FAIRFAX COUNTY
WASTEWATER MANAGEMENT

Quality of Water = Quality of Life

ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the Fiscal Year Ended
June 30, 2023

INTEGