurrent liabilities	5,815,980	5,513,509
Total liabilities	6,313,067	6,011,358
	0,515,007	0,011,558
Deferred Inflows of Resources	0.7 50 4	
Deferred gains on debt refunding	27,706	
Total liabilities and deferred inflows of resources	6,340,773	6,011,358
Net Position		
Net investments in capital assets	2,480,216	2,305,799
Restricted for:		
Capital projects	7,287	
		20 222
Debt service	62,586	39,223
Debt service Unrestricted Total net position	62,586 316,741 \$ 2,866,830	39,223 316,247 \$ 2,661,269

The notes to the basic financial statements are an integral part of these financial statements.

Statements of Revenues, Expenses and Changes in Net Position Years Ended September 30, 2022 and 2021 (In thousands)

	2022	2021
Operating revenues:		
Water and wastewater user charges:		
Residential, commercial and multi-family customers	\$ 522,057 \$	474,380
Federal government	76,680	86,422
District government and D.C. Housing Authority (note 13)	51,407	50,020
Charges for wholesale wastewater treatment	135,285	127,410
Other	46,781	32,325
Total operating revenues	832,210	770,557
Operating expenses:		
Personnel services	149,655	142,352
Contractual services	75,587	73,227
Chemicals, supplies and small equipment	40,974	35,411
Utilities and rent	37,823	27,331
Depreciation and amortization	140,263	138,074
Water purchases	33,345	33,135
Payment in lieu of taxes and right of way fee (note 13)	22,718	22,372
Total operating expenses	500,365	471,902
Operating income	331,845	298,655
Nonoperating revenues (expenses):		
Interest income	4,458	2,760
Interest expense and other nonoperating expenses	(162,176)	(155,672)
Total nonoperating expenses	(157,718)	(152,912)
Change in net position before capital contributions	174,127	145,743
Capital contributions (note 5)	31,434	42,093
Change in net position	205,561	187,836
Net position, beginning of year	2,661,269	2,473,433
Net position, end of year	\$ 2,866,830 \$	2,661,269

The notes to the basic financial statements are an integral part of these financial statements.

Statements of Cash Flows Years Ended September 30, 2022 and 2021 (In thousands)

		2022	2021
Cash flows from operating activities:			
Cash received from customers	\$	776,747	692,376
Cash received from customers for Storm Water fees		13,560	15,338
Cash paid to suppliers for goods and services		(175,007)	(158,109)
Cash paid to employees for services		(144,871)	(136,804)
Cash paid to District of Columbia for Storm Water fees		(12,481)	(14,279)
Cash paid to District for PILOT and ROW		(22,718)	(22,372)
Net cash provided by operating activities		435,230	376,150
Cash flows from capital and related financing activities:			
Proceeds from issuance of revenue bonds		894,792	
Proceeds from other jurisdictions		55,512	74,879
Repayments of bond principal and notes payable to Federal government		(526,174)	(76,272)
Acquisition of capital assets		(362,670)	(387,108)
Payments of interest and fiscal charges		(184,206)	(159,295)
Contributions of capital from Federal and District governments		41,011	29,060
Proceeds from issuance of commercial paper		517,651	470,552
Repayments of commercial paper		(525,970)	(441,800)
Net cash used in capital and related financing activities		(90,054)	(489,984)
Cash flows from investing activities:			
Cash received for interest		3,188	3,509
Investment purchases		(490,527)	(268,825)
Investment maturities		260,572	321,555
Net cash used in investing activities		(226,767)	56,239
Net increase (decrease) in cash and cash equivalents		118,409	(57,595)
Cash and cash equivalents at beginning of year		493,133	550,728
Cash and cash equivalents at end of year	\$	611,542	5 493,133
Operating income	\$	331,845	298,655
Adjustments to reconcile operating income to net cash provided by	Ψ	551,015	, 2,0,000
operating activities:			
Depreciation and amortization		140,263	138,074
Change in operating assets and liabilities:			
(Increase) decrease in customer and other receivables		(10,396)	(16,652)
Increase in inventory and prepaid assets		(1,094)	(3,112)
Increase (decrease) in payables and accrued liabilities		1,721	5,393
Decrease in unearned revenue		(27,109)	(46,208)
Net cash provided by operating activities	\$	435,230	376,150
Noncash Investing, Capital and Financing Activities:			
Capital asset additions included in accounts payable	\$	97,023	111,649
Net increase (decrease) in the fair value of investments	Ŧ	(8,082)	(1,492)

The notes to the basic financial statements are an integral part of these financial statements.
Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(1) Background, Governance, Operations and Reporting Entity

(a) Background

The District of Columbia Water and Sewer Enterprise Fund (the "Fund") was established in 1979 and was operated by the Water and Sewer Utility Administration, a division of the Government of the District of Columbia (the "District") Department of Public Works. The District of Columbia Water and Sewer Authority ("DC Water" or the "Authority"), an independent authority of the District, was created in April 1996 and began operating on October 1, 1996 under and pursuant to an act of the Council of the District entitled the "Water and Sewer Authority and Department of Public Works Reorganization Act of 1996 (as amended)", and an Act of the United States Congress entitled the "District of Columbia Water and Sewer Authority is considered a related organization of the District for purposes of presentation in the District's financial statements.

(b) Governance

The Authority is governed by a Board of Directors consisting of eleven principal and eleven alternate members. The Board is composed of six District of Columbia representatives, two each from Montgomery and Prince George's Counties in Maryland, and one from Fairfax County in Virginia. The Mayor of the District of Columbia appoints, and the DC Council confirms, all six District Board members and alternates, including the Chairman. In addition, the Mayor appoints the five principal and alternate members who represent the surrounding jurisdictions based on executive submissions from those jurisdictions.

(c) Operations

The Authority provides water and wastewater services to District residents, businesses, federal and municipal customers, and certain facilities of the Federal government in Virginia and Maryland. DC Water also operates a regional advanced wastewater treatment plant (Blue Plains or, "the Plant") and an interceptor trunk line that carries wastewater primarily from Loudoun and Fairfax Counties and Dulles Airport to the Blue Plains wastewater treatment facility.

The Authority's wastewater service territory includes over 2.5 million people in Montgomery and Prince George's Counties in Maryland, Fairfax and Loudoun Counties in Virginia, and the District. The Blue Plains Intermunicipal Agreement between the Authority; the District; Fairfax County, Virginia; and the Washington Suburban Sanitary Commission ("WSSC"), which comprises Montgomery and Prince George's Counties in Maryland (collectively referred to as the "Participants"), was executed in September 1985 (the "1985 IMA").

The 1985 IMA was replaced in 2012 and became effective on April 3, 2013 by a new Intermunicipal Agreement (the "2012 IMA"), which was negotiated, approved and executed by each of the original signatories to the 1985 IMA. The IMA provides for the allocation of capital, operating, and maintenance costs among the Participants. Capital costs of the Plant are allocated among the Participants in proportion to their respective wastewater treatment capacity allocation as defined in the 2012 IMA. Operating costs are allocated based on wastewater flows from each participant.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(1) Background, Governance, Operations and Reporting Entity (Continued)

The Loudoun County Sanitation Authority and the Potomac Interceptor Group also purchase wastewater services from the Authority. The Potomac Interceptor Group consists of the Town of Vienna, Virginia; the U.S. Park Service; the U.S. Department of the Navy; and the Metropolitan Washington Airports Authority (Dulles Airport).

The Authority purchases water from the Washington Aqueduct (the "Aqueduct"), which is owned by the Federal government and operated by the U.S. Army Corps of Engineers (USACE) under the direction of the Secretary of the Army. Since 1852, an act of Congress placed the care, management, and superintendence of the Washington Aqueduct under the USACE. Under the Act, USACE was given responsibility for supplying water in the District for use by the Federal government and for the use and benefit of the inhabitants of the District. The USACE operates two water purification plants at the Aqueduct, Dalecarlia and McMillan, for the exclusive benefit of the Authority, Arlington County and Fairfax County Water Authority ("FCWA"). The Aqueduct facilities supply treated water to distribution systems of the Authority, Arlington County, FCWA, the Federal government, and other parts of northern Virginia.

As of January 3, 2014, FCWA assumed ownership and operation of the water distribution system previously owned and operated by the City of Falls Church. The Authority is responsible for managing the treated Water System that serves the District and several other governmental customers outside the District. The Authority currently purchases approximately 74% of the finished water produced by the Aqueduct, and Arlington County and the FCWA purchase the remainder. Under this agreement, which remains in effect until September 30, 2023 and then thereafter until terminated, the Authority is responsible for funding approximately 74% of the Aqueduct's annual operating and capital costs. Additionally, the Authority obtains back-up and peak-day water supply from the Jennings Randolph Reservoir (Bloomington Dam) and Little Seneca Lake. The Jennings Randolph Reservoir was constructed by the Federal government and is operated by the USACE. The Little Seneca Lake was constructed and is operated by the WSSC.

(d) Reporting Entity

A financial reporting entity consists of a primary government and its component units. The criteria used to determine whether organizations are to be included as component units within the Authority's reporting entity are as follows:

- The Authority holds the corporate powers of the organization, and
- The Authority appoints a voting majority of the organization's board, and
- The Authority is able to impose its will on the organization, or
- The organization has the potential to impose a financial burden on, or provide a financial benefit to the Authority, or
- It would be misleading to exclude the organization from the Authority's financial statements.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(1) Background, Governance, Operations and Reporting Entity (Continued)

Based on the application of the above criteria, Blue Drop, LLC, a separate not-for-profit organization created by DC Water in November, 2016 by the Board Resolution #16-90, is considered to be a component unit of the Authority. Blue Drop, LLC which is legally separate from the Authority was established as a pilot program to provide the following:

- Relief from rising rates, fees, and charges to DC Water's customers in the District of Columbia, to other participating jurisdictions and to users of the joint-use sewage facilities,
- Advancing and promoting innovative strategies and technologies in the treatment and delivery of potable water, the treatment and collection of wastewater, and related products and services,
- Improving the state of the water and wastewater treatment sectors by sharing knowledge, research, and expertise throughout the country and the world,
- Promoting resource recovery and conservation; and
- Other purposes consistent with and complementary to the principles described in this Resolution.

A component unit should be included in the reporting entity financial statements using the blending method in any of these circumstances:

- The component unit's governing body is substantively the same as the governing body of the primary government *and* (1) there is a financial benefit or burden relationship between the primary government and the component unit, or (2) management of the primary government has operational responsibility for the component unit.
- The component unit provides entirely, or almost entirely, to the primary government or otherwise exclusively, or almost exclusively, benefits the primary government even though it does not provide services directly to it.
- The component unit's total debt outstanding, including leases, is expected to be repaid entirely, or almost entirely, with resources of the primary government.
- The component unit is organized as a not-for-profit corporation in which the primary government is the sole corporate member, as identified in the component unit's articles of incorporation or bylaws.

Blue Drop, LLC is a blended component unit because it is organized as a not-for-profit corporation in which the Authority is the sole corporate member, as identified in Blue Drop, LLC's articles of incorporation and bylaws. The inclusion of Blue Drop, LLC as a blended component unit did not have a material effect on the fiscal year 2022 or 2021 financial statements. Separate audited financial statements for Blue Drop, LLC are available from the Blue Drop, LLC Office at 1385 Canal Street SE, Washington, DC 20003. Condensed financial statements of Blue Drop, LLC as of and for the years ended September 30, 2022 and 2021 are also included in Note 15.

Additionally, the Authority is not considered to be a component unit of the District as the District is not able to impose its will on the Authority, and the Authority does not impose a financial burden on or provide a financial benefit to the District.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(2) Summary of Significant Accounting Policies

The financial statements of the Authority have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"), as applicable to governmental entities. The Governmental Accounting Standards Board ("GASB") is the accepted primary standard-setting body for establishing governmental accounting and financial reporting standards. The Authority's significant accounting policies are described below.

(a) Measurement Focus and Basis of Accounting

The financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned, and expenses are recorded when a liability is incurred, regardless of the timing of the related cash flows. Grants and similar items are recognized when all eligibility requirements imposed by the grantor have been met.

(b) Cash and Cash Equivalents

The Authority invests all unrestricted cash balances, in excess of the required compensating balances, in interest-bearing accounts. The Authority's cash equivalents at year end consist of unrestricted and restricted investments, such as registered money market mutual funds and U.S. government agency obligations, which have an original maturity of 90 days or less, and are readily convertible to known amounts of cash.

For purposes of the accompanying statements of cash flows, cash and cash equivalents also include the Authority's restricted cash and cash equivalents.

(c) Investments

The Authority's investments at year end consist of unrestricted and restricted U.S. government agency obligations, U.S. Treasury notes, commercial paper, FDIC insured and negotiable certificates of deposit, corporate notes, supranational bonds and municipal bonds which have an original maturity in excess of 90 days. Money market investments and participating interest-earning investment contracts that have a remaining maturity at time of purchase of one year or less are reported at amortized cost. All other investments are reported at fair value as of September 30, 2022 and 2021, respectively.

(d) Inventory

Inventory is recorded at the lower of weighted average cost or market value and consists primarily of operating and maintenance materials.

(e) Restricted Assets

Restricted assets represent unspent revenue bond proceeds, funds for the current payment of debt service, and unspent Federal capital appropriations. These assets, which cannot be used for routine operations, are classified as restricted assets since their use is limited by the applicable debt covenants and Federal Appropriations Act.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(2) Summary of Significant Accounting Policies (Continued)

(f) Capital Assets

The Authority's capital assets are comprised of the wastewater treatment plant, wastewater collection facilities, the water distribution systems, deep tunnel systems, purchased capacity, and capital equipment and fleet. Capital assets are reported at historical costs and include all ancillary costs. The wastewater treatment plant, collections facilities, water distribution systems and deep tunnel systems include project construction and development costs, internal engineering and construction management personnel costs, and interest costs incurred during the construction period.

Normal recurring maintenance and repair costs are charged to operations, whereas major repairs, improvements and replacements, which extend the useful lives of the capital assets, are capitalized. Construction-in-progress is transferred to capital assets in-service upon substantial completion or when placed in service, with related depreciation commencing at that time. The Authority's capitalization thresholds are: \$500 for wastewater treatment plant and collection facilities, and water distribution systems improvements; and \$5 for capital equipment and fleet.

Capital assets are depreciated using the straight-line method over the following estimated useful lives:

Asset class	Estimated useful lives
Wastewater treatment plant	60 years
Wastewater collection facilities	60 years
Water distribution systems	60 years
Deep tunnel systems	100 years
Purchased capacity	60 years
Buildings	60 years
Capital equipment and fleet	3 - 20 years

As discussed in Note 1, the Authority is responsible for approximately 74% of the Aqueduct's operating and capital costs. The Authority records its share of operating costs as water purchases and capital costs as purchased capacity, an intangible asset. The Authority's policy is to capitalize capital costs required to be funded under long-term water purchase agreements and to amortize such costs over the shorter of the term of the contractual agreement or estimated useful life of the assets. For purposes of the Aqueduct, the Authority considers the term of the water purchase agreement to be indefinite as USACE is required by law to provide the Authority with a source of water from the Aqueduct and the Authority has no intent to terminate its Agreement to purchase water from USACE. Additionally, capital cost reimbursements made in prior years under the Authority's participation in the Jennings Randolph Reservoir (Bloomington Dam) and Little Seneca Lake projects are also included in purchased capacity.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(2) Summary of Significant Accounting Policies (Continued)

(g) Deferred Outflows of Resources

Deferred outflows of resources are defined as a consumption of net position by the Authority that is applicable to a future reporting period. Deferred outflows of resources increase net position, similar to assets. Deferred loss on bond refunding resulted from the difference between the carrying value of the refunded debt and its reacquisition price. Net losses are deferred and amortized over the life of the refunded or refunding debt, whichever is shorter.

(h) Compensated Absences

Employees earn vacation and sick leave based on a prescribed formula, which allows employees to accumulate an unlimited amount of sick leave, and vacation leave up to the maximum amounts shown in the table below. Vacation leave earned but unused by employees vests and is accrued as a liability. Generally, sick leave does not vest, and accordingly, it is recorded when used. However, as further discussed in Note 14d, the Authority Retirement Health Savings (RHS) Plan allows non-union, non-federal employees to use sick leave that is usually forfeited upon termination, to fund an account that can be used to pay for eligible medical expenses. Eligibility is established upon termination if an employee has five years of service and 100 hours of sick leave.

Accordingly, the Authority has recorded an accrual for earned sick leave only to the extent it is probable that the benefits will result in termination payments. In developing this estimate the Authority has taken into consideration past experience in making termination payments for sick leave, adjusted for the effect of changes in our termination payment policy and other current factors.

	Annual Carryover
Length of Service	Limits
Regular Union employees: 1-3 years 4-14 years Over 15 years	240 hours 240-320 hours 240-360 hours
Non-union employees: 1-2 years 3-6 years 7 years	240 hours 320 hours 360 hours

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(2) Summary of Significant Accounting Policies (Continued)

(i) Bond Premiums, Discounts and Issuance Costs

Bond premiums and discounts incurred to issue debt are capitalized and amortized as interest expense over the related bond issue period using the effective interest method. Bond issuance costs are expensed in the period incurred.

(j) Net Position

Net position is categorized into three components as follows:

- Net investments in capital assets This component of net position consists of capital assets, net
 of accumulated depreciation and amortization and is reduced by the outstanding balances of any
 bonds or other borrowings that are attributable to the acquisition, construction, or improvement of
 those assets. Deferred outflows of resources and deferred inflows of resources that are attributable
 to the acquisition, construction, or improvement of those assets or related debt are also included
 in this component.
- Restricted This component of net position consists of restrictions placed on net position as a
 result of external constraints imposed by creditors (such as through debt covenants), grantors,
 contributors, or laws or regulations of other governments or constraints imposed by law through
 constitutional provisions or enabling legislation. When both restricted and unrestricted resources
 are available for use, generally it is the Authority's policy to use restricted resources first and the
 unrestricted resources when they are needed.
- Unrestricted This component consists of net position that does not meet the definition of "restricted" or "net investments in capital assets".

(k) Revenues and Expenses

Revenues and expenses are distinguished between operating and non-operating items. Operating revenues generally result from providing services in connection with the Authority's principal ongoing operations.

The principal operating revenues of the Authority are water and wastewater user charges, and charges for wholesale wastewater treatment. Revenues from user charges and sales of services are recognized as the related services are provided.

Operating expenses include the costs associated with the conveyance of water and wastewater, treatment of wastewater, administrative expenses, District payments-in-lieu-of-taxes (PILOT) and right-of-way (ROW) fees, and depreciation and amortization of capital assets. All revenues and expenses not meeting these definitions are reported as non-operating revenues and expenses.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(2) Summary of Significant Accounting Policies (Continued)

(I) Retail Water and Wastewater User Charges

Retail water and wastewater rates are approved by the Authority's Board of Directors. Charges to the District and the Federal government are the same as those charged to retail customers. Charges for services provided but unbilled at the end of the year are recorded as revenue on an estimated basis, which considers historical usage patterns and current rates. Allowances for customer receivables that ultimately may be uncollectible are estimated based on the current five years weighted average rate and charged to expense. Amounts received in advance or in excess of the user charge for a billing period are recorded as unearned revenues until such time as these amounts are either refunded or applied against future user charges.

(m) Charges for Wholesale Wastewater Treatment and Unearned Revenue

The cost of operating and maintaining the wastewater treatment plant and related collection facilities applicable to non-District users is billed to participating jurisdictions based upon their share of flows in accordance with terms of the IMA agreement discussed in Note 1c. The charges for operating and maintenance costs and for overhead costs incurred on capital projects are recorded as charges for wholesale wastewater treatment revenue in the year the costs are incurred. The costs of capital projects required for the joint use facilities are allocated to the participating jurisdictions based on their applicable capacity allocation as set forth in the 2012 IMA. The reimbursements for capital related costs are recorded as unearned revenue and are amortized into user charges for wholesale wastewater treatment revenues over the estimated useful lives of the related assets.

(n) Contingencies

Liabilities from loss contingencies arising from claims, assessments, litigation, fines and penalties, and other sources, are recorded when information available before the financial statements are issued indicates that it is probable that an asset has been impaired or a liability has been incurred at the date of the financial statements and the amount of the loss can be reasonably estimated. When the reasonable estimate of the loss is a range, and when no amount within the range is a better estimate than any other amount, the Authority accrues a loss for the minimum amount in the range.

(o) Use of Estimates

The preparation of financial statements in conformity with U.S generally accepted accounting principles (GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets, deferred outflows of resources, liabilities and deferred inflows of resources and disclosure of contingent assets and liabilities at the date of the basic financial statements. Estimates also affect the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(2) Summary of Significant Accounting Policies (Continued)

(p) Adoption of New Accounting Standards

During the fiscal year ended September 30, 2022, the Authority adopted the following new accounting standards issued by the Governmental Accounting Standards Board (GASB): Statement No. 87, *Leases* and Statement No. 92, *Omnibus 2020*. The objective of GASB 87 is to improve the accounting and financial reporting for leases by governments, by requiring recognition of certain lease assets and liabilities for leases that were previously classified as inflows of resources or outflows of resources based on the payment provisions of the contract.

The adoption of GASB 87 did not have any impact on the Authority's financial statements, as it did not enter into any material lease agreements applicable to the statement.

The objectives of GASB 92 are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. The adoption of GASB 92 did not have any impact on the financial statements of the Authority.

(q) New Accounting Pronouncements to be Implemented in the Future

The Authority plans to implement the following GASB pronouncements by the required implementation dates:

No.	Title	Required Implementation Date (Period Beginning After)	Authority Fiscal Year
91	Conduit Debt Obligations	December 15, 2021	2023
94	Public-Private and Public-Public Partnerships and Availability Payment Arrangements	June 15, 2022	2023
96	Subscription-Based Information Technology Arrangements	June 15, 2022	2023
99	Extension of the use of LIBOR, accounting for SNAP distributions - Omnibus 2022	June 15, 2023	2024
100	Accounting changes and corrections	June 15, 2023	2024
101	Compensated Absences	December 15, 2023	2025

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(3) Cash Deposits and Investments

(a) Authorized Cash Deposits and Investments

The Authority's Investment Policy, which is compliant with the Authority's bond covenants and master indenture, requires that all cash and other deposits maintained in financial institutions be collateralized, including bank deposits and collateralized certificates of deposit. Collateral is required to be secured in accordance with the following policy: a) collateralization on all deposits of the Authority in excess of the amount protected by federal deposit insurance; and b) collateralization with any of the following: (i) U.S. Treasury obligations, (ii) Federal agency obligations, or (iii) a Letter of Credit issued by a Federal Home Loan Bank the amount of which shall be 102% of the deposits held. Collateral shall always be held by an independent third-party custodian in the name of the Authority.

The Authority's Investment Policy permits investments in the following securities:

- (1) U.S. Treasury Obligations. U.S Treasury bills, notes, or any other obligation or security issued by or backed by the full faith and credit of the US Treasury. These securities shall be limited to a maximum maturity of five (5) years at the time of purchase.
- (2) Registered Investment Companies (Mutual Funds). Shares in open-end, no-load investment funds provided such funds are registered under the Federal Investment Company Act of 1940, invest exclusively in the securities permitted under this investment policy, provided that the fund is rated "AAAm" or "AAAm-G" or the equivalentby a NRSRO. The mutual fund must comply with the diversification, quality and maturity requirements of Rule 2(a)-7, or any successor rule, of the United States Securities and Exchange Commission.
- (3) Repurchase Agreements. Contracts shall be invested in only if certain conditions are met, including: a) the Repurchase Agreement has a term to maturity of no greater than ninety (90) days; b) the contract is fully secured by deliverable U.S. Treasury and Federal Agency obligations, having a market value at all times of at least one hundred two percent (102%) of the amount of the contract; and c) the counterparty meets certain criteria specified in the Investment Policy.
- (4) Federal Agency Obligations. Bonds, notes, debentures, or other obligations or securities issued by a Federal government agency or instrumentality, except Collateralized Mortgage Obligations, with a rating of at least "AA" or equivalent from two (2) NRSROs. These obligations shall be limited to a maximum maturity of five (5) years at the time of purchase.
- (5) Bankers' Acceptances. Issued by a domestic bank or a federally chartered domestic office of a foreign bank, which are eligible for purchase by the Federal Reserve System, may be purchased if the following conditions are met: a) the maturity is no greater than one hundred-eighty days (180) days; and b) the short-term paper of which is rated not lower than 'A-1' or the equivalent by a NRSRO.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(3) Cash Deposits and Investments (Continued)

- (6) Commercial Paper. Unsecured short-term debt of U.S. corporations may be purchased if certain conditions are met, including: a) the maturity is no greater than one (1) year; b) the issuing corporation, or its guarantor, has a short-term debt rating of no less than "A-1" (or its equivalent) by at least two of the NRSROs; and c) the total holdings of an issuer's paper do not represent more than ten percent (10%) of the corporation's outstanding commercial paper
- (7) Collateralized Certificates of Deposit in state chartered banks or federally charted banks. Deposits with savings and loans associations or District and Federal Credit Unions shall not exceed the greater of the total net worth or \$500,000. Collateralized Certificates of Deposit shall be collateralized at 102%. Please refer to the DC Water's collateralization policies under Collateralization of Bank Deposits.
- (8) Corporate Notes. High quality corporate notes that meet the following criteria: 1) a rating of at least 'A' (or its equivalent) from at least two NRSROs; and 2) the final maturity shall not exceed a period of five (5) years from the time of purchase.
- (9) FDIC insured Certificates of Deposit obtained through Certificate of Deposit placement services including the Certificate of Deposit Account Registry Service (CDARS). In 2012, the Authority began participating in CDARS program. The program allows the Authority to allocate funds into certificates of deposit in increments, which ensure the funds are eligible for full FDIC insurance.
- (10) Federal Agency Mortgage-Backed Securities. Issued by Fannie Mae, Freddie Mac, or the Government National Mortgage Association (GNMA) that meet the following criteria: 1) a rating of at least "AA" (or its equivalent) by two NRSROs; 2) the weighted average life (WAL) shall not exceed a period of five (5) years from the time of purchase.
- (11) Negotiable Certificates of Deposit and Bank Deposit Notes of domestic banks and domestic offices of foreign banks with: a) ratings of at least 'A-1' (or its equivalent) by two NRSROs for maturities of one (1) year or less; b) a rating of at least 'AA' (or its equivalent) by two (2) NRSOs for maturities of one (1) year or less; 2) and a rating of at least 'A' (or its equivalent) from at least two (2) NRSROs for maturities over one (1) year; and c) the final maturity shall not exceed a period of five (5) years from the time of purchase.
- (12) Supranational Bonds. Obligations, participations or other instruments of any Federal agency, instrumentality or United States government-sponsored enterprise, including those issued or fully guaranteed as to the principal and interest by Federal agencies, instrumentalities or United States government sponsored enterprises, provided that: 1) at time of purchase the maturity does not exceed five (5) years; and 2) have a rating of at least 'A' (or its equivalent) from at least two (2) NRSROs.
- (13) Municipal Obligations. Municipal bonds, notes and other evidences of indebtedness of the District or of any state or local government upon which there is no default that meet the following criteria; a) have a final maturity on the date of investment not to exceed five (5) years; b) a rating of at least 'AA' (or equivalent) by two (2) NRSROs; and c) the total holdings of any single issue do not represent more than 25% of the total issue.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(3) Cash Deposits and Investments (Continued)

Additionally, the Authority's Investment Policy has established the following limits as to the maximum percentage of the investment portfolio that is permitted to be invested in each type of eligible security:

Security		Security	
Collateralized Bank Deposits	100%	Collateralized Certificates of Deposit	30%
U.S. Treasury Obligations	100%	Corporate Notes	40%
Registered Money Market Mutual Funds	100%	FDIC-insured Certificates of Deposit	30%
Repurchase Agreements	100%	Federal Agency Mortgage-Backed Securities	30%
Federal Agency Obligations	80%	Negotiable Certificates of Deposit	50%
Bankers' Acceptances	40%	Supranational Bonds	30%
Commercial Paper	50%	Municipal Obligations	30%

The Authority's Investment Policy also stipulates that no more than 5% of the Authority's portfolio will be invested in the securities of any single issuer with following exceptions:

U.S. Treasury	100%	maximum
Each Mutual Fund	50%	maximum
Each Repurchase Agreement Counterparty	50%	maximum
Each Federal Agency	40%	maximum

For the years ended September 30, 2022 and 2021, the Authority was in full compliance with the Investment Policy.

(b) Cash Deposits

At September 30, 2022 and 2021, the carrying amounts of the Authority's unrestricted and restricted bank deposits were \$160,012 and \$209,138 respectively. These bank deposits were entirely insured or collateralized with securities or letters of credit at 102% of the market value of principal, plus accrued interest held by the Authority's independent agent in the Authority's name.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(3) Cash Deposits and Investments (Continued)

(c) Fair Value Measurements

The Authority categorizes its fair value measurements within the fair value hierarchy established by GAAP. The Authority is required to classify certain assets and liabilities based on the following fair value hierarchy:

- Level 1: Quoted price in active markets for identical assets.
- **Level 2:** Inputs other than quoted prices included in level 1 that are observable, either directly or indirectly. Debt securities are priced based on a compilation of primarily observable market information or broker quote in a non-active market.
- Level 3: Inputs are significant unobservable inputs.

As noted in the following table, all of the Authority's investments that are reported at fair value have been measured using Level 2 inputs as of September 30, 2022 and 2021, respectively:

	Fair Value Measurement at Reportable Date Using Significant Other Observable Inputs (Level 2)				
Investments by fair value level	2022	2021			
U.S. Treasury notes Corporate notes U.S. government agency obligations Supranational Bonds Municipal bonds Federal Agency Mortgage-Backed Securities Negotiable certificates of deposit Total investments at fair value	\$ 122,926 48,240 23,566 7,138 3,822 3,173 1,050 209,915	\$ 38,053 17,858 31,569 7,480 8,514 2,939 2,965 109,378			
Investments and cash equivalents carried at amortized cost Total investments and cash equivalents	606,809 \$ 816,724	318,396 \$ 427,774			

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(3) Cash Deposits and Investments (Continued)

(d) Cash Equivalents and Investments

As of September 30, 2022 and 2021, the Authority held the following cash equivalents and investments:

		Weighted Average Maturity		Weighted Average Maturity
Cash equivalents and investments	2022	(Years)	2021	(Years)
Registered money market mutual	\$ 451,529	0.083	\$ 283,996	0.083
U.S. Treasury notes	191,575	0.814	38,053	2.040
Commercial paper	67,538	0.180	13,298	0.145
Corporate notes	48,240	2.517	17,858	2.414
U.S. government agency obligations	23,566	0.929	31,569	1.793
FDIC-insured certificates of deposit	15,931	0.218	15,916	0.303
Supranational Bonds	7,138	1.253	7,480	2.278
Municipal bonds	3,822	1.732	8,514	1.423
Federal Agency Mortgage-Backed Securities	3,173	6.919	2,939	10.280
Negotiable certificates of deposit	4,212	1.906	8,151	0.647
Total cash equivalents and investments	\$ 816,724	0.487	\$ 427,774	0.637

The Authority's exposure to foreign currency risk, interest rate risk, credit risk and custodial risk associated with its cash deposits and investments are described below:

Foreign Currency Risk – Foreign currency risk is the risk that changes in the exchange rates will adversely impact the fair values of an investment. The Authority's investments are not subject to foreign currency risk as the Authority held no investments denominated in foreign currency as of and for the years ended September 30, 2022 and 2021, respectively.

Interest Rate Risk – Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, an investment with a longer maturity will have a greater sensitivity to fair value changes that are related to market interest rates. As a means of limiting its exposure to fair value losses resulting from rising interest rates, the Authority's Investment Policy limits the Authority's investment portfolio to investments with certain maximum maturities.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(3) Cash Deposits and Investments (Continued)

The following are the maximum maturities established by the Authority's investment policy:

Security	Maturities	Security	Maturities
U.S. Treasury Obligations	5 years	Corporate Notes	5 years
Registered Money Market Mutual Funds	NA	FDIC-insured Certificates of Deposit	NA
Repurchase Agreements	90 days	Federal Agency Mortgage-Backed Securities	5 years
Federal Agency Obligations	5 years	Negotiable Certificates of Deposit	5 years
Bankers' Acceptances	180 days	Supranational Bonds	5 years
Commercial Paper	1 year	Municipal Obligations	5 years
Collateralized Certificates of Deposit	NA		

Additionally, the Authority monitors the interest rate risk inherent in its portfolio by measuring the weighted average maturity of its portfolio of debt instruments.

As reflected in the table on the previous page, the weighted average maturity of the Authority's investment portfolio was 0.487 years and 0.636 years as of September 30, 2022 and 2021, respectively.

Credit Risk – Generally, credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized rating organization. The Authority manages this risk by establishing minimum credit ratings in its investment policy.

The table below reflects the allocation of the Authority's investments by credit quality rating as of September 30, 2022:

	Credit Quality Rating												
Investment Type	AAA	AA+	AA	AA-	A+	Α	A	BBB+	A-1	A-1+	AAAm	Not Rated	Total
U.S. government agency Obligations		2.9%											2.9%
Commercial paper									4.3%	4.1%			8.3%
Registered Money Market Mutual											55.2%		55.2%
U.S. Treasury notes		23.7%											23.7%
FDIC-Insured certificates of deposit												2.0%	2.0%
Federal Agency Mortgage-Backed Securities		0.4%											0.4%
Corporate notes			0.4%	1.1%	0.9%	1.3%	1.6%	0.6%					6.0%
Negotiable certificates of deposit					0.1%								0.1%
Supranational Bonds	0.9%												0.9%
Municipal bond		0.1%	0.1%	0.1%								0.2%	0.5%
	0.9%	27.2%	0.5%	1.2%	1.0%	1.3%	1.6%	0.6%	4.3%	4.1%	55.2%	2.1%	100.0%

At September 30, 2022, the Authority's investments with exposure to credit risk met the minimum credit ratings required in the Authority's investment policy.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(3) Cash Deposits and Investments (Continued)

Custodial Credit Risk – Deposits is the risk that, in the event of the failure of the depository financial institution, the Authority will not be able to recover the deposits or collateral securities that are in the possession of an outside party. The Authority had no custodial credit risk associated with cash deposits as all other bank deposits were entirely insured or collateralized with securities or letters of credit at 102% of the market value of principal, plus accrued interest and held by the Authority's independent agent in the Authority's name.

Custodial Credit Risk – Investments is the risk that in the event of the failure of the counterparty, the Authority will not be able to recover the value of its investments or collateral securities that are in the possession of the outside party. The Authority has no custodial credit risk as all Authority investments are held in the Authority's name by an independent custodial agent for the term of the agreement and investments in obligations of the United States or its agencies are held by the Federal Reserve in a custodial account.

Other Required Disclosures – As of and for the years ended September 30, 2022 and 2021, the Authority did not have any:

- Commitments to resell securities under yield maintenance agreements;
- · Losses due to defaults by counterparties or recoveries from prior period losses; or
- Investments in any one issuer that represent 5% or more of total investments, excluding investments explicitly guaranteed by the U.S. government and its agencies and investments in mutual funds, external investment pools and other pooled investments that are excluded from this disclosure requirement.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(3) Cash Deposits and Investments (Continued)

(d) Cash and Investment Schedule

A schedule of cash, cash equivalents and investments as of September 30, 2022 and 2021 follows:

		2022		2021		
Description	Unrestricted	Restricted	Total	Unrestricted	Restricted	Total
Cash and cash equivalents						
Registered money market mutual	\$ 262	\$451,268	\$ 451,530	\$ 630	\$283,366	\$ 283,996
Demand Deposit	160,012	-	160,012	193,103	16,035	\$ 209,138
Total cash and cash equivalents	160,274	451,268	611,542	193,733	299,401	493,134
Investments						
U.S. Treasury notes	58,876	132,699	191,575	36,639	1,414	38,053
Commercial paper	-	67,538	67,538	-	13,298	13,298
Corporate notes	48,240	-	48,240	17,858	-	17,858
U.S. government agency obligations	13,573	9,993	23,566	21,246	10,323	31,569
FDIC-insured certificates of deposit	15,931	-	15,931	15,916	-	15,916
Supranational Bonds	7,138	-	7,138	7,480	-	7,480
Negotiable certificates of deposit	4,214	-	4,214	8,151	-	8,151
Municipal bonds	3,822	-	3,822	8,514	-	8,514
Federal Agency Mortgage-Backed Securities	3,173	-	3,173	2,939	-	2,939
Total Investments	154,967	210,230	365,197	118,743	25,035	143,778
Total cash, cash equivalents & investments	\$ 315,241	\$661,498	\$ 976,739	\$ 312,476	\$324,436	\$ 636,912

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(3) Cash Deposits and Investments (Continued)

(e) Restricted Cash and Investment Schedule

A schedule of restricted cash, cash equivalents and investments as of September 30, 2022 and 2021 follows:

Description	2022	2021
Restricted cash and cash equivalents (current and noncurrent)		
Revenue bonds 2019C	\$ 100,456	\$ 86,858
2022 B Bond-Construction Fund	100,432	-
2022 C1 Bond-Construction Account	60,213	-
Debt service reserve account, 1998 revenue bonds	1,402	6,935
Revenue bonds 2019A	13,897	50,659
Principal payment, 2014 revenue bonds	13,625	13,448
Interest payment, 2010 revenue bonds	12,636	12,324
2022 E Bond-Construction Account	10,629	-
Interest payment, 2015A,B revenue bonds	8,563	8,692
Interest payment, 2016A revenue bonds	8,534	8,520
Interest payment, 2014A revenue bonds	8,442	8,425
2022 D Bond-Construction Account	7,985	-
Water Mains at Mass Ave	7,287	1,545
2018 A&B Senior Bond Interest	7,250	7,330
2022 B and C Bond Subordinate-Interest Account	6,844 6,668	- 6 754
Interest payment, 2017 A&B Senior Lien Interest		6,754
Interest payment, 2014C revenue bonds 2015 A & B Lien Revenue Bonds	6,460 5,654	8,469 7,362
Principal payment, 1998 revenue bonds	5,654 19,326	18,425
Principal payment, 1996 revenue bonds Principal payment, 2012 revenue bonds	5,342	5,089
Interest payment, 2019D revenue bonds	5,335	5,342
2017 A&B Senior Lien Principal	4,555	4,340
2017 Add Senior Eler Filicipal 2018 A&B Senior Bond Principal	3,860	3,696
Interest payment, 2019A,B revenue bonds	3,819	3,812
Lead Service Program 1	3,152	552
2022 D Bond Subordinate-Interest Account	2,220	
Cash-Fleet & Sewer Relocation	2,220	16.033
Interest payment, 1998 revenue bonds	2,046	2,545
Lead Service Program 2	5,788	212
Principal payment, 2019D revenue bonds	1,653	1,626
DC Government Customer Assistance Program 3	1,600	1,792
2022 E Bond Subordinate-Interest Account	1,513	-
2022 A Bond Subordinate-Interest Account	1,446	-
Interest payment, 2012A,C revenue bonds	1,336	7,498
Interest payment, 2019C revenue bonds	872	871
Interest payment, 2014B revenue bonds	148	1
Commercial Paper Series B Interest	68	1
CRIAC Emergency Residential Relief Fund COVID 19	67	166
2022 E Cost of Issuance	46	-
Interest payment, 2012C revenue bonds	39	39
Interest payment, 2013 revenue bonds	29	29
2022 A Cost of Issuance	19	-
Commercial Paper Notes Investment	10	-
2022 B Cost of Issuance	1	-
2012 B-2 Bond Interest Accoun, 2018 B Cost of Issuance	1	1
Combined sewer overflow (CSO) federal appropriations	-	2
Interest payment, EMCP Series A	 -	8
Total restricted cash and cash equivalents	\$ 451,268	\$ 299,401
Restricted investments (current and noncurrent)		
Revenue bonds 2019C	-	13,298
Debt service reserve account, 1998 revenue bonds	13,816	11,737
2022 C1 Bond-Construction Account	40,303	-
2022 D Bond-Construction Account	67,087	-
2022 E Bond-Construction Account	89,024	-
Total restricted investments	\$ 210,230	\$ 25,035

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(4) Capital Assets

The following tables present the activity in capital assets for the years ended September 30, 2022 and 2021

	Balance	Additiona	Dianacala	Transford	Balance
Capital Accesta	9/30/2021	Additions	Disposals	Transfers	9/30/2022
Capital Assets	** *** ***	•	•	• - • • •	* ~ ~~ / ~~ ~
Wastewater treatment plant	\$3,327,555	\$-	\$-	\$ 7,305	\$3,334,860
Wastewater collection facilities	1,045,919	-	-	46,454	1,092,373
Water distribution system	1,218,468	-	-	13,142	1,231,610
Deep tunnel systems	1,269,271	-	-	85	1,269,356
Purchased capacity	399,651	10,806	-	-	410,457
Buildings	84,903	-	-	-	84,903
Capital equipment	381,432	62	(2,355)	26,229	405,368
Total capital assets in service	7,727,199	10,868	(2,355)	93,215	7,828,927
Less accumulated depreciation:					
Wastewater treatment plant	(886,839)	(58,772)	-	-	(945,611)
Wastewater collection facilities	(357,659)	(18,821)	-	-	(376,480)
Water distribution system	(348,880)	(20,169)	-	-	(369,049)
Deep tunnel systems	(40,231)	(12,632)	-	-	(52,863)
Purchased capacity	(125,286)	(6,637)	-	-	(131,923)
Buildings	(7,540)	(1,336)	-	-	(8,876)
Capital equipment	(282,815)	(21,896)	2,355		(302,356)
Total accumulated depreciation	(2,049,250)	(140,263)	2,355		(2,187,158)
Net capital asssets in service	5,677,949	(129,395)	-	93,215	5,641,769
Construction-in-progress	2,057,773	325,316		(93,215)	2,289,874
Net capital assets	\$7,735,722	\$ 195,921	\$ -	\$ -	\$7,931,643

	Balance 9/30/2020	Additions	Disposals	Transfers	Balance 9/30/2021
Capital Assets			Biopodalo		
Wastewater treatment plant	\$3,275,198	\$ (4,205)	\$-	\$ 56,562	\$3,327,555
Wastewater collection facilities	1,087,554	(80,256)	-	38,621	1,045,919
Water distribution system	1,183,800	-	-	34,668	1,218,468
Deep tunnel systems	1,268,779	-	-	492	1,269,271
Purchased capacity	385,133	14,518	-	-	399,651
Buildings	-	84,461	-	442	84,903
Capital equipment	368,796	42	(14,353)	26,947	381,432
Total capital assets in service	7,569,260	14,560	(14,353)	157,732	7,727,199
Less accumulated depreciation:					
Wastewater treatment plant	(833,210)	(53,629)	-	-	(886,839)
Wastewater collection facilities	(341,362)	(16,297)	-	-	(357,659)
Water distribution system	(329,224)	(19,656)	-	-	(348,880)
Deep tunnel systems	(27,604)	(12,627)	-	-	(40,231)
Purchased capacity	(118,886)	(6,400)	-	-	(125,286)
Buildings	-	(7,540)	-	-	(7,540)
Capital equipment	(275,243)	(21,925)	14,353		(282,815)
Total accumulated depreciation	(1,925,529)	(138,074)	14,353		(2,049,250)
Net capital asssets in service	5,643,731	(123,514)	-	157,732	5,677,949
Construction-in-progress	1,830,830	384,675		(157,732)	2,057,773
Net capital assets	\$7,474,561	\$ 261,161	\$-	\$-	\$7,735,722

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(4) Capital Assets (Continued)

For the years ended September 30, 2022 and 2021, total interest expense incurred was \$154,500 and \$153,588, respectively.

The following tables present the activity in purchased capacity for the years ended September 30, 2022 and 2021:

	Balance 9/30/2021		Ad	lditions	Balance 9/30/2022	
Purchased capacity						
Washington Aqueduct	\$	367,461	\$	10,806	\$ 378,267	
Jennings Randolph Reservoir		19,863		-	19,863	
Little Seneca Lake		12,327		-	12,327	
Total in service		399,651		10,806	410,457	
Less accumulated depreciation:						
Washington Aqueduct		(106,385)		(6,026)	(112,411)	
Jennings Randolph Reservoir		(11,403)		(401)	(11,804)	
Little Seneca Lake		(7,498)		(210)	(7,708)	
Total accumulated depreciation		(125,286)		(6,637)	(131,923)	
Purchased capacity, net	\$	274,365	\$	4,169	\$ 278,534	
		Balance 9/30/2020		Additions	Balance 9/30/2021	
Purchased capacity						
Washington Aqueduct	\$	352,943	\$	14,518	\$ 367,461	
Jennings Randolph Reservoir		19,863		-	19,863	
Little Seneca Lake		12,327		-	12,327	
Total in service		385,133		14,518	399,651	
Less accumulated depreciation:						
Washington Aqueduct		(100,596)		(5,789)	(106,385)	
Jennings Randolph Reservoir		(11,002)		(401)	(11,403)	
Little Seneca Lake		(7,288)		(210)	(7,498)	
Total accumulated depreciation		(118,886)		(6,400)	(125,286)	
Purchased capacity, net	\$	266,247	\$	8,118	\$ 274,365	

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(5) Capital Contributions

Capital contributions consist of the following for the years ended September 30, 2022 and 2021, respectively:

Description	2022	2021
Federal grants and appropriations	\$ 25,148	\$ 22,291
Contributions from District government	6,286	19,802
Total	\$ 31,434	\$ 42,093

Capital contributions consist principally of Federal grants and appropriations and certain capital costs incurred by the Authority in fiscal years 2022 and 2021 to be reimbursed by the District government pursuant to the Memorandum of Understanding between the Authority and the District discussed in Note 13(e).

(6) Due from Federal Government

The amount due from the Federal government consists of the following at September 30, 2022 and 2021, respectively:

Description	2022	2021
Washington Aqueduct advance	\$ 45,722	\$ 41,845
Federal grants receivable	1,253	2,120
Total	\$ 46,975	\$ 43,965

The Washington Aqueduct advance consists of unexpended capital advances and an operating escrow of \$4,675 required under the Water Sales Agreement. Federal grants receivable represents amounts due from federal grantors related to allowable construction costs incurred but not billed and/or reimbursed as of the fiscal year end.

(7) Customer Receivables

The following is a summary of customer receivables, net as of September 30, 2022 and 2021:

Description	2022 2021		
Billed customer receivables	\$ 105,008 \$	96,043	
Unbilled customer receivables	27,315	26,165	
Total customer receivables	132,323	122,208	
Less: Allowance for doubtful accounts	(32,344)	(29,030)	
Customer receivables, net	\$ 99,979 \$	93,178	

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(8) Due from Other Jurisdictions

The amount due from other jurisdictions under the 2012 IMA consists of the following at September 30, 2022 and 2021:

Description	2022	2021
Current:		
Washington Suburban Sanitary Commission	\$ 4,253	\$ 3,243
Fairfax	-	191
Northern Virginia	113	109
Potomac Interceptor	815	865
Total current	5,181	4,408
Noncurrent:		
Washington Suburban Sanitary Commission	4,686	5,975
Fairfax	917	1,517
Loudoun County Sanitation Authority	416	790
Northern Virginia	2,364	2,476
Total noncurrent	8,383	10,758
Total due from other jurisdictions	\$ 13,564	\$ 15,166

(9) Compensated Absences

The following table reflects the activity associated with accrued compensated absences for the years ended September 30, 2022 and 2021, respectively:

	2022				2021	
Description	Vacation	Sick	Total	Vacation	Sick	Total
Beginning of year	\$ 12,334	\$16,079	\$ 28,413	\$ 10,696	\$13,964	\$ 24,660
Increases (incurred)	13,506	7,300	20,806	13,985	3,527	17,512
Decreases	(13,730)	(4,300)	(18,030)	(12,347)	(1,412)	(13,759)
End of year	12,110	19,079	31,189	12,334	16,079	28,413
Less: current portion	11,166	2,200	13,366	9,498	1,784	11,282
Noncurrent portion	\$ 944	\$16,879	\$ 17,823	\$ 2,836	\$14,295	\$ 17,131

The current portion of compensated absences is included in compensation payable in the accompanying statements of net position.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(10) Short-Term Debt—Commercial Paper and Extendable Municipal Commercial Paper

The Authority's commercial paper notes payable are comprised of the following as of September 30, 2022 and 2021, respectively:

	Balance	Balance
Description	9/30/2022	9/30/2021
Commercial Paper	\$ 49,633	\$ 57,952
Extendable Municipal Commercial Paper	50,000	50,000
	\$ 99,633	\$ 107,952

(a) Commercial Paper

A schedule of Commercial Paper activity for the years ended September 30, 2022 and 2021 is shown below:

Balance	2022					ance
9/30/2021	Ν	/laturities	Re	-lssuance	9/30	/2022
\$ 28,752	\$	(138,370)	\$	130,051	\$ 2	0,433
29,200		(87,600)		87,600	2	9,200
\$ 57,952	\$	(225,970)	\$	217,651	\$ 4	9,633
Balance		202	21		Bal	ance
9/30/2020	Ν	/laturities	Re	-lssuance	9/30	/2021
\$-	\$	(25,000)	\$	53,752	\$2	8,752
29,200		(116,800)		116,800	2	9,200
\$ 29,200	\$	(141,800)	\$	170,552	\$ 5	7,952
	9/30/2021 \$ 28,752 29,200 <u>\$ 57,952</u> Balance 9/30/2020 \$ - 29,200	9/30/2021 N \$ 28,752 \$ 29,200 <u>\$ 57,952 \$</u> Balance 9/30/2020 N \$ - \$ 29,200	9/30/2021 Maturities \$ 28,752 \$ (138,370) 29,200 (87,600) \$ 57,952 \$ (225,970) Balance 202 9/30/2020 Maturities \$ - \$ (25,000) 29,200 (116,800)	9/30/2021 Maturities Re \$ 28,752 \$ (138,370) \$ 29,200 (87,600) \$ 57,952 \$ (225,970) \$ Balance 2021 9/30/2020 Maturities Re \$ - \$ (25,000) \$ 29,200 (116,800) \$	9/30/2021 Maturities Re-Issuance \$ 28,752 \$ (138,370) \$ 130,051 29,200 (87,600) 87,600 \$ 57,952 \$ (225,970) \$ 217,651 Balance 2021 9/30/2020 Maturities Re-Issuance \$ - \$ (25,000) \$ 53,752 29,200 (116,800) 116,800	9/30/2021 Maturities Re-Issuance 9/30 \$ 28,752 \$ (138,370) \$ 130,051 \$ 24 29,200 (87,600) 87,600 24 \$ 57,952 \$ (225,970) \$ 217,651 \$ 44 Balance 2021 Balance 9/30 9/30/2020 Maturities Re-Issuance 9/30 \$ - \$ (25,000) \$ 53,752 \$ 24 29,200 (116,800) 116,800 24

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(10) Short-Term Debt—Commercial Paper and Extendable Municipal Commercial Paper (Continued)

The Authority has established a commercial paper ("CP") program to provide interim financing for the Authority's capital improvement program. 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, (collectively, the "Commercial Paper Notes"), each as subordinate debt to the senior debt discussed in Note 11. In May 2020, the Authority replaced the expiring direct-pay letters of credit issued by Landesbank Hessen-Thüringen Girozentrale, New York Branch with new irrevocable, direct-pay letters of credit, issued by TD Bank, NA to continue to provide liquidity and credit support for the Commercial Paper Notes.

In connection with the Bank's issuance of the Letters of Credit, the Authority and the Bank entered into a Reimbursement Agreement for each series of CP Notes, each dated as of May 1, 2015, each as amended (collectively, the "Reimbursement Agreements") that obligates the Authority to pay Bank Obligations and Reimbursement Obligations (both as defined in the Eleventh Supplemental Indenture relating to the Commercial Paper Notes) and Fee Obligations (as defined in each Reimbursement Agreement) to the Bank. The Bank Obligations, the Reimbursement Obligations and Fee Obligations and Fee Obligations are Subordinate Debt under the Indenture.

As of September 30, 2022 and 2021, the unspent amount related to the Series B and Series C Commercial Paper Notes was \$100,367 and \$92,048, respectively.

(b) Extendable Municipal Commercial Paper

A schedule of Extendable Municipal Commercial Paper activity for the years ended September 30, 2022 and 2021 is shown below:

	Balance	2022	Balance
Description	9/30/2021	Maturities Re-Issuance	9/30/2022
EMCP Series A, interest from 0.09% to 2.08%, maturities ranged from 27 to 92			
days	\$50,000	\$ (300,000) \$ 300,000	\$ 50,000
	Balance	2021	Balance
Description	9/30/2020	Maturities Re-Issuance	9/30/2021
EMCP Series A, interest from 0.09% to 1.9%, maturities ranged from 14 to 91 days	\$50,000	\$ (300,000) \$ 300,000	\$ 50,000

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(10) Short-Term Debt—Commercial Paper and Extendable Municipal Commercial Paper (Continued)

The Authority has authorized a \$100,000 Extendable Municipal Commercial Paper (EMCP) Program. The program consists of one series - A, in the amount of \$100,000. 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. On December 1, 2015, the Authority issued the Series A EMCP Notes in the amount of \$50,000. The proceeds were used to (1) redeem \$47,310 of currently outstanding Commercial Paper (2) pay \$1 of accrued interest on the Commercial Paper as well as the interest associated with the Authority's public utility subordinate lien multimodal revenue bonds, 2012 series B-2 (3) pay \$355 associated cost of issuance of the Series A EMCP Note.

As of September 30, 2022 and 2021, the unspent amount related to the Series A EMCP Notes was \$50,000.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(11) Long-Term Debt

A schedule of long-term debt activity for the year ended September 30, 2022 is shown below:

Description	Balance 9/30/2021	In	creases	Decreases	Balance 9/30/2022	Due With One Yea	
2022 Public Utility Revenue Bonds:	3/30/2021		0100303	Decreases	3/30/2022		
Series A interest at 1.56% to 2.53%, maturing in 2037	\$-	\$	294,305	\$-	\$ 294,305	\$	_
Series B interest at 5.0%, maturing in 2048	÷ _	Ŧ	79,585	÷ -	79,585	Ŷ	_
Series C -1 interest at 4% to 5%, maturing in 2052	-		206,730	-	206,730		_
Series C-2 interest at 4%, maturing in 2041	-		4,418	-	4,418		-
Series D interest at 1.7% to 3.5%, maturing in 2045	-		148,925	-	148,925		-
Series E interest at 3%, maturing in 2028	-		96,350	-	96,350		-
2019 Public Utility Revenue Bonds:							
Series A interest at 4.0 % to 5.0%, maturing in 2050	104,010		-	-	104,010		-
Series B interest at 5.0%, maturing in 2038	58,320		-	-	58,320		-
Series C interest at 1.75%, maturing in 2055	99,505		-	-	99,505		-
Series D interest at 1.7% to 3.2%, maturing in 2049	341,510		-	(1,625)	339,885	1,6	50
2018 Public Utility Revenue Bonds:							
Series A interest at 5.0%, maturing in 2050	100,000		-	-	100,000		-
Series B interest at 5.0%, maturing in 2050	193,185		-	(3,665)	189,520	3,8	\$50
2017 Public Utility Revenue Bonds:							
Series A interest at 4.0 % to 5.0%, maturing in 2053	100,000		-	-	100,000		-
Series B interest at 4.0 % to 5.0%, maturing in 2045	189,630		-	(4,340)	185,290	4,5	55
2016 Public Utility Revenue Bonds:							
Series A interest at 2.0 % to 5.0%, maturing in 2040	377,575		-	-	377,575		-
2015 Public Utility Revenue Bonds:							
Series A interest at 2.0 % to 5.0%, maturing in 2046	95,420		-	(13,780)	81,640	7,6	i 40
Series B interest at 5.0 % to 5.25%, maturing in 2045	250,000		-	(76,910)	173,090		-
2014 Public Utility Revenue Bonds:							
Series A interest at 4.81%, maturing in 2115	350,000		-	-	350,000		-
Series B-1 interest at 3.25%, maturing in 2050	50,000		-	-	50,000		-
Series B-2 interest at 3.25%, maturing in 2050	50,000		-	-	50,000		-
Series C interest at 3.0 % to 5.0%, maturing in 2044	363,730		_	(106,850)	256,880	14,1	25
2012 Public Utility Revenue Bonds:	000,100			(100,000)	200,000	, .	20
Series A interest at 2.0 % to 5.0%, maturing in 2038	127 700			(132,465)	5,325	5,3	225
	137,790		-	· · · · ·	5,525	5,5	20
Series C interest at 4.0% to 5.0%, maturing in 2034	163,215		-	(163,215)	-		-
2010 Series A Public Utility Revenue Bonds:							
interest at 4.1% to 5.5%, maturing in 2045	295,485		-	(4,595)	290,890	4,6	575
1998 Public Utility Revenue Bonds:							
interest ranges from 5.5% to 6.0%, maturing in 2029	92,545		-	(18,275)	74,270	19,2	280
Subtotal	3,411,920		830,313	(525,720)	3,716,513	61,1	00
Direct Placement & Borrowings of Debt:							
Notes payable to the Federal Government							
interest at 3.25%, maturing in 2041	10,873		_	(452)	10,421	4	66
Subtotal	10,873		-	(452)	10,421		66
Total	3,422,793		830,313	(526,172)	3,726,934	61,5	666
I pamortized hand premiums	254,284		64 470	(60 500)	250 225		
Unamortized bond premiums			64,479	(68,528)	250,235		-
Unamortized bond discounts	(1,577)	¢	-	129 (EQ4 EZ1)	(1,448)	¢ 04 5	-
Grand total bonds and notes	\$3,675,500	\$	894,792	\$ (594,571)	\$3,975,721	\$ 61,5	000

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(11) Long-Term Debt (Continued)

A schedule of long-term debt activity for the year ended September 30, 2021 is shown below:

Description	Balance 9/30/2020	Increases	Decreases	Balance 9/30/2021	Due Within One Year
2019 Public Utility Revenue Bonds:	0,00,2020	moreacce	Boorodooo	0/00/2021	
Series A interest at 4.0 % to 5.0%, maturing in 2050	\$ 104,010	\$-	\$-	\$ 104,010	\$-
Series B interest at 5.0%, maturing in 2038	58,320	-	-	58,320	-
Series C interest at 1.75%, maturing in 2055	99,505	-	-	99,505	-
Series D interest at 1.7% to 3.2%, maturing in 2049	343,160	-	(1,650)	341,510	1,625
2018 Public Utility Revenue Bonds:					
Series A interest at 5.0%, maturing in 2050	100,000	-	-	100,000	-
Series B interest at 5.0%, maturing in 2050	196,675	-	(3,490)	193,185	3,665
2017 Public Utility Revenue Bonds:				(
Series A interest at 4.0 % to 5.0%, maturing in 2053	100,000	-	-	100,000	-
Series B interest at 4.0 % to 5.0%, maturing in 2045	193,760	-	(4,130)	189,630	4,340
2016 Public Utility Revenue Bonds: Series A interest at 2.0 % to 5.0%, maturing in 2040	377,575			377,575	
-	511,515	-	-	577,575	-
2015 Public Utility Revenue Bonds:	07 400		(2,000)	05 400	7 050
Series A interest at 2.0 % to 5.0%, maturing in 2046	97,420	-	(2,000)	95,420	7,350
Series B interest at 5.0 % to 5.25%, maturing in 2045	250,000	-	-	250,000	-
2014 Public Utility Revenue Bonds:					
Series A interest at 4.81%, maturing in 2115	350,000	-	-	350,000	-
Series B-1 interest at 3.25%, maturing in 2050	50,000	-	-	50,000	-
Series B-2 interest at 3.25%, maturing in 2050	50,000	-	-	50,000	-
Series C interest at 3.0 % to 5.0%, maturing in 2044	376,580	-	(12,850)	363,730	13,410
2012 Public Utility Revenue Bonds:					
Series A interest at 2.0 % to 5.0%, maturing in 2038	142,665	-	(4,875)	137,790	5,090
Series C interest at 4.0% to 5.0%, maturing in 2034	163,215	-	-	163,215	-
2010 Series A Public Utility Revenue Bonds:					
interest at 4.1% to 5.5%, maturing in 2045	300,000	-	(4,515)	295,485	4,595
1998 Public Utility Revenue Bonds:	,		()/	,	,
interest ranges from 5.5% to 6.0%, maturing in 2029	109,870	-	(17,325)	92,545	18,275
Subtotal	3,462,755	-	(50,835)	3,411,920	58,350
	-,,		(-,,	,
Direct Placement & Borrowings of Debt:					
2016 Public Utility Revenue Bonds:					
Series B interest at 3.4%, maturing in 2047	25,000	-	(25,000)	-	-
Notes payable to the Federal Government					
interest at 3.25%, maturing in 2041	11,310	-	(437)	10,873	452
Subtotal	36,310	-	(25,437)	10,873	452
Total	3,499,065	-	(76,272)	3,422,793	58,802
					<u> </u>
Unamortized bond premiums	270,117	-	(15,833)	254,284	-
Unamortized bond discounts	(1,706)	-	129	(1,577)	-
Grand total bonds and notes	\$3,767,476	\$-	\$ (91,976)	\$3,675,500	\$ 58,802

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(11) Long-Term Debt (Continued)

(a) Senior Debt

The 2018 Series A and B, 2017 Series A and B, 2014 Series A, 2009 Series A and 1998 Series public utility revenue bonds are considered senior debt under the related Master Indenture of Trust ("Master Indenture"). Payment of the principal and interest on the Authority's senior debt is secured by a pledge of Authority's gross revenues (excluding any capital contributions or grants) after provisions for payment of operating expenses.

In April 2018, the Authority issued senior lien revenue bonds with a face value of \$300,000. The bonds were structured in two Series: 2018 Series A (Green Bonds) consisting of \$100,000 with interest rates at 5.0% maturing in 2050; 2018 Series B consisting of \$200,000 with interest rates at 5.0% maturing in 2050. Gross proceeds from the two series of 2018 Bonds totaled \$348,644 including \$48,644 of the original issue premium. Approximately \$115,086 of 2018 series A (Green Bonds) was used to fund a portion of the costs of the Authority's DC Clean Rivers Project; \$146,586 of the 2018 series B was used to fund various capital improvements to the system; \$85,000 of 2018 series B was used to pay principal of and interest on all or a portion of the Authority's outstanding commercial paper notes, Series B (the "Series B CP Notes) and \$1,972 was used to pay the underwriter's discount and cost of issuance.

In January 2017, the Authority issued senior lien revenue bonds with a face value of \$300,000. The bonds were structured in two Series: 2017 Series A (Green Bonds) consisting of \$100,000 with interest rates ranging from 4.0% to 5.0% maturing in 2053; 2017 Series B consisting of \$200,000 with interest rates ranging from 4.0% to 5.0% maturing in 2045. Gross proceeds from the two series of 2017 Bonds totaled \$334,345, including \$34,345 of the original issue premium. Approximately \$107,966 of 2017 series A (Green Bonds) was used to fund a portion of the costs of the Authority's DC Clean Rivers Project; \$224,406 of the 2017 series B was used to fund various capital improvements to the system and \$1,972 was used to pay the underwriter's discount and cost of issuance.

In July 2014, the Authority issued \$350,000 of senior lien public utility revenue bonds 2014 Series A. The 2014 Series A bonds are federally taxable green bonds with a fixed rate of 4.81% and a 100 year final maturity in 2115. The proceeds of the issuance will be used to help finance the construction of the Authority's DC Clean Rivers Project. Net proceeds from the bond issuance totaled approximately \$346,000 including \$4,000 of underwriter's discount and cost of issuance.

In February 2009, the Authority issued senior lien public utility revenue bonds 2009 Series A with a face value of \$300,000, consisting of \$38,355 in Serial Bonds and \$261,645 in Term Bonds. The Serial Bonds have maturity dates and interest rates ranging from 2010-2030 and 3.0% to 5.4%, respectively. The Term Bonds have maturity dates and interest rates ranging from 2024-2039 and 4.8% to 6.0%, respectively. Debt proceeds were used to repay \$14,800 of the taxable Series A Commercial Paper Notes and \$50,000 of the tax exempt Series B Commercial Paper Notes with the remainder used to finance the ongoing capital improvement program. During fiscal years 2015 and 2016, the Authority advance refunded \$128,835 and \$144,810, of the 2009 Series A bonds respectively. Details of the advance refunding are discussed below. As of September 30, 2019, the bonds are considered to be defeased and the liability for these bonds has been removed from the financial statements

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(11) Long-Term Debt (Continued)

In April 1998, the Authority issued \$266,120 of senior lien public utility revenue bonds 1998 Series. Gross proceeds from the Series 1998 Series bonds totaled \$285,200, including \$18,800 of the original issue premium. Approximately \$77,200 was used to fund various capital projects; \$181,000 was used to repay the outstanding balances of a revolving line of credit and certain notes payable to the Federal government and to advance-refund approximately \$152,200 of District general obligation bonds. The refunded bonds have been fully extinguished. The remainder of the gross proceeds, approximately \$27,000, was used to fund the debt service reserve fund and to pay the cost of issuance. The payment of principal and interest on the Series 1998 bonds is insured by Financial Security Assurance, Inc.

(b) Subordinate Debt

Payments of the Authority's subordinate debt are made after payments of senior debt and after certain reserves have been funded (see "Bond Covenants" below).

In February 2022, the Authority issued subordinate lien revenue bonds with a face value of \$439,658. The bonds were structured in four Series: 2022 Series B (Green Bonds) consisted of \$79,585, with average interest rates at 5.0% maturing in 2048; revenue and revenue refunding bonds 2022 Series C-1 consisting of \$206,730 with average interest rates ranging from 4% to 5% maturing in 2052; revenue refunding bonds 2022 Series C-2 consisting of \$4,418 with average interest rates at 4% maturing in 2041; revenue and revenue refunding bonds 2022 Series D consisting of \$148,925 with average interest rates ranging from 1.7% to 3.5% maturing in 2045. Gross proceeds from the four series of 2022 Bonds totaled \$499,136, including \$59,774 of the original issue premium. Approximately \$79,585 of 2022 series B, was used to fund a portion of the costs of the Authority's DC Clean Rivers Project: Series 2022 C-1 and D will be used to pay a portion of the Authority's share of capital improvements to the Washington Aqueduct and a portion of the costs of capital improvements to the system; \$25,000 of the 2022 series C-1 was used to fund CP notes principal and interest subaccounts. A portion of the series C-1 proceeds was used to refund \$106.850 Subordinate Lien Revenue Refunding Bonds, Series 2014C, \$13,780 Subordinate Lien Revenue Bonds, Series 2015A and \$76,910 Subordinate Lien Revenue Bonds, Series 2015B; \$121,622 of the 2022 series C-1 was deposited to series 2022C-1 tender purchase account; \$74,727 of the 2022 series D was deposited to series 2022D Escrow Account; \$4,418 of the 2022 series C-2 will be issued in exchange for the tendered bonds and therefore no proceeds will be received by the Authority, and \$2,787 was used to pay the underwriter's discount and cost of issuance.

In March 2022, the Authority issued \$96,350 of tax-exempt 2022 Series E variable rate multimodal subordinate lien revenue bonds, maturing in 2027 to fund the Authority's capital improvement program. Net proceeds from the bond issuance totaled approximately \$100,653 including \$653 of underwriter's discount and cost of issuance. Initially, the 2022 Series E bonds will bear interest at a soft tender long term rate. Upon expiration of the initial interest period, the bonds may be converted into a daily, weekly, index, short term, or fixed rate period, or a subsequent long term rate period.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(11) Long-Term Debt (Continued)

In April 2020, DC Water entered into an agreement with DNT Asset Trust (an affiliate of JPMorgan Chase Bank, N.A.) to purchase a Subordinate Lien Revenue Refunding Bond, Series 2022A in the amount of \$294,305 to (a) refund \$127,375 Subordinate Lien Revenue Bonds, Series 2012A and \$163,215 Subordinate Lien Revenue Refunding Bonds, Series 2012C; and (b) pay the costs of issuance of the bond. In July 2022, the Authority issued the 2022 Series A bonds for \$294,305 with interest rates ranging from 1.56% and 2.53% and maturing in 2037. The refunding provided an annual debt service savings averaging \$3,800 annually from fiscal year 2022 to fiscal year 2037.

In October 2019, the Authority issued subordinate lien revenue bonds with a face value of \$505,490. The bonds were structured in three Series: 2019 Series A consisted of \$104,010 with average interest rates ranging from 4.0% to 5.0% maturing in 2050; 2019 Series B consisting of \$58,320 with average interest rates at 5.0% maturing in 2038; revenue refunding bonds 2019 Series D consisting of \$343,160 with average interest rates ranging from 1.7% to 3.2% maturing in 2049. Gross proceeds from the three series of 2019 Bonds totaled \$544,170, including \$38,680 of the original issue premium. Approximately \$125,000 of 2019 series A was used to fund a portion of the costs of the Authority's DC Clean Rivers Project; \$75,000 of the 2019 series B was used to fund various capital improvements to the system; \$342,471 of 2019 series D was used to refund all or portion of the authority's outstanding subordinated lien revenue bonds 2013 Series A, and \$2,948 was used to pay the underwriter's discount and cost of issuance.

The Authority completed its refunding of the 2013 Series A bonds by using \$342,470 of bond proceeds from 2019 Series D to purchase securities that were placed in an irrevocable trust with an escrow agent to provide for all future debt service payments on the bonds. As a result, the bonds are considered to be defeased and the liability for those bonds has been removed from the financial statements. This refunding decreases total debt service payments by approximately \$77,712 resulting in an economic gain (difference between the present values of the debt service payments on the old and new debt) of \$50,847. The refunded bonds have been fully extinguished.

In October 2019, the Authority issued \$99,505 of tax-exempt 2019 Series C variable rate multimodal subordinate lien revenue bonds, maturing in 2055 to fund the Authority's capital improvement program. Net proceeds from the bond issuance totaled approximately \$100,617 including \$617 of underwriter's discount and cost of issuance. Initially, the 2019 Series C bonds will bear interest at a soft tender long term rate. Upon expiration of the initial interest period, the bonds may be converted into a daily, weekly, index, short term, or fixed rate period, or a subsequent long term rate period.

In September 2016, the Authority issued \$25,000 of tax-exempt public utility subordinate lien revenue bonds, 2016 Series B (Environmental Impact Bonds) (the "2016 Series B Bonds"). The 2016 Series B Bonds are multimodal variable rate bonds, initially issued bearing a 3.43% fixed rate through the mandatory tender date, April 1, 2021. The net proceeds (after payment of \$472 of issuance expenses) of \$24,528 of the 2016 Series B Bonds will be used for construction of green infrastructure (GI) in Rock Creek Project A (RC-A). The GI practices are designed to mimic natural processes to absorb and slow surges of stormwater during periods of heavy rainfall, reducing the incidence and volume of combined sewer overflows (CSOs) that pollute the District's waterways.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(11) Long-Term Debt (Continued)

The 2016 Series B Bonds were designated as Environmental Impact Bonds and, as such, included provisions for the possibility of an Outcome Payment by the Authority to the Original Purchasers of the 2016 Series B Bonds of \$3,300 in the event of a runoff reduction greater than 41.3%, and for the possibility of a Risk Share Payment by the Original Purchasers to the Authority of \$3,300 in the event of a runoff reduction means the percentage reduction of storm water runoff in RC-A per impervious acre treated to manage the volume of runoff produced by 1.2 inches of rain as compared to the existing conditions runoff in RC-A as defined in the Private Placement Agreement between the Authority and Original Purchasers. Post-construction monitoring found the green infrastructure reduced stormwater runoff by nearly 20 percent from previous levels. This fell within the 'as expected' outcome range established by the EIB and means no outcome payment was due to the investors and no risk share or underperformance penalty was due from the investors.

In February 2016, the Authority issued subordinate lien revenue refunding bonds 2016 Series A for \$389,110. The proceeds from these bonds were used to advance refund \$67,295 of the remaining portion of subordinated lien revenue bonds 2007 Series A, \$141,555 of subordinate lien revenue bonds 2008 Series A, \$144,810 of senior lien revenue bonds 2009 Series A and current refund the remaining portion of \$48,285 of subordinated lien revenue bonds 2007 Series A. The proceeds from 2016 Series A were used to purchase securities that were placed in an irrevocable trust with an escrow agent to provide for all future debt service payments on the refunded 2007 Series A, 2008 Series A and 2009 Series A bonds. As a result, the bonds are considered to be defeased and the liability for these bonds has been removed from the financial statements. The interest rates on the refunded bonds ranges from 3.0% to 6.0%. The cash flow required to make principal and interest payments on the refunding bonds is approximately \$78,672 less than the debt service requirements of the refunded bonds. The economic gain (the difference between the present values of the debt service payments on the old and new debt) obtained from the advance refunding is \$56,831.

In October 2015, the Authority issued subordinate lien revenue bonds with a face value of \$350,000. The bonds were structured in two Series: 2015 Series A (Green Bonds) consisted of \$100,000 with interest rates ranging from 2.0% to 5.0% maturing in 2046; 2015 Series B consisting of \$250,000 with interest rates ranging from 5.0% to 5.25% maturing in 2045. Gross proceeds from the two series of 2015 Bonds totaled \$406,587, including \$56,587 of the original issue premium. Approximately \$115,869 of 2015 series A (Green Bonds) was used to fund a portion of the costs of the Authority's DC Clean Rivers Project; \$226,584 of the 2015 series B was used to fund various capital improvements to the system; \$62,000 of 2015 series B was used to pay principal of and interest on all or a portion of the Authority's outstanding commercial paper notes, Series B (the "Series 2015 B CP Notes), and \$2,134 was used to pay the underwriter's discount and cost of issuance.

In November 2014, the Authority issued subordinate lien revenue refunding bonds 2014 Series C for \$377,700. The proceeds from these bonds were used to advance refund \$103,135 of subordinated lien revenue bonds 2007 Series A, \$93,560 of subordinate lien revenue bonds 2008 Series A, and \$128,835 of senior lien revenue bonds 2009 Series A; and to current refund \$52,690 of subordinate lien multimodal revenue bonds 2012 Subseries B-1.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(11) Long-Term Debt (Continued)

The proceeds from 2014 Series C were used to purchase securities that were placed in an irrevocable trust with an escrow agent to provide for all future debt service payments on the refunded 2007 Series A, 2008 Series A and 2009 Series A bonds. As a result, the bonds are considered to be defeased and the liability for these bonds has been removed from the financial statements. The interest rates on the refunded bonds ranges from 2.26% to 6.0%. The cash flow required to make principal and interest payments on the refunding bonds is approximately \$50,356 less than the debt service requirements of the refunded bonds. The economic gain (the difference between the present values of the debt service payments on the old and new debt) obtained from the advance refunding is \$35,266.

In July 2014, the Authority issued \$100,000 of tax-exempt 2014 Series B variable rate multimodal subordinate lien revenue bonds, maturing in 2050 to fund the Authority's capital improvement program. Net proceeds from the bond issuance totaled approximately \$99,500 including \$500 of underwriter's discount and cost of issuance. Initially, the 2014 Series B bonds will bear interest in a weekly rate period but may be converted to daily, index, short term, long term or fixed rate. Funds for the purchase of tendered bonds that are not remarketed will be provided initially by TD Bank, N.A. for a period of three years pursuant to a Standby Bond Purchase Agreement dated July 23, 2014.

In July 2013, the Authority issued \$300,000 of subordinate lien public utility revenue bonds with interest rates ranging from 4.75% to 5.0%, maturing in 2049 to fund the Authority's capital improvement program. Gross proceeds from the 2013 Series A bonds totaled \$298,921, including \$1,014 of original issue premium and \$2,093 of underwriter's discount and cost of issuance. During fiscal year 2019, the Authority refunded \$300,000 of the series 2013 Series A bonds. Details of the refunding are discussed above. As of September 30, 2020, the bonds are considered to be defeased and the liability for these bonds has been removed from the financial statements.

In March 2012, the Authority issued subordinate lien revenue bonds with a face value of \$440,645. The bonds were structured in three Series: 2012 Series A consisted of \$177,430 with interest rates ranging from 2.0% to 5.0% maturing in 2038; 2012 Series B consisting of \$100,000 with interest rate at 2.26% maturing in 2044; and 2012 Series C consisting of \$163,215 with interest rates ranging from 4.0% to 5.0% maturing in 2034. Gross proceeds from the three series of 2012 Bonds totaled \$493,934, including \$53,289 of the original issue premium.

Approximately \$302,413 was used to fund various capital projects; \$188,688 was used to advancerefund series 2003 Series bonds, and \$2,833 was used to pay the underwriter's discount and cost of issuance. During fiscal years 2016 and 2015, the Authority current refunded \$47,310 and advance refunded \$52,690 of the series 2012 Series B-2 and 2012 Series B-1 bonds respectively. Details of the current and advance refunding are discussed above.

During fiscal year 2022, the Authority complete refunded \$163,215 of the series 2012 Series C bonds and partially refunded \$142,665 of the series 2012 Series A bonds. Details of the refunding are discussed above. As of September 30, 2022, 2012 Series C bonds are fully extinguished, and the liability has been removed from the financial statements and the 2012 Series A bonds are partially extinguished and the liability is partially removed from the financial statements.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(11) Long-Term Debt (Continued)

In October 2010, the Authority issued the 2010 Series A public utility subordinate lien revenue bonds, 2010 Series A under the Federal Government's Build America Bonds program. Under this program, the Federal government provides the Authority a federal subsidy in the amount of 35% of the interest paid on the bonds which reduces the Authority's effective interest costs to approximately 3.6%. The \$300,000 par amount consisted of \$18,550 in serial bonds maturing in 2033 and gross interest rates ranging from 4.1% to 4.6%, \$30,950 in term bonds maturing in 2028 and a gross interest rate of 5.4%, and \$250,500 in index term bonds maturing in 2045 and a gross interest rate of 5.5%. Approximately \$214,640 was issued to fund costs of certain capital improvements, including \$2,420 for the cost of issuance and underwriter's discount. In addition, approximately \$75,000 was issued to fund the Authority's Digester Project and \$10,360 for capitalized interest.

The interest subsidy received by the Authority for the fiscal years ended September 30, 2022 and 2021 amounted to \$5,259 and \$8,037, respectively. In fiscal year 2022, the Authority received \$318 less than expected due to budget sequester impacts experienced by the Federal government. In fiscal year 2021, the Authority received \$2,687 more than expected due to IRS delays as a result of the COVID-19 pandemic in FY 2020.

Notes payable to the Federal government for the Jennings Randolph Reservoir are considered subordinate debt under the Master Indenture and contain no pledge of property, sinking fund provisions, or restrictive covenants. The proceeds of the notes were used to make improvements to the Jennings Randolph Reservoir for back-up and peak-day water supply.

(c) Bond Covenants

The Master Indenture sets forth the establishment of accounts, the application of revenues, and certain other covenants to ensure proper operation and maintenance of the water and wastewater system and payment of debt service. Management believes the Authority was in compliance with all bond covenants as of and for the years ended September 30, 2022 and 2021. The primary requirements of the Master Indenture are summarized below:

Rate Covenant — The Authority has covenanted to establish and maintain rates and charges to produce revenues sufficient to pay operating expenses and annual debt service on senior and subordinate debt, to fund certain required reserves, to fund any payment in lieu of taxes, and to produce net revenues sufficient at least equal to the sum of: (1) 120% of annual debt service on senior debt and (2) 100% of annual debt service on subordinate debt. Net revenues are defined generally as all Authority revenues (excluding capital contributions from wholesale customers, Federal grants, or any proceeds derived from the sale of capital assets), less operating and maintenance expenses (excluding any payment in lieu of taxes, depreciation and amortization charges and certain extraordinary, nonrecurring expenses).

Debt Service Reserve Fund — The Authority has established debt service reserve accounts for certain series of bonds, which are only to be used to pay debt service in the event of insufficient funds. The 1998 Series bonds debt service reserve account balance as of September 30, 2022 and 2021 was \$15,218 and \$18,672, respectively, and is required to be maintained at 125% of current and future average annual 1998 Series debt service.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(11) Long-Term Debt (Continued)

Operating Reserve Fund — The Master Indenture creates an Operating Reserve Fund in which the Authority must maintain a balance equal to at least 60 days of operating and maintenance expenses of the prior year. Moneys in the Operating Reserve Fund shall be used to pay, to the extent necessary, operating expenses of the Authority. In addition, to the extent that moneys on deposit in the Bond Fund are insufficient to make the required interest and principal payments, moneys in the Operating Reserve Fund shall be used prior to any withdrawal from the Debt Service Reserve Fund to satisfy any such deficiencies. The Board has adopted a policy of funding operating reserves to a level of \$125,500 which is in excess of that required by the Master Indenture.

Events of default with finance related consequences — If the Trustee is required to draw moneys from the Debt Service Reserve Fund to pay principal or interest on the Bonds and the Authority fails to begin replenishing the Debt Service Fund within 60 days, the Trustee shall send a notice of default to Holders of Senior Debt that have related Debt Service Reserve Accounts notifying them of the Authority's failure to replenish such draws.

Termination of Proceedings — Where default proceedings have been discontinued or abandoned for any reason or shall have been determined adversely to the trustee, the Authority and the Trustee shall be restored to their former positions and rights under the terms of the Master Indenture, and all rights, remedies and power of the Trustee shall continue as if no such proceedings had taken place.

Acceleration — Where the Trustee declares by written notice to the Authority, that the entire unpaid principal of the Bonds due and payable, the Authority shall forthwith pay to the holders of the Bonds the entire unpaid principal of, premium, if any, and accrued interest on the Bonds, but only from Net Revenues and other moneys specifically pledged for payments of Bondholders under the terms of the Master Indenture.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(11) Long-Term Debt (Continued)

(d) Debt Service to Maturity

The future debt-service obligations at September 30, 2022 are as follows:

Fiscal year	Principal	Interest	Total
2023	61,566	147,302	208,868
2024	75,636	145,457	221,093
2025	173,942	142,215	316,157
2026	84,478	138,581	223,059
2027 - 2031	566,283	630,417	1,196,700
2032 - 2036	566,748	527,460	1,094,208
2037 - 2041	666,706	396,194	1,062,900
2042 - 2046	742,140	245,068	987,208
2047 - 2051	399,315	128,942	528,257
2052 - 2056	40,120	85,824	125,944
2057 - 2061	-	84,245	84,245
2062 - 2066	-	84,245	84,245
2067 - 2071	-	84,245	84,245
2072 - 2076	-	84,245	84,245
2077 - 2081	-	84,245	84,245
2082 - 2086	-	84,245	84,245
2087 - 2071	-	84,245	84,245
2092 - 2096	-	84,245	84,245
2097 - 2101	-	84,245	84,245
2102 - 2106	28,069	82,894	110,963
2107 - 2111	161,963	54,831	216,794
2112 - 2116	159,968	12,004	171,972
	\$\$	<u>3,495,394</u>	5

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(11) Long-Term Debt (Continued)

(e) Outstanding Debt Defeased

The Authority defeased certain revenue bonds in current and prior years by placing cash or the proceeds of new revenue bonds in irrevocable trusts to provide for all future debt service payments on the defeased bonds. Accordingly, the Trust account assets and the liability for the defeased bonds are not reflected in the Authority's financial statements. At September 30, 2022 and 2021, the following outstanding revenue bonds are considered defeased:

	Principal Outstanding	
Bond issue	2022	2021
2013 Public Utility Revenue Bonds: interest at 4.75% to 5.0%, maturing in 2049	\$300,000	\$300,000
Total Principal Outstanding	\$300,000	\$300,000

(f) WIFIA Loan Agreement

On March 12, 2021 DC Water entered into a WIFIA Loan Agreement with the United States Environmental Protection Agency for an amount up to \$156,367. The WIFIA Loan is expected to provide partial funding for infrastructure repair, rehabilitation, and replacement projects within the District of Columbia. Payment of the WIFIA Loan will be secured by a senior lien pledge of net revenues. The March 2021 loan bore interest at a fixed interest rate of 2.33%, with final maturity on October 1, 2060. On September 17, 2021 DC Water and EPA re-executed the WIFIA Loan Agreement to lower the fixed interest rate to 1.87%, with all other terms remaining unchanged. DC Water has not submitted any requests for loan disbursements to date and there is no outstanding loan principal as of September 30, 2022.
Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(12) Commitments and Contingencies – Other Liabilities

A schedule of other liabilities as of September 30, 2022 and 2021 is shown below:

Description	2022	2021
Risk management contingency Rolling owner controlled insurance program	\$ 6,742 6,408	ŧ - j
Litigation contingency	1,766	429
Contractual obligations	1,259	,
Retirement health savings plan	6,406	
Total other liabilities	22,581	,
Less: current portion	10,407	10,587
Noncurrent portion	\$ 12,174	\$ 13,946

The current portion of other liabilities represents management's estimate of the amounts that will be paid in next fiscal year.

(a) Risk Management

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Effective April 7, 1998, the Authority purchased certain commercial insurance coverage. Prior to that date, the Authority was either self-insured or covered under District self-insurance programs.

For each of the three most recent years, settlement of claims has not exceeded insurance coverage. Additionally, there has not been any significant changes in insurance coverage in comparison to coverage in the prior year.

The Authority has purchased \$1,000,000 property coverage (Property Policy) to protect its owned or leased facilities, buildings and contents. Except for catastrophic on-site protection provided on the Property Policy, the Authority self-insures its fleet of vehicles. The deductible for each claim for buildings and contents is \$1,000 per occurrence. A lower deductible of \$10 per occurrence applies to scheduled watercraft and mobile equipment.

The Authority has purchased liability insurance coverage to protect it from claims alleging damages and injuries caused by automobile accidents, damaged utilities, construction, cyber and other activities. Limits of \$100,000 have been secured in excess of a self-insured retention of \$1,000 for each occurrence. Public Officials' liability insurance has been secured with limits of \$20,000 in excess of a deductible of \$250 per claim. Additional insurance includes professional liability, which provides protection for errors or omissions arising from engineering, consulting or testing services provided to third parties for a fee. Crime & Fidelity/Employee insurance provides dishonesty coverage and miscellaneous crime coverages. Fiduciary liability provides protection for wrongful acts that are actually or allegedly caused by trustees and employees of the DC Water sponsored Employee Benefit Plans.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(12) Commitments and Contingencies – Other Liabilities (Continued)

The Authority self-insures the first \$1,000 per occurrence of workers' compensation claims costs. To mitigate the potential self-insured costs of medical expenses, rehabilitation, and lost wages, the Authority purchased an Excess Workers' Compensation Policy with unlimited coverage. The Authority contracts with a third-party administrator to support the workers' compensation claims management program.

Liabilities are recognized when it is probable that losses have occurred, and the amounts of the losses can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported to date and include a provision for allocated and unallocated claim adjustment expenses.

Because actual claims liabilities depend on such complex factors as inflation, changes in governing laws and standards, and court awards, the process used in computing claims liabilities is reevaluated periodically to take into consideration the history, frequency and severity of recent claims and other economic and social factors.

These liabilities are computed using a combination of actual claims experience and statistically estimated amounts. The Authority has not discounted these estimated liabilities to present value.

Changes in the Authority's estimated risk management liabilities related to workers' compensation and general liability claims during the years ended September 30, 2022, 2021 and 2020 were as follows:

Description	 2022	 2021	 2020
Balance, beginning of year	\$ 10,288	\$ 12,068	\$ 12,033
Current year claims and changes in estimates	602	374	2,659
Claim payments	 (4,148)	 (2,154)	 (2,624)
Balance, end of year	\$ 6,742	\$ 10,288	\$ 12,068

(b) Rolling Owner Controlled Insurance Program

The Authority procures insurance for most of its construction contractors through the Authority's Rolling Owner Controlled Insurance Program (ROCIP). Construction contractors who do not participate in the ROCIP are required to procure insurance on their own. Coverage for participating construction contractors includes general liability, umbrella, and workers' compensation insurance. Both general liability and workers' compensation have a \$500 per occurrence deductible. There is also \$100,000-\$200,000 excess general liability coverage in place. The workers' compensation loss coverage is statutory, and unlimited above the retention. For each of the three most recent years, settlement of claims has not exceeded insurance coverage. Additionally, there has not been a significant reduction in insurance coverage from coverage in the prior year.

Liabilities for the self-insured exposure for workers' compensation claims and general liability claims under the ROCIP are recognized when it is probable that losses have occurred, and the amounts of the losses can be reasonably estimated.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(12) Commitments and Contingencies – Other Liabilities (Continued)

Liabilities include an amount for claims that have been incurred but not reported to date and include a provision for allocated and unallocated claim adjustment expenses. Because actual claims liabilities depend on such complex factors as inflation, changes in governing laws and standards, and court awards, the process used in computing claims liabilities is reevaluated periodically to take into consideration the history, frequency and severity of recent claims and other economic and social factors.

These liabilities are computed using a combination of actual claims experience and statistically estimated amounts. The Authority has not discounted these estimated liabilities to present value.

Changes in the Authority's estimated ROCIP liabilities related to workers' compensation and general liability claims during the years ended September 30, 2022, 2021 and 2020 were as follows:

Description	 2022	 2021	 2020
Balance, beginning of year	\$ 5,497	\$ 4,455	\$ 5,582
Current year increase (decrease) in ROCIP liability	5430	11,031	3,637
ROCIP administration and claim payments	 (4,519)	 (9,989)	 (4,764)
Balance, end of year	\$ 6,408	\$ 5,497	\$ 4,455

(c) Litigation

The Authority is a party in various administrative proceedings, legal actions and claims brought by or against it in the normal course of operations by employees, contractors, and other parties. The following table reflects the changes in the Authority's estimated liabilities for litigation contingencies where the risk of loss is probable during the years ended September 30, 2022 and 2021:

Description		2022		2022 2		2021
Balance, beginning of year	\$	428	\$	355		
Current year claims and changes in estimates		1654		229		
Claim payments		(316)		(156)		
Balance, end of year	\$	1,766	\$	428		

Although the ultimate outcome of these legal proceedings are unknown, in the opinion of the Authority's management and legal counsel, the ultimate resolution of these actions and claims will not materially affect the financial position, results of operations, or cash flows of the Authority.

(d) Federal Grants

The Authority's federal capital grants are subject to financial and compliance audits by the federal grantors or their representatives. The Authority's management does not expect that the results of these audits will have a material adverse effect on the accompanying financial statements.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(12) Commitments and Contingencies – Other Liabilities (Continued)

(e) Construction and Other Significant Commitments

The Authority's contractual commitments are primarily associated with the long-term capital improvement program. Outstanding contractual commitments related to the capital improvement program as of September 30, 2022 and 2021 were \$256,795 and \$192,422, respectively. Outstanding construction commitments are not recorded in the financial statements until goods and services have been received by the Authority in accordance with the terms of the related contracts.

(f) Lease Commitments

The Authority conducts a portion of its operations from leased facilities. Most of the leases contain renewal options. All of the leases for equipment and facilities are operating leases, and the rental payments under these leases are charged to operations as incurred.

The Authority's rental expense for the years ended September 30, 2022 and 2021 were as follows:

Description	 2022		2021	
Facilities leases	\$ 170	\$	449	
Automobile equipment leases	179		46	
Machinery leases	 702		377	
Total	\$ 1,051	\$	872	

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(13) Related Party and Similar Transactions

(a) Water and Wastewater User Charges

The enabling legislation, described in Note 1, established that the District would pay for water and wastewater services. The Authority recorded revenues of \$36,657 and \$36,524 from the District government \$14,750 and \$13,496 from the District of Columbia Housing Authority ("DCHA") for fiscal years 2022 and 2021, respectively. Both the District government and DCHA revenues are included in water and wastewater user charges in the accompanying statements of revenues, expenses and changes in net position.

(b) PILOT and ROW Fees

On October 2, 2014, DC Water entered into a Right-of-Way memorandum of understanding (ROW MOU) establishing an annual payment of \$5,100 to the District in fiscal years 2015 through 2024. DC Water will make the payment in four equal quarterly installments of \$1,275 due on the 15th of November, February, May and August of each year.

On December 15, 2014, DC Water entered into a Payment In Lieu of Taxes memorandum of understanding (PILOT MOU) establishing a fiscal year 2015 PILOT payment of \$15,337 to the District for services provided in fiscal year 2015. In fiscal years 2016 through 2024, DC Water will increase the PILOT payment by 2.0% per annum based upon the amount of the prior fiscal year's annual PILOT payment. In addition, the MOU stipulates that the Authority is entitled to offset this payment for services rendered to the District under our fire protection program.

The Authority recorded an expense of 17,618 and \$17,272 for payments-in-lieu-of-taxes (PILOT) to the District for services such as road repairs, fire protection, police protection, and other services for each of the years ended September 30, 2022 and 2021.

The Authority also recorded an expense of \$5,100 for the District's right-of-way (ROW) fee, respectively charged to all area utilities for infrastructure occupancy in public streets, for each of the years ended September 30, 2022 and 2021. As of September 30, 2022 there was no outstanding balance due to the District related to these fees.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(13) Related Party and Similar Transactions (Continued)

(c) Due from District Government (Net)

The amounts due from the District government as of September 30, 2022 and 2021 were \$21,010 and \$26,294 respectively. Such amounts were comprised of the following at September 30, 2022 and 2021, respectively:

Description	 2022	2021
Northeast Boundary Neighborhood Protection Project	\$ 17,574	\$ 23,432
Storm Water Fees (13d)	(475)	(783)
Other miscellaneous items	 3,720	3,645
Total due from District government	\$ 20,819	\$ 26,294
Less: current portion	9,103	8,720
Noncurrent portion	\$ 11,716	\$ 17,574

On September 11, 2014, the District and the Authority entered into a Memorandum of Understanding (MOU) whereby the District agreed to fund up to \$58,579 of costs incurred by the Authority on the Northeast Boundary Neighborhood Protection Project. Amounts due from the District as of September 30, 2022 and 2021 under this agreement amounted to \$11,716 and \$17,574 respectively. Amendment No. 1 of the MOU dated September 1, 2015, calls for ten (10) equal installment payments of \$5,858. The parties agreed that each installment payment is due on January 15th of each year until the costs are paid in full.

(d) Storm Water Fee Billings and Collections

The District of Columbia Council created the Storm Water Compliance Amendment Act of 2000 which established the Authority as the Storm Water Administrator and a fund was established. The administration of the fund was transferred to the District Department of the Environment ("DDOE") in 2007. The Authority continues to bill and collect storm water fees as a separate item and transfers the funds to the DDOE quarterly.

During the years ended September 30, 2022 and 2021, the activity associated with the Authority providing this service to the District was as follows:

Description	 2022	2021
Due from (to) the District-beginning of year	\$ (783) \$	(2,600)
Collections on behalf of the District	(13,224)	(13,432)
Remittances to the District	13,560	15,338
Expenses incurred by the Authority	1,617	1,059
Expenses reimbursed by the District	 (1,645)	(1,148)
Due (to) from the District-end of year	\$ (475) \$	(783)

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(13) Related Party and Similar Transactions (Continued)

Billings and collections associated with the District's Storm Water fees are not reflected in the Authority's financial statements as these are not billings and collections of the Authority. However, reimbursable expenses incurred and the related revenues from the District to cover such expenses are reflected in the accompanying statements of revenues, expenses and changes in net position.

The due (to) from the District has been reported in Due from District Government on the statement of net position as of September 30, 2022 and 2021, respectively.

(e) Fleet and Sewer Service Relocation Funding Agreement

On January 4, 2018, the District and the Authority entered into a Relocation Funding Agreement whereby the District has agreed to fund up to \$29,681 of costs associated with the Authority's relocation of its Fleet Maintenance and Sewer Service operations, which was scheduled to be completed in phases starting in February 2018 through September 2021. However, due to soil contamination on the area; the relocation was delayed until August 2022. As of September 30, 2022, the District has disbursed \$27,842 to DC Water pursuant to this agreement and the Authority has incurred \$27,842 (net of interest earned) in eligible costs to date that are included in capital contributions on the statement of changes in net position. There is no unearned revenue balance on the statement of net position as of September 30, 2022.

(14) Employee Benefits

(a) Federal Benefit Plans

Certain DC Water employees who were previously employed by the District of Columbia government prior to October 1, 1987, are eligible to continue to participate in certain federal benefit plans administered by the federal government's Office of Personnel Management ("OPM"). The plans provide retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan participants and beneficiaries. In fiscal years 2022 and 2021, there were 56 and 61 DC Water employees covered by these plans, respectively.

The OPM issues a publicly available financial report that includes financial statements and required supplementary information, which may be obtained at www.opm.gov.

Employees and the Authority each contribute 7% of the employees' salaries to OPM. The contribution requirements of the plan members are established by OPM. During fiscal years 2022, 2021, and 2020, the Authority's contributions to the plans were \$395, \$442 and \$465, respectively. These amounts were 100% of the required contributions under the plans for each of the fiscal years presented.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(14) Employee Benefits (Continued)

DC Water is only responsible for funding the employer contributions for participating employees while employed by the Authority. DC Water is not responsible for any unfunded liability for this plan. Under current law, this liability will be paid off eventually through the series of 30-year amortizations payments from the general fund of the U.S. Treasury to the Civil Service Retirement and Disability Fund.

(b) Defined Contribution Plans

Defined Contribution Plan - Employees who were hired after September 30, 1987, participate in the U.S. Social Security system and a defined contribution plan administered by the Authority. The District of Columbia Water and Sewer Authority Defined Contribution Plan is a qualified trust under Internal Revenue Code Section 401(a).

The Authority established a retirement plan committee that oversees the 401(a) and 457(b) retirement plans. The committee meets on a semiannual basis to make decisions regarding the plan. Pursuant to the 401(a) plan, employees not reaching the 100% vesting period of three years of service will forfeit amounts related to Basic, Matching, and Discretionary Contributions and may be used to pay for plan expenses or reduce future Authority contributions. There are no amounts of forfeitures reflected in the pension expense reported in fiscal years 2022, 2021, and 2020.

As Plan Administrator, the Authority maintains the plans' records, determines issues related to eligibility as they relate to participation and benefits, interprets the plans, communicates with participants and their beneficiaries and responsible for the plans' operations. Fidelity Investments is the Plan Trustee.

Defined Contribution Plan - During fiscal years 2022, 2021, and 2020, the Authority's contribution was 7% of base pay up to the social security wage base, plus 5% of base pay in excess of the social security wage base for each eligible employee. Employees do not contribute to the plan.

457(b) Plan - Starting in January 2000, employees who were hired after September 30, 1987, participate in the U.S. Social Security system and a 457(b) Deferred Compensation plan administered by the Authority. The District of Columbia Water and Sewer Defined Contribution Plan is a qualified trust under Internal Revenue Code Section 401.

The Authority makes a matching contribution of 100% of the amount that the employee defers to the 457(b) Deferred Compensation Plan; up to a maximum contribution of 5% of base pay for eligible employees. There is no waiting period before an employee can elect to become a participant of this plan and employees are always 100% vested in their contributions.

The Authority's matching contribution is vested after three years of service. During fiscal years 2022, 2021, and 2020, the Authority's contributions to both defined contribution plans were \$11,273; \$10,740; and \$10,036, respectively. The amount of the Authority's outstanding liability at the end of fiscal years 2022, 2021, and 2020 were \$1,769; \$1,426; and \$1,054, respectively.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(14) Employee Benefits (Continued)

(c) Post-Employment Insurance Plans

The Authority does not provide post-employment health and life insurance benefits to any employees hired after September 30, 1987. The federal government provides healthcare and life insurance benefits to certain retired employees under the Federal Employees' Health Benefits Program and the Federal Employee's Group Life Insurance Program at no cost to the Authority

(d) Retirement Health Savings Plan

In fiscal year 2007, the Authority implemented a Retirement Health Savings Plan for non-union employees hired after September 30, 1987. The Plan allows eligible employees to receive a benefit for their unused sick leave upon separation of service. Funds are transferred to a third party (Maritain) to pay for post-employment medical expenses at the termination of employment.

(15) Blended Component Unit Condensed Financial Statements

The following are the condensed financial statements of Blue Drop, LLC as of and for the year ended September 30, 2022 and 2021. As required, all intra-entity activities between Blue Drop and the Authority have been eliminated in the consolidation of Blue Drop, LLC's financial statements with those of the Authority. Such intra-entity activities were comprised of: \$1,512 and \$1,112 of support provided by DC Water to Blue Drop for fiscal years 2022 and 2021 as noted in the following table.

Description	2022	2021
DC Water current land configuration	Ф 7 4Б	ф со 7
DC Water support - land application	\$ 715	+
Marketing fees	712	445
Donated office space	27	27
Donated employee time	57	3
Total	\$1,512	\$ 1,112

During fiscal years ended September 30, 2022 and 2021 intra-entity receivables and payables were \$0 and \$0 and \$190, respectively.

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(15) Blended Component Unit Condensed Financial Statements (Continued)

Condensed Statement of Net Position - Blended Component Unit - Blue Drop, LLC as of September 30, 2022 and 2021:

	2022	2021
Current assets	\$8,634	\$ 4,475
Property and Equipment - Net	102	47
Due from DC Water	-	190
Total assets	8,736	4,712
Current liabilities	273	191
Due to DC Water	-	-
Deferred Rental Revenue Total liabilities	75 348	31 222
Unrestricted net position	\$8,388	\$ 4,490

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(15) Blended Component Unit Condensed Financial Statements (Continued)

Condensed Statement of Revenues, Expenses, and Changes in Net Position - Blended Component Unit - Blue Drop, LLC for the year ended September 30, 2022 and 2021:

	2022	2021
DC Water support-Land application	\$ 715	\$ 667
Product and IP Revenue	4,319	2,109
Sales of Bloom, Net of cost of sales	-	162
Marketing fees, DC Water	712	445
In-kind contributions	85	
Interest Income	4	3
Event Rental	332	22
Other	6	15
Bloom revenue, net of cost of goods sold	(15)	
Total revenues	6,157	3,423
Personnel services	867	717
Contractual services	1,137	733
Supplies	104	134
Utilities and rent	30	29
Depreciation	9	2
Bad debt	10	
Total operating expenses	2,157	1,615
Change in net position	4,000	1,808
Net position, beginning of year	4,490	2,682
Net position, end of year	\$8,490	\$ 4,490

Condensed Statement of Cash Flows - Blended Component Unit - Blue Drop, LLC for the year ended September 30, 2022 and 2021:

2022	2021
\$ 3,889	\$ 2,115
(1,067)	(1,043)
2,823	1,072
2,171	1,099
\$4,994	\$ 2,171
	\$ 3,889 (1,067) 2,823

Notes to the Financial Statements

September 30, 2022 and 2021

(In thousands)

(16) Subsequent Events

The Authority has evaluated events subsequent to September 30, 2022, through December 21, 2022, the date the financial statements were available to be issued. During this period, the Authority has determined there have not been any events that have occurred that would require adjustments to the financial statements.



Statistical Section (Unaudited)

Statistical Section (Unaudited)

This section contains statistical tables that reflect financial trends information, revenue capacity information, debt capacity information, demographic and economic information, and operating information. These tables differ from the basic financial statements because they usually cover more than two fiscal years and may present non-accounting data.

The statistical section is divided into five sections as follows:

- 1. Financial Trends
- 2. Revenue Capacity
- 3. Debt Capacity
- 4. Demographic and Economic Information
- 5. Operating Information

1. Financial Trends

These schedules contain trend information to better understand how the Authority's financial performance and well-being have changed over time.

EXHIBIT 1
CHANGE IN NET POSITION
LAST TEN FISCAL YEARS
(\$000)

	 2022	2021		2020	2019	2018	2017	2016	2015	2014	2013
Operating revenues											
Residential, commercial and multi-family customers	\$ 522,057 \$	474,3	80 \$	459,572 \$	443,481 \$	425,492	\$ 401,246 \$	382,552 \$	335,711 \$	295,209 \$	275,337
Federal government	76,680	86,4	-22	80,122	73,393	73,551	67,672	63,417	54,274	39,001	45,187
District government and DC Housing Authority	51,407	50,0	20	46,781	45,816	42,710	40,483	38,185	32,948	28,852	21,677
Charges for wholesale wastewater treatment	135,285	127,4	10	117,166	114,766	121,961	101,619	91,873	112,522	96,845	87,178
Other	 46,781	32,3	25	33,187	27,691	20,788	32,149	19,762	14,460	13,917	9,700
Total Operating Revenues	 832,210	770,5	57	736,828	705,147	684,502	643,169	595,789	549,915	473,824	439,079
Operating expenses											
Personnel services	149,655	142,3	52	135,005	141,040	142,342	132,124	124,239	115,233	108,467	103,908
Contractual services	75,587	73,2	27	74,064	75,818	74,627	72,611	74,086	66,241	68,172	68,417
Chemicals, supplies and small equipment	40,974	35,4	11	30,602	36,579	31,152	33,381	29,524	32,935	31,748	28,987
Utilities and rent	37,823	27,3	31	24,708	25,813	26,163	24,262	23,934	30,848	29,939	26,098
Depreciation and amortization	140,263	138,0	74	135,590	127,501	115,453	97,900	89,512	83,857	77,833	77,330
Water purchases	33,345	33,1	35	31,696	32,430	28,357	26,796	26,345	29,109	28,407	27,223
Payment in lieu of taxes and right of way fee	22,718	22,3	572	22,034	21,702	21,376	21,057	20,744	20,437	11,458	21,982
Total operating expenses	 500,365	471,9	02	453,699	460,883	439,470	408,131	388,384	378,660	356,024	353,945
Operating income	331,845	298,6	55	283,129	244,264	245,032	235,038	207,405	171,255	117,800	85,134
Non-operating revenue (expenses)											
Interest income	4,458	2,7	60	8,846	9,307	5,866	3,740	2,629	1,316	977	1,144
Interest expense and other nonoperating expenses	(162,176)	(155,6	72)	(91,724)	(104,630)	(93,956)	(68,293)	(69,118)	(61,409)	(69,288)	(63,905)
Total non-operating (expenses)	 (157,718)	(152,9	12)	(82,878)	(95,323)	(88,090)	(64,553)	(66,489)	(60,093)	(68,311)	(62,761)
Change in net position before capital contributions	174,127	145,7	43	200,251	148,941	156,942	170,485	140,916	111,162	49,489	22,373
Capital contributions	 31,434	42,0	93	22,727	16,313	30,419	24,066	32,431	67,965	94,690	58,310
Change in net position	 205,561	187,8	36	222,978	165,254	187,361	194,551	173,347	179,127	144,179	80,683
Net position, beginning of year	 2,661,269	2,473,4	33	2,250,455	2,085,201	1,897,840	1,703,289	1,529,942	1,350,815	1,206,636	1,125,953
Net position, end of year	\$ 2,866,830 \$	2,661,2	69 \$	2,473,433 \$	2,250,455 \$	2,085,201	\$ 1,897,840 \$	1,703,289 \$	1,529,942 \$	1,350,815 \$	1,206,636

Source: FY 2013 - 2022 Statements of Revenues, Expenses and Changes in Net Position.

EXHIBIT 2 SUMMARY OF NET POSITION LAST TEN FISCAL YEARS (\$000)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Net investments in capital assets	\$2,480,216	\$2,305,799	\$2,129,340	\$1,935,786	\$1,808,622	\$1,655,867	\$1,491,925	\$1,348,056	\$1,130,952	\$1,042,620
Restricted:										
Capital projects	7,287	-	-	-	-	-	-	-	-	-
Debt service	62,586	39,223	35,222	43,762	38,907	33,276	33,135	27,054	28,863	29,010
Unrestricted	316,741	316,247	308,871	270,907	237,672	208,697	178,229	154,832	191,000	135,006
Total net postion	\$2,866,830	\$2,661,269	\$2,473,433	\$2,250,455	\$2,085,201	\$1,897,840	\$1,703,289	\$1,529,942	\$1,350,815	\$1,206,636

Source: FY 2013 - 2022 Statements of Net Position



EXHIBIT 3 CAPITAL DISBURSEMENTS LAST TEN FISCAL YEARS (\$000)

Note: These disbursements include DC Water's share of Washington Aqueduct's capital disbursements.

Source: FY 2013 - 2022 Statements of Cash Flows.

2. Revenue Capacity

These schedules contain information regarding the Authority's most significant revenue sources.

EXHIBIT 4 OPERATING REVENUES AND RATE INCREASES LAST TEN FISCAL YEARS (\$000)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Operating Revenues										
Retail Customers										
Residential, Commercial and Multifamily	\$ 522,057	\$ 474,380	\$459,572	\$443,481	\$425,492	\$401,246	\$382,552	\$335,711	\$295,209	\$275,337
Federal Government	76,680	86,422	80,122	73,393	73,551	67,672	63,417	54,274	39,001	45,187
DC Government	36,657	36,524	34,439	33,985	31,980	30,429	28,890	24,453	21,205	14,714
DC Housing Authority	14,750	13,496	12,342	11,831	10,730	10,054	9,295	8,495	7,647	6,963
Other Revenues	46,781	32,325	33,187	27,691	20,788	32,149	19,762	14,460	13,917	9,700
Total Retail Customers	696,925	643,147	619,662	590,381	562,541	541,550	503,916	437,393	376,979	351,901
Wholesale Customers	135,285	127,410	117,166	114,766	121,961	101,619	91,873	112,522	96,845	87,178
Total Operating Revenues	\$ 832,210	\$ 770,557	\$736,828	\$705,147	\$684,502	\$643,169	\$595,789	\$549,915	\$473,824	\$439,079
Retail Rate Increases	7.80%	9.90%	11.50%	5.00%	5.00%	5.00%	6.50%	7.50%	5.50%	5.50%

Source: FY 2013 - 2022 Statements of Revenues, Expenses and Changes in Net Position

	2022	2021	2020	2019	2018 ^(A)	2017	2016	2015	2014	2013
Retail Accounts										
Residential	107,082	106,799	106,656	106,097	105,430	105,762	106,120	105,735	104,965	104,477
Commercial ^(B)	17,692	17,594	17,399	17,369	17,363	18,807	18,828	18,947	19,433	19,343
Governmental										
Federal ^(C)	461	463	457	459	459	560	558	550	542	542
District of Columbia	513	515	524	523	517	650	641	638	641	630
DC Housing Authority	1,058	1,062	1,077	1,124	1,130	1,457	1,462	1,446	1,452	1,460
Total Retail Accounts	126,806	126,433	126,113	125,572	124,899	127,236	127,609	127,316	127,033	126,452
DC Water	27	27	29	29	30	39	39	39	37	36
Washington Aqueduct	1	1	1	2	2	2	2	2	2	2
Wholesale	7	7	7	7	7	7	7	7	7	7
Total Number of Accounts	126,841	126,468	126,150	125,610	124,938	127,284	127,657	127,364	127,079	126,497

EXHIBIT 5 NUMBER AND TYPE OF CUSTOMER ACCOUNTS LAST TEN FISCAL YEARS

^(A) DC Water began excluding inactive accounts in 2018 after converstion to new CIS.

^(B) Included in commercial are: i) multi-family and (ii) exempt accounts from FY 2013 through FY 2020

^(C) Exempt acconts are included in Federal starting in FY 2021

Source: D.C. Water Department of Customer Service

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Howard University	\$ 3,663,172	\$ 3,065,479 \$	3,710,923 \$	3,898,131 \$	3,879,664 \$	3,957,007 \$	3,823,023 \$	3,237,999 \$	2,662,949 \$	2,699,376
George Washington University	3,456,763	2,285,071	3,268,007	2,998,442	2,522,689	2,477,970	2,338,974	2,763,055	2,602,949	2,161,183
Washington Hospital Center	3,188,277	2,728,267	2,455,804	2,078,916	2,003,551	1,624,588	1,991,344	1,830,586	1,671,855	1,693,655
Washington Hospital Center William C Smith & Co	3,149,593	2,767,263	2,495,804	2,441,968	2,003,551	2,226,722	2,455,990	2,076,534	2,277,833	1,782,719
Georgetown University	3,030,532	2,434,834	1,958,462	1,875,409	2,118,763	1,438,247	1,324,563	1,413,714	2,605,884	1,865,068
Horning Brothers	2,235,641	2,276,290	2,076,006	1,697,812	-	-	1,335,613	-	1,347,287	1,258,995
Children's Hospital	1,621,805	1,451,942	1,279,259	-	831,854	-	-	-	-	-
Catholic University	1,570,521	-	-	1,174,396	-	-	-	-	-	-
Gallaudet University	1,491,808	1,278,783	-	-	-	-	-	-	-	-
Medstar-Georgetown Medical Center	1,329,146	1,166,894	1,031,263	-	850,673	807,540	-	-	-	-
American University	-	2,904,844	987,647	1,005,881	1,004,977	750,235	1,001,742	1,078,412	1,125,050	1,253,038
Cafritz	-	-	1,092,288	-	-	-	-	-	-	-
Amtrak	-	-	-	1,924,967	1,046,179	983,224	1,019,570	1,028,989	984,336	1,004,177
Georgetown University Hospital	-	-	-	1,010,696	-	808,884	920,681	720,247	955,353	1,053,659
Metropolitan Washington Airports Authority	-	-	-	-	1,280,248	1,068,877	1,008,250	923,394	807,803	716,929
Shoreham Hotel	-	-	-	-	-	-	-	1,035,982	-	-
Total	\$ 24,737,257	\$ 22,359,669 \$	20,356,430 \$	20,106,617 \$	17,617,212 \$	16,143,294 \$	17,219,750 \$	16,108,912 \$	17,047,961 \$	5 15,488,799
% of Total Operating Revenues	2.97%	2.90%	2.76%	2.85%	2.57%	2.51%	2.89%	2.93%	3.60%	3.53%

EXHIBIT 6 TEN LARGEST COMMERCIAL CUSTOMERS LAST TEN FISCAL YEARS

Source: DC Water Department of Customer Service

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
D.C. Housing Authority	\$ 12,574,996	\$ 11,345,071 \$	9,921,080 \$	9,203,222 \$	5,176,951	\$ 7,492,820 \$	6,999,037 \$	6,922,176 \$	6,308,902 \$	5,879,383
U.S. General Services Administration	9,741,460	10,816,058	9,536,411	7,870,446	8,096,034	7,092,342	11,670,623	6,425,889	7,598,077	7,184,034
Federal Naval Research Lab	5,995,495	4,707,425	3,553,343	2,779,271	2,209,408	1,853,214	1,975,742	1,802,150	1,542,370	1,833,491
Bolling Air Force Base	5,703,529	12,567,892	4,798,312	4,279,384	4,187,710	3,115,393	2,602,439	2,509,536	1,928,617	2,265,348
Smithsonian Institution	4,802,274	4,146,701	6,138,774	4,967,305	4,683,524	3,635,763	2,768,661	3,219,324	2,810,786	3,038,455
U.S. Congress/Fed Legislative	4,659,746	3,391,970	6,157,111	5,447,393	5,061,870	4,597,331	3,223,507	6,524,863	4,019,627	4,926,790
D.C. Board of Education	4,116,350	3,876,997	2,908,559	1,866,303	1,569,405	2,497,561	2,228,498	2,166,846	2,391,393	2,092,748
Department Defense VA	3,567,662	4,018,325	4,003,435	2,834,531	2,082,125	-	-	4,020,624	3,275,936	3,275,936
Department of the Navy	3,388,084	-	1,894,810	1,951,907	1,732,073	1,662,225	1,708,908	-	-	1,521,264
National Park Service	3,287,476	2,839,593	2,707,685	2,342,203	3,298,927	4,621,035	3,656,234	2,233,857	1,363,657	2,577,096
D.C. Recreation and Parks	-	2,159,393	-	-	-	1,604,350	1,695,630	1,702,488	1,216,398	-
Total	\$ 57,837,072	\$ 59,869,426 \$	51,619,519 \$	43,541,966 \$	38,098,027	\$ 38,172,034 \$	38,529,279 \$	37,527,753 \$	32,455,763 \$	34,594,545
% of Total Operating Revenues	6.95%	7.19%	7.01%	6.17%	5.57%	5.93%	6.47%	6.82%	6.85%	7.88%

EXHIBIT 7 TEN LARGEST GOVERNMENT CUSTOMERS LAST TEN FISCAL YEARS

Source: DC Water Department of Customer Service

		(b)	(c) DISTRICT	(d)	(e)	(f)	(g) IMPERVIOUS	
	(a)	(5) WATER SYSTEM	PUBLIC SPACE	WATER	SEWER	COMBINED	SURFACE	AVERAGE
FISCAL	METERING	REPLACEMENT	OCCUPANCY	CONSUMPTION	CONSUMPTION	CONSUMPTION	AREA	MONTHLY
YEAR	FEE	FEE	FEE AND PILOT	RATE	RATE	RATE	CHARGE ²	BILL ¹
2013	3.86	-	0.66	3.42	4.18	7.60	9.570	64.64
2014	3.86	-	0.70	3.61	4.41	8.02	11.85	69.77
2015	3.86	-	0.63	3.88	4.74	8.62	16.75	77.96
2016	3.86	6.30	0.64	3.36	5.44	8.80	20.30	88.99
2017	3.86	6.30	0.65	3.52	5.71	9.23	22.24	93.66
2018	3.86	6.30	0.67	3.70	6.00	9.70	25.18	99.63
2019	3.86	6.30	0.68	3.17	7.75	10.92	23.00	96.03
2020	3.86	6.30	0.70	3.33	8.89	12.22	20.94	101.13
2021	4.96	6.30	0.73	3.75	9.77	13.52	19.52	108.02
2022	7.75	6.30	0.75	3.92 ³	10.64	14.56	18.40	115.43

EXHIBIT 8 RETAIL WATER AND SEWER RATES LAST TEN FISCAL YEARS

¹ Average residential customer consumption is 6.2 Ccf per month for up to FY 2018 and 5.42 Ccf for FY 2019 and beyond. The average monthly bill is calculated as follows (a)+(b)+(g)+(((c)+(f)) x 5.42 Ccf))

² Per Equivalent Residential Unit (ERU).

³ Weighted average water rate for residential customers.

Source: D.C. Water Department of Finance & Budget





- (1) This analysis is based on a single family residential monthly bill as a percentage of median household income for large national utilities based on rates in effect winter 2022.
- * Cities that use property tax or other revenue sources to pay a part of the cost of water, wastewater or storm services. In those cities, the user charges will not reflect the full cost of water, wastewater or stormwater services.

Source: DC Water Department of Finance & Budget





- (1) This analysis represents single family residential average monthly bill based on rates in effect winter 2022.
- * Cities that use property tax or other revenue sources to pay a part of the cost of water, wastewater or storm services. In those cities, the user charges will not reflect the full cost of water, wastewater or stormwater services.

Source: DC Water Department of Finance & Budget

3. Debt Capacity

These schedules present information showing the Authority's current levels of outstanding debt and the Authority's ability to issue additional debt in the future.

EXHIBIT 11 OUTSTANDING DEBT AND DEBT RATIOS LAST TEN FISCAL YEARS (\$000, EXCEPT PER CAPITA)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Senior Debt:										
2018 Series A Public Utility Revenue Bonds	\$ 100,000 \$	100,000 \$	100,000 \$	100,000 \$	100,000 \$	- \$	- \$	- \$	- \$	-
2018 Series B Public Utility Revenue Bonds	189,520	193,185	196,675	200,000	200,000	-	-	-	-	-
2017 Series A Public Utility Revenue Bonds	100,000	100,000	100,000	100,000	100,000	100,000	-	-	-	-
2017 Series B Public Utility Revenue Bonds	185,290	189,630	193,760	196,955	200,000	200,000	-	-	-	-
2014 Public Utility Revenue Bonds	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	-
2009 Series A Public Utility Revenue Bonds	-	-	-	-	4,225	8,040	11,535	159,520	291,145	293,720
1998 Public Utility Revenue Bonds	74,270	92,545	109,870	126,290	141,855	156,605	170,525	183,660	196,050	207,735
Total Senior Debt	999,080	1,025,360	1,050,305	1,073,245	1,096,080	814,645	532,060	693,180	837,195	501,455
Subordinate Debt:										
2022 Series A Public Utility Revenue Bonds		- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
2022 Series B Public Utility Revenue Bonds	79,585	-		-			-	-	-	-
2022 Series C-1 Public Utility Revenue Bonds	206.730	-	-	-			-	-	-	-
2022 Series C-2 Public Utility Revenue Bonds	4,418	-	-	-			-	-	-	-
2022 Series D Public Utility Revenue Bonds	148,925	-	-	-			-	-	-	
2022 Series E Public Utility Revenue Bonds	96,350	-	-	-	-	-	-	-		-
2019 Series A Public Utility Revenue Bonds	104,010	104.010	104.010	-	-	-	-	-	-	-
2019 Series B Public Utility Revenue Bonds	58,320	58,320	58,320	-	-	-	-	-	_	-
2019 Series C Public Utility Revenue Bonds	99,505	99.505	99,505	-	-	-	-	-	_	-
2019 Series D Public Utility Revenue Bonds	339,885	341,510	343,160	_			_			_
2016 Series A Public Utility Revenue Bonds	377,575	377,575	377,575	389,110	389,110	389,110	389,110	_		
2016 Series B Public Utility Revenue Bonds	011,010	011,010	25,000	25,000	25,000	25,000	25,000	-	-	-
2015 Series A Public Utility Revenue Bonds	81.640	95.420	97.420	99.420	100.000	100,000	100,000	-	-	-
2015 Series & Public Utility Revenue Bonds	173,090	250.000	250,000	250,000	250,000	250,000	250,000	-	-	-
2013 Series B Public Utility Revenue Bonds 2014 Series B-1 Public Utility Revenue Bonds	50.000	50.000	50.000	50,000	50,000	250,000	50.000	50.000	50.000	-
2014 Series B-1 Public Utility Revenue Bonds 2014 Series B-2 Public Utility Revenue Bonds	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	-
2014 Series C Public Utility Revenue Bonds	256,880	363,730	376,580	377,110	377,110	377,110	377,110	377,700	30,000	-
2013 Series A Public Utility Revenue Bonds	230,000	303,730	370,300	300,000	300,000	300,000	300,000	300.000	300.000	300.000
2012 Series A Public Utility Revenue Bonds	5,325	- 137,790	- 142,665	148,255	153,600	158,740	163,655	168,405	172,990	177,430
2012 Series & Public Utility Revenue Bonds 2012 Series B-1 Public Utility Revenue Bonds	5,325	137,790	142,005	148,255	153,600	158,740	103,055	168,405	52,690	52,690
	-	-			-	-		-		
2012 Series B-2 Public Utility Revenue Bonds	-	-	-	-	-	-	-	47,310	47,310	47,310
2012 Series C Public Utility Revenue Bonds	-	163,215	163,215	163,215	163,215	163,215	163,215	163,215	163,215	163,215
2010 Series A Public Utility Revenue Bonds	290,890	295,485	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
2008 Series A Public Utility Revenue Bonds	-	-	-	-	6,865	13,600	20,200	168,190	268,095	274,210
2007 Series A Public Utility Revenue Bonds	-	-	-	-	-	-	-	115,580	218,715	218,715
Notes Payable to the Federal	10.101	10.070	44.040	44 704	10.051	10.151	10.011	10.017	10 500	10,000
Government for Bloomington Dam	10,421	10,873	11,310	11,734	12,054	12,454	12,841	13,217	13,580	13,932
DC General Obligation Bonds	-	-	-	-	-	-	-	-	-	-
Notes Payable to WSSC for Little Seneca	-	-	-	-	-	-	-	-	-	
Total Subordinate Debt	2,727,854	2,397,433	2,448,760	2,163,844	2,176,954	2,189,229	2,201,131	1,753,617	1,636,595	1,547,502
Total Senior and Subordinate debt	3,726,934	3,422,793	3,499,065	3,237,089	3,273,034	3,003,874	2,733,191	2,446,797	2,473,790	2,048,957
Unamortized bond premiums	250,235	254,284	270,117	246,460	259,578	222,786	198,677	104,060	76,098	79,313
Unamortized bond discounts	(1,448)	(1,577)	(1,706)	(1,835)	(1,964)	(2,093)	(2,222)	(2,351)	(2,480)	(2,608)
Total Debt	\$ 3,975,721 \$	3,675,500 \$	3,767,476 \$	3,481,714 \$	3,530,648 \$	3,224,567 \$	2,929,646 \$	2,548,506 \$	2,547,408 \$	2,125,662
Debt - per capita	N/A \$	5,485 \$	5,285 \$	4,933 \$	5,026 \$	4,647 \$	4,301 \$	3,791 \$	3,866 \$	3,288
Debt - percentage of personal income	N/A	5.69%	6.11%	5.91%	6.13%	5.81%	5.65%	5.17%	5.54%	4.37%

N/A: population and personal income not available

See exhibits 13 and 14 for per capita personal income and population data.

Total debt doesn't include outstanding debt associated with DC Water's short-term debt (commercial paper) program.

Source: D.C. Water Department of Finance & Budget

EXHIBIT 12 CALCULATION OF DEBT SERVICE COVERAGE FY 2022 (\$000)

Prepared in accordance with the Authority's Master Trust Indenture, which corresponds closely to the cash basis of accounting.

Calculation of Debt Service Coverage: Cash Receipts (Revenues) Retail Wholesale	\$	627,926
Cash Receipts (Revenues) Retail	\$	
Retail	\$	
Wholesele	·	
VVIIOIESAIE		84,899
Other Non-Operating		68,670
Transfer from (Contributions to) Rate Stabilization Fund		52,100
Total Cash Receipts (A)		833,595
Cash Disbursements (Operating Expenses) (B)		348,402
Cash Receipts Less Cash Disbursements (C=A-B)	\$	485,193
Debt Service:		
Senior Debt Service (D)	\$	73,474
Subordinate Debt Service (E)		136,293
Total Outstanding and Projected Debt Service (F=D+E)	\$	209,767
Calculation of Net Cash Receipts Available for Senior Debt Service:		
Cash Receipts Less Cash Disbursements (C)	\$	485,193
Prior Year Federal Billing Reconciliation		(3,060)
(Refund to)/Payment from Wholesale Customers		(2,351)
(Additions to)/Transfers from DC PILOT Fund		-
(Additions to)/Transfers from DC ROW Fund		-
Net Cash Receipts Available for Senior Debt Service (G)	\$	479,782
Senior Debt Service Coverage (G/D)		6.53
Calculation of Subordinate Debt Service Coverage:		
Net Cash Receipts Available for Senior Debt Service (G)	\$	479,782
Less Senior Debt Service (D)		(73,474)
Net Cash Receipts Available for Subordinate Debt Service (G-D)	\$	406,308
Subordinate Debt Service Coverage ((G-D)/E)		2.98
Combined Debt Service Coverage (G/F)		2.29

Source: D.C. Water Department of Finance & Budget

4. Demographic and Economic Information

These schedules offer demographic and economic data to help explain the environment within which the Authority's financial activities take place.

_	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
District of Columbia	N/A	670,050	712,816	705,749	702,455	693,972	681,170	672,228	658,893	646,449
Montgomery County, MD	N/A	1,054,827	1,051,816	1,050,688	1,052,567	1,058,810	1,043,863	1,040,116	1,030,447	1,016,677
Prince George's County, MD	N/A	955,306	909,612	909,327	909,308	912,756	908,049	909,535	904,430	890,081
Fairfax County, VA	N/A	1,178,489	1,188,907	1,186,168	1,190,141	1,187,113	1,176,830	1,180,139	1,175,622	1,168,405
Loudoun County, VA	N/A	427,592	422,784	413,538	406,850	398,080	385,945	375,629	363,050	349,679

EXHIBIT 13 POPULATION OF SERVICE AREA JURISDICTIONS LAST TEN CALENDAR YEARS

N/A: Not Available

Source: U.S. Department of Commerce, Bureau of Economic Analysis

EXHIBIT 14 PERSONAL INCOME OF SERVICE AREA JURISDICTIONS LAST TEN CALENDAR YEARS (\$000)

_	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
District of Columbia	N/A	\$64,644,701	\$61,706,124	\$58,863,955	\$57,604,817	\$ 55,510,450	\$ 51,842,801	\$ 49,275,917	\$ 46,015,860	\$48,696,519
Montgomery County, MD	N/A	97,825,022	94,191,794	94,708,400	94,404,295	91,202,046	84,518,332	79,946,266	75,720,017	73,958,785
Prince George's County, MD	N/A	52,461,141	49,296,368	46,034,388	44,938,165	43,232,981	41,922,938	40,806,805	40,215,913	38,595,921
Fairfax County, VA	N/A	111,576,020	105,777,709	102,177,189	98,116,827	93,041,631	89,412,959	88,419,380	88,180,013	83,835,355
Loudoun County, VA	N/A	38,591,724	35,672,015	33,460,894	31,762,679	29,789,834	27,486,217	26,254,562	24,463,869	20,886,046

N/A: Not Available

Source: U.S. Department of Commerce, Bureau of Economic Analysis

EXHIBIT 15 PER CAPITA PERSONAL INCOME OF SERVICE AREA JURISDICTIONS LAST TEN CALENDAR YEARS

_	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
District of Columbia	N/A	\$ 96,477	\$ 86,567	\$ 83,406	\$ 82,005	\$ 79,989	\$ 76,108	\$ 73,302	\$ 69,838	\$ 75,329
Montgomery County, MD	N/A	92,740	89,552	90,139	89,690	86,136	80,967	76,863	73,483	72,746
Prince George's County, MD	N/A	54,916	54,195	50,625	49,420	47,365	46,168	44,866	44,465	43,362
Fairfax County, VA	N/A	94,677	88,971	86,141	82,441	78,376	75,978	74,923	75,007	71,752
Loudoun County, VA	N/A	90,254	84,374	80,914	78,070	74,834	71,218	69,895	67,384	59,729

N/A: Not Available

Source: U.S. Department of Commerce, Bureau of Economic Analysis

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
District of Columbia	4.6%	5.9%	9.2%	5.3%	6.0%	6.2%	6.5%	6.9%	7.0%	7.3%
Montgomery County, MD	3.4%	4.9%	7.0%	2.8%	3.2%	3.4%	3.2%	4.0%	4.1%	4.5%
Prince George's County, MD	4.3%	6.7%	9.6%	3.6%	4.1%	4.3%	4.1%	5.1%	5.5%	6.2%
Fairfax County, VA	2.2%	2.7%	5.8%	2.0%	2.3%	3.4%	3.3%	3.3%	3.6%	3.7%
Loudoun County, VA	2.1%	2.5%	5.2%	2.0%	2.3%	3.4%	3.3%	3.3%	3.6%	3.9%

EXHIBIT 16 UNEMPLOYMENT RATES LAST TEN CALENDAR YEARS

Source: U.S. Department of Labor, Bureau of Labor Statistics

	DISTRICT OF COLUMBIA	MONTGOMERY COUNTY	PRINCE GEORGE'S COUNTY	FAIRFAX COUNTY	LOUDOUN COUNTY
Agriculture, Forestry, Mining, etc.	0.02%	0.23%	0.16%	0.10%	0.84%
Construction	2.14%	5.73%	9.91%	4.74%	8.74%
Manufacturing	0.23%	2.15%	1.73%	0.74%	3.56%
Transportation & Public Utilities	1.76%	4.05%	7.77%	3.91%	6.97%
Wholesale & Retail Trade	3.44%	8.48%	12.01%	9.32%	10.37%
Finance, Insurance & Real Estate	7.20%	12.54%	7.16%	10.04%	9.20%
Services	56.20%	52.65%	40.80%	58.47%	48.93%
Government (Federal, State & Local)	27.36%	13.01%	18.85%	11.55%	10.88%
Military	1.65%	1.16%	1.61%	1.13%	0.51%
TOTAL	100.00%	100.00%	100.00%	100.00%	100.00%

EXHIBIT 17 EMPLOYMENT BY SECTOR

Source: U.S. Department of Commerce, Bureau of Economic Analysis Latest available data is for 2021

5. Operating Information

These schedules contain information about the Authority's operations and resources to help the reader understand how the Authority's financial information relates to the activities it perform.

	TREATED		
FISCAL	WATER	WATER	SOLD/PUMPED
YEAR	DELIVERED (MG)	BILLED (MG)	RATIO
2013	34,714	26,316	75.81%
2014	34,708	25,374	73.11%
2015	38,146	26,748	70.12%
2016	36,363	26,325	72.40%
2017	35,827	25,845	72.14%
2018	34,343	25,526	74.33%
2019	35,189	25,067	71.24%
2020	33,639	24,370	72.45%
2021	34,719	24,017	69.18%
2022	34,763	24,282	69.85%

EXHIBIT 18 WATER DELIVERED (PUMPED) AND BILLED (SOLD) LAST TEN FISCAL YEARS

Source: DC Water Department of Customer Service

EXHIBIT 19 WATER DEMAND LAST TEN FISCAL YEARS

FISCAL YEAR	ANNUAL DELIVERIES TO SYSTEM (MG)	AVERAGE DAY (MG)	MAXIMUM MONTH AVERAGE (MGD)	MAXIMUM DAY (MGD)	TOTAL ANNUAL WATER SOLD (MG)	AVERAGE DAY (MGD)
2013	34,714	95.1	111.3	129.7	26,316	71.9
2014	34,708	95.1	106.6	123.7	25,374	72.1
2015	38,146	104.5	117.7	148.4	26,748	73.3
2016	36,363	99.4	113.8	127.7	26,325	72.1
2017	35,827	98.2	107.4	122.7	25,845	70.8
2018	34,343	94.1	110.9	132.5	25,526	69.9
2019	35,189	96.4	115.9	133.3	25,067	68.7
2020	33,639	91.9	107.2	123.4	24,370	66.6
2021	34,719	95.1	109.3	124.2	24,017	65.8
2022	34,763	95.2	105.7	115.0	24,282	66.5

Source: DC Water Department of Water Services and Washington Aqueduct

EXHIBIT 20 MISCELLANEOUS STATISTICS ABOUT AUTHORITY OPERATIONS LAST TEN FISCAL YEARS

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Utilities and supplies per day at Blue Plains										
Electric power (kwh) - Total Used	672,000	681,600	674,000	702,000	678,000	632,220	615,000	700,000	700,000	700,000
Electric power (kwh) - Generated On Site	160,800	166,730	153,000	153,000	158,000	138,347	-	-	-	-
Sodium hypochlorite (gallons)	13,271	11,300	10,456	16,688	14,580	12,880	10,051	10,051	6,850	6,850
Sodium bisulfite (pounds)	11,482	12,587	12,738	14,915	12,130	9,085	7,880	7,880	5,600	5,600
Water (gallons)	525,000	525,000	525,000	525,000	525,000	525,000	525,000	525,000	525,000	525,000
Lime (tons, pounds), dry	-	-	-	-	-	-	-	39,000	72,050	72,050
Lime (gallons), slurry	5,430	2,881	2,321	3,221	1,150	3,095	-	-	-	-
Sodium hydroxide (pounds)	3,869	2,017	4,545	6,975	9,350	2,854	14,766	14,766	26,100	26,100
Methanol (gallons)	15,637	16,618	17,288	18,447	19,100	20,705	19,428	19,428	10,000	10,000
Ferric chloride (10% Iron) (gallons)	12,281	12,375	13,900	14,265	15,770	16,054	19,060	19,060	12,900	12,900
Wastewater treatment capacity										
Average day (mgd)	384	384	384	336	384	384	370	370	370	370
Peak 4 hour flow, through complete process (mgd)	555	555	555	667	550	511	511	511	740	740
Excess storm flow, primary treatment only (mgd)	-	-	-	-	-	336	336	336	336	336
Peak flow (mgd)	780	780	780	906	-	847	847	847	1,076	1,076
Captured Combined Flow,										
through Wet Weather Treatment	225	225	225	239	225	-	-	-	-	-
DC Water employees	1,091	1,096	1,086	1,111	1,165	1,134	1,121	1,164	1,079	1,080

Source: D.C. Water Department of Wastewater Treatment Operations

(CONTINUED ON NEXT PAGE)

EXHIBIT 20 MISCELLANEOUS STATISTICS ABOUT AUTHORITY OPERATIONS (CONTINUED)

Wastewater Plant Permit Limitations August 26, 2018 through August 25, 2023

Total Supended Solids (TSS)6.1 mg/l (19,603 lbs./day)NL (29,404 lbs./day)Ammonin Nitrogen Summer (5/1 - 10/31)4.1 mg/l (13,130 lbs./day)6.1 mg/l (19,536 lbs./day)Winter 1 (17 - 2/14)12.8 mg/l (40,993 lbs./day)15.4 mg/l (49,319 lbs./day)Total Phosphorus (annual average)0.17 mg/l (32,986 lbs./day)0.34 mg/l (1,080 lbs./day)Dissolved Oxygen Minimum daily average5.0 mg/l 4.0 mg/l0.34 mg/l (1,080 lbs./day)PH Minimum Minimum Maximum6.0 units 8.5 units5.0 mg/lTotal ChlorineNon detectable2.6 cu/100ml Geometric (30 day)E.coli126 cu/100ml Geometric (30 day)5.4 mg/l (9,100 lbs./day)U.S. Environmental Protection Agency Total Nitrogen (Annual Average)1,300 MGD3.00 MGDNumber of fine screens161.31.300 MGDNumber of acrated grit chambers2.3 MG3.0 MGNumber of primary clarifiers)2.3 MG3.0 MGNumber of primary clarifiers)1.008 gallons/square foot/day	Parameter	Monthly	Weekly			
Ammonia Nitrogen Summer (5/1 – 10/31) Winter 1 (17 – 2/14) Winter 2 (2/15 – 4/30) Total Phosphorus (annual average) Dissolved Oxygen Minimum daily average Not less than PH Minimum Maimum Max	Biochemical Oxygen Demand (carbonaceous)	5.0 mg/L (16,013 lbs./day)	7.5 mg/l (24,019 lbs./day)			
Summer (51 – 1031) 4.1 mg/l (13,130 lbs/day) 6.1 mg/l (19,536 lbs/day) Winter 1 (1/1 – 2/14) 12.8 mg/l (40,993 lbs/day) 19.3 mg/l (61,809 lbs/day) Winter 2 (215 – 4/30) 0.3 mg/l (530 lbs/day) 19.3 mg/l (40,391 lbs/day) Total Phosphorus (annual average) 0.17 mg/l (530 lbs/day) 0.34 mg/l (1,080 lbs/day) Dissolved Oxygen 5.0 mg/l 4.0 mg/l Minimum daily average 5.0 mg/l 4.0 mg/l PH Minimum 6.0 units 8.5 units Total Chlorine Non detectable Ecoli Ecoli 126 cu/100ml Geometric (30 day) Chespace U.S. Environmental Protection Agency 4,370,078 lbs/yr Chespace Vastewater Plant Processes 1,300 MGD Ecoli Ecoli Influent Pumping Capacity 1,300 MGD Ecoli Ecoli Ecoli Number of fine screens 16 Ecoli Ecoli Ecoli Ecoli Number of arated grit chambers 2.3 MG Ecoli Ecoli Ecoli Ecoli Ecoli Ecoli Ecoli Ecoli Ecoli Ecoli </td <td>Total Suspended Solids (TSS)</td> <td>6.1 mg/l (19,603 lbs./day)</td> <td>NL (29,404 lbs./day)</td>	Total Suspended Solids (TSS)	6.1 mg/l (19,603 lbs./day)	NL (29,404 lbs./day)			
Dissolved Oxygen Minimum daily average Not less than PH Minimum Maximum Mon detectable E.coli Lo Columits Mon detectable Mon detectable Mon detectable Mon detectable N/A Numler of Incoreases Primary Treatment Influent Pumping Capacity Number of fine screens Mumber of fine screens Mumber of aerated grit chambers Mumber of aerated grit chambers Mumber of primary clarifiers Mumber of primary clarif	Ammonia Nitrogen Summer $(5/1 - 10/31)$ Winter 1 $(1/1 - 2/14)$ Winter 2 $(2/15 - 4/30)$	12.8 mg/l (40,993 lbs./day)	19.3 mg/l (61,809 lbs./day)			
Minimum daily average Not less than5.0 mg/l 4.0 mg/lpH Minimum Maximum6.0 units 8.5 unitsTotal ChlorineNon detectableE.coli126 cu/100ml Geometric (30 day)Chesapeake Bay Voluntary Agreement Total Nitrogen (Annual Average)N/AU.S. Environmental Protection Agency Total Nitrogen (Annual Average)4,370,078 lbs./yrWastewater Plant Processes Primary Treatment1,300 MGDInfluent Pumping Capacity1,300 MGDNumber of fine screens16Total volume of aerated grit chambers2.3 MGNumber of primary clarifiers36Average detention time (clarifiers)2.5 hoursAverage hydraulic loading (clarifiers)1,008 gallons/square foot/day	Total Phosphorus (annual average)	0.17 mg/l (530 lbs./day)	0.34 mg/l (1,080 lbs./day)			
Minimum6.0 units 8.5 unitsMaximum6.0 units 8.5 unitsTotal ChlorineNon detectableE.coli126 cu/100ml Geometric (30 day)Chesapeake Bay Voluntary Agreement Total Nitrogen (Annual Average)N/AU.S. Environmental Protection Agency Total Nitrogen (Annual Average)4,370,078 lbs./yrWastewater Plant Processes Primary Treatment1,300 MGDNumber of fine screens13Number of fine screens16Number of aerated grit chambers2.3 MGNumber of primary clarifiers36Average detention time (clarifiers)2.5 hoursNumber of out (clarifiers)1,008 gallons/square foot/day	Dissolved Oxygen Minimum daily average Not less than					
E.coli126 cu/100ml Geometric (30 day)Chesapeake Bay Voluntary Agreement Total Nitrogen (Annual Average)N/AU.S. Environmental Protection Agency Total Nitrogen (Annual Average)4,370,078 lbs./yrWastewater Plant Processes Primary Treatment1,300 MGDInfluent Pumping Capacity1,300 MGDNumber of fine screens16Number of aerated grit chambers6Yotal volume of aerated grit chambers36Number of primary clarifiers2.3 MGAverage detention time (clarifiers)2.5 hoursAverage hydraulic loading (clarifiers)1,008 gallons/square foot/day	pH Minimum Maximum					
Chesapeake Bay Voluntary Agreement Total Nitrogen (Annual Average)N/AU.S. Environmental Protection Agency Total Nitrogen (Annual Average)4,370,078 lbs./yrWastewater Plant Processes Primary Treatment1,300 MGDInfluent Pumping Capacity1,300 MGDNumber of fine screens13Number of aerated grit chambers2.3 MGNumber of primary clarifiers)36Average hydraulic loading (clarifiers)1,008 gallons/square foot/day	Total Chlorine	Non detectable				
Total Nitrogen (Annual Average)4,370,078 lbs./yrU.S. Environmental Protection Agency Total Nitrogen (Annual Average)4,370,078 lbs./yrWastewater Plant Processes Primary Treatment1,300 MGDInfluent Pumping Capacity1,300 MGDNumber of fine screens13Number of aerated grit chambers16Total volume of aerated grit chambers2.3 MGNumber of primary clarifiers36Average detention time (clarifiers)2.5 hoursAverage hydraulic loading (clarifiers)1,008 gallons/square foot/day	E.coli	126 cu/100ml Geometric (30 day)				
Total Nitrogen (Annual Average)Wastewater Plant Processes Primary TreatmentInfluent Pumping Capacity1,300 MGDNumber of fine screens13Number of aerated grit chambers16Total volume of aerated grit chambers2.3 MGNumber of primary clarifiers36Average detention time (clarifiers)2.5 hoursAverage hydraulic loading (clarifiers)1,008 gallons/square foot/day	Chesapeake Bay Voluntary Agreement Total Nitrogen (Annual Average)	N/A				
Primary TreatmentInfluent Pumping Capacity1,300 MGDNumber of fine screens13Number of aerated grit chambers16Total volume of aerated grit chambers2.3 MGNumber of primary clarifiers36Average detention time (clarifiers)2.5 hoursAverage hydraulic loading (clarifiers)1,008 gallons/square foot/day	U.S. Environmental Protection Agency Total Nitrogen (Annual Average)	4,370,078 lbs./yr				
Number of fine screens13Number of aerated grit chambers16Total volume of aerated grit chambers2.3 MGNumber of primary clarifiers36Average detention time (clarifiers)2.5 hoursAverage hydraulic loading (clarifiers)1,008 gallons/square foot/day	<u>Wastewater Plant Processes</u> Primary Treatment					
Number of aerated grit chambers16Total volume of aerated grit chambers2.3 MGNumber of primary clarifiers36Average detention time (clarifiers)2.5 hoursAverage hydraulic loading (clarifiers)1,008 gallons/square foot/day	Influent Pumping Capacity	1,300 MGD				
Total volume of aerated grit chambers2.3 MGNumber of primary clarifiers36Average detention time (clarifiers)2.5 hoursAverage hydraulic loading (clarifiers)1,008 gallons/square foot/day	Number of fine screens	13				
Number of primary clarifiers36Average detention time (clarifiers)2.5 hoursAverage hydraulic loading (clarifiers)1,008 gallons/square foot/day	Number of aerated grit chambers	16				
Average detention time (clarifiers)2.5 hoursAverage hydraulic loading (clarifiers)1,008 gallons/square foot/day	Total volume of aerated grit chambers	2.3 MG				
Average hydraulic loading (clarifiers) 1,008 gallons/square foot/day	Number of primary clarifiers	36				
	Average detention time (clarifiers)	2.5 hours				
Maximum hydraulic loading (clarifiers) 2,929 gallons/square foot/day	Average hydraulic loading (clarifiers)1,008 gallons/square foot/day					
	Maximum hydraulic loading (clarifiers)	2,929 gallons/square foot/day				

EXHIBIT 20 MISCELLANEOUS STATISTICS ABOUT AUTHORITY OPERATIONS (CONTINUED)

		I		
Secondary Treatment		Effluent dissolved oxygen	3.8-7.2 mg/L	
Number of reactors	6	(Post – Aeration)		
Total reactor volume	27.7 MG	Dual Purpose sedimentation tanks		
Number of clarifiers	24		4 Secondary Treatments	
Average reactor detention time	1.6 hours		4 Nitrification Treatments	
Average clarifier hydraulic loading	763 gal/sq ft./day	Total Dual Purpose Surface Area	197,160 sq. ft.	
Number of centrifugal blowers	6			
Total blower capacity	280,000 cu ft. /min	Filtration & Disinfection		
Average MLSS	2,200 mg/L	Number of filters	40	
Average SRT	1.6 days	Total filter area	83,200 sq. ft.	
Average SVI	80-100 ml/g	Average filtration rate	3.4 gal/ minute/ sq. ft.	
Effluent dissolved oxygen	2-3 mg/L	Average filter run time	55 hours	
Effluent alkalinity	140 mg/L as CaCO3	Depth of anthracite media	24 inches	
Nitrification / Denitrification		Depth of sand media	12 inches	
Number of Nitrification reactors	12	Number of chlorine contact tanks	4	
Total reactor volume	55.2 MG	Average contact time	42 minutes	
Number of Denitrification reactors	8			
Total reactor volume	36.7 MG	<u>Tunnel Dewatering Pump Station and Wet Weather</u> <u>Treatment Facility</u>		
	20	Number of tunnel dewatering	5	
Number of clarifiers	28	pumps	5	
Average reactor detention time	3.3 hours 755 gallons/square	Rated capacity per pump	83.3 MGD	
Average clarifier hydraulic loading	ft./day	Number of fine screens	4.	
Average MLSS	2000 mg/L	Rated capacity per screen	125 MGD	
Average pH	7.0 units	Number of grit vortex	3	
Average SRT	21 days	Number of high-rate clarifiers	3	
Average SVI	80-110 ml/g	Rated Capacity per grit vortex and clarifier	83.3 MGD	
Effluent alkalinity	110 mg/L as CaCO3			
		I		

EXHIBIT 20 MISCELLANEOUS STATISTICS ABOUT AUTHORITY OPERATIONS (CONTINUED)

Solids Processing	
Number of gravity thickeners	10
Max gravity thickener solids loading rate	24.1 lbs/day/sf
Number of flotation thickening tanks	18
Max flotation solids loading rate	39 lbs/day/sf
Number of solids screens	12
Rater capacity per screen	65 dtpd
Number of centrifuges	10
Rated capacity per centrifuge	70 dtpd
Number of thermal hydrolysis process streams	4
Number of anaerobic digesters	4
Rated capacity per thermal hydrolysis stream and anaerobic digester	112.5 dtpd
Working volume per digester	3.8 MG
Number of belt filter presses	16
Averaging loading rate per press	24 dtpd
Combined Heat and Power	
Number of combustion turbines	3
Electrical output per generator	$3.8 - 5.3 \; MW$
Number of heat recovery steam generators (HRSG)	3
Steam flow rate per HRSG	
Unfired duct burner	11,500 lbm/hr
Fully fired duct burner	34,000 lbm/hr
Number of auxiliary boilers	1
Max steam flow rate per boiler	51,750 lbm/hr

EXHIBIT 21 SCHEDULE OF INSURANCE AS OF SEPTEMBER 30, 2022

TYPE OF COVERAGE	COMPANY	POLICY PERIOD	COVERAGE LIMITS
Blanket Property and Boiler & Machinery	Alliant Public Entity Property Insurance Program (PEPIP)	July 1, 2022- July 1, 2023	\$1,000,000,000 Blanket Buildings and Contents - (Specified Locations) and Mobile Equipment
			\$100,000,000 Boiler and Machinery
			\$25,000,000 Miscellaneous Locations
			\$100,000,000 Earth Movement
			\$100,000,000 Excess Flood (over NFIP), except \$25,000,000 Locations within 100 Year Flood Zone (e.g. Blue Plains)
			Terrorism: \$700,000,000 per occurrence, \$1,600,000,000 annual aggregate (Alpha,Hiscox- \$250,000,000 of occurrence and aggregate limit dedicated solely to DC Water)
			\$25,000,000 Transit Per Shipment
			Deductibles: \$1,000,000 Any Loss, except \$10,000 Equipment
Fidelity & Crime Insurance	AIG	July 1, 2022- July 1, 2023	\$10,000,000 - Employee Dishonesty, Forgery, Funds Transfer, Fraud, Money & Securities Deductible:
			\$25,000 Per Occurrence
Commercial General Liability	Self-Funded		\$1,000,000 each occurrence
Commercial Automobile	Self-Funded		\$1,000,000 any one accident
			100% Physical Damage - self-funded
Worker's Compensation	Self-Funded		\$1,000,000 each accident
			Statutory WC Benefits
			Employer's Liability - \$1,000,000 Each Accident; \$1,000,000 Disease/ Employee
Excess Worker's Compensation Insurance	Safety National	July 1, 2022– July 1, 2023	Unlimited - WC Benefits; \$3,000,000 - Employer's Liability (Included - Terrorism)
			Retentions: \$1,000,000/accident; \$1,000,000 Disease/ Employee.
Excess General Liability, Automobile Liability, and Employers Liability Insurance	AEGIS	July 1, 2022- July 1, 2023	\$35,000,000 in excess of \$1,000,000
Excess Liability	EIM	July 1, 2022- July 1, 2023	\$65,000,000 in excess of \$35,000,000
Public Official Liability	RSUI Indemnity / Chubb Insurance Company	July 1, 2022- July 1, 2023	\$20,000,000 Each Loss / Aggregate
			Retentions: \$250,000 per wrongful act
Fiduciary Liability	Travelers Insurance	July 1, 2022- July 1, 2023	\$5,000,000 Each Loss / Aggregate
			Deductible: \$0 per claim
Cyber	Cowbell	July 1, 2022- July 1, 2023	5,000,000 Each Loss/Aggregate Deductible: \$100,000
Professional Liability	Lloyds of London	July 1, 2022- July 1, 2023	\$2,000,000 Each Loss Deductible: \$10,000
National Flood	NFIP	July 1, 2022- July 1, 2023	\$500,000 building/contents Deductible: \$50,000 per building/contents

EXHIBIT 22 SUMMARY OF MAJOR PERMITS AND ADMINISTRATIVE ORDERS AS OF SEPTEMBER 30, 2022

	AS OF SEPTEMBER 30, 2022		
Wastewater	Description	Expiration Date	Current Status
National Pollutant Discharge Elimination System Permit # DC0021199	Permit issued to DC Water. Authorizes discharge of treated wastewater from Blue Plains Advanced Wastewater Treatment Plant (Plant) into the Potomac River and from the combined sewer system into Rock Creek, the Anacostia River, and the Potomac River. Prescribes operating conditions for the Plant and sewer system.	August 25, 2023	In Compliance
National Pollutant Discharge Elimination System Permit # DC0000221	Permit issued to Government of District of Columbia. Authorizes discharge from municipal separate storm sewer system (MS4) and prescribes certain actions that DC Water has agreed to perform including:	June 22, 2023	In Compliance
	Responding to sanitary sewer overflows (SSO)		
	Reporting SSOs that overflow to MS4 system to public health agencies		
	Cleaning catch basins and removing trash from waterbodies		
	Maintaining storm sewer system infrastructure		
	Collection of stormwater fees for the District of Columbia		
1995 Consent Decree	Requires certain actions including:	N/A	In Compliance All items completed; awaiting
Civil Action No.: 90-1643-JGP and	Review procurement practices & maintenance procedures		action to terminate decree
84-2842-JGP	Undertake Operational Capability Review		
	Conduct a pilot project for biological nitrogen reduction		
1996 Stipulated Agreement & Order	Requires certain actions including:	N/A	In Compliance All items completed; awaiting
Civil Action No.: 96-669-TFH	Rehabilitate and maintain certain facilities and capital equipment in good operating condition		action to terminate agreemer and order
	Maintain certain records and data for status reports and prepare monthly reports on status of compliance		
	Maintain user fees in separate accounts and make timely payment of invoices		
2003 Consent Decree	Requires certain actions including:	N/A	In Compliance
Civil Action No.: 1:00CV00183TFH	Replacement/repair of control structures		
Civil Action No.: 02-2511 (TFH)	Cleaning/inspection of catch basins Rehabilitation of pumping stations Rehabilitation of Blue Plains grit chambers and influent screens Inspection of certain sewers and siphons Public education/outreach activities Payment of civil penalty of \$250,000 Conduct/support of supplemental environmental projects		
2005 Modified Consent Decree for CSS LTCP	Requires implementing projects for various components of the combined sewer system (CSS) long term control plan (LTCP). On	N/A	In Compliance
Consolidate Civil Action No;	January 14, 2016, the Court entered the First Amendment to the Consent Decree to incorporate DC Water's Total Nitrogen Wet		
1:00CV00183TFH	Weather Plan and modify the requirement for the Potomac and Rock Creek watersheds to include Green/Gray Infrastructure in Potomac watershed, and Gray Infrastructure in the Rock Creek watershed. On December 22, 2020, the Parties filed a Joint Stipulation of Non- Material Modification, amending the requirements for the Rock Creek Sewershed Projects and other provisions. The Consent Decree does not have an expiration date.		
DOEE Department of Energy and the Environment	Title V permit for all sources located at Blue Plains WWTP	N/A	In Compliance – application submitted pending issuance

EXHIBIT 23 BUDGETARY COMPARISON SCHEDULE FOR FISCAL YEAR 2022

	/	Approved Budget		ctual enditures	١	/ariance
Expenditures						
Personnel services	\$	180,353	\$	173,229	\$	7,124
Contractual services		88,504		75,878		12,626
Water purchases		35,217		33,345		1,872
Chemicals and supplies		34,200		39,189		(4,989)
Utilities and rent		27,329		37,820		(10,491)
Small equipment		1,108		862		246
Interest and fiscal charges (debt service)		231,164		671,397		(440,233)
Payment in lieu of tax & right of way fee		22,718		22,718		-
Cash financed capital improvements		37,830		-		37,830
Total budgetary basis expenditures	\$	658,422	\$1,	054,438	\$	(396,016)

Reconciliation between total budgetary basis expenditures and total expenses reported in statements of revenues, expenses and changes in net position

Capitalized personnel expenditures	(24,413)
Depreciation and amortization expense	140,263
Long-term debt - principal payments	(526,172)
Build America Bonds subsidy	5,259
Inventory issuances	819
Blue Drop	665
Non-budgeted expenses	11,682
Total expenses reported in statements of revenues, expenses and	
changes in net position	\$ 662,541

(CONTINUED ON NEXT PAGE)

EXHIBIT 23 BUDGETARY COMPARISON SCHEDULE FOR FISCAL YEAR 2022 (CONTINUED)

BUDGETARY ACCOUNTING AND CONTROL

Budget Law

The Authority prepares its operating and capital budgets under the provisions of its enabling legislation. In accordance with those provisions, the following process is used to adopt the annual budget.

- Development of the 10-year financial plan
- Development of individual departmental operating budgets, based on the financial framework in the 10-year financial plan
- Review and development of the Authority wide proposed budget by the Chief Executive Officer (CEO) and General Manager
- Presentation of proposed budget to the Board of Directors
- Review and recommendation of proposed budget by the various Board Committees
- Adoption of proposed budget by the Board of Directors
- Submission of proposed budget to the District of Columbia for inclusion in its budget
- District of Columbia budget submission to U.S. Congress
- Approval of proposed budget by U.S. Congress and President

Budgetary Accounting

The Authority is a single enterprise fund and maintains accounting records using the accrual basis of accounting, in accordance with U.S. generally accepted accounting principles (GAAP). Under this basis of accounting, revenues are recognized when earned, and expenses are recognized when goods and services are received. The Authority's expenditure budget is prepared on a comparable basis to GAAP, with the exception of debt service, which is budgeted in full when due, including principal and interest. Depreciation is not budgeted; depreciation is recorded as an expense for financial statement purposes. Certain other items are also not budgeted such as bad debt expense or (recovery) and loss (gain) on disposals of fixed assets or inventory.

Budgetary Requirements

After the U.S. Congress approves the budget, the operating and capital budgets are loaded into the Authority's financial management system, which prevents overspending without appropriate approvals. The Department of Finance 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 the Authority complies with its authorized budget levels.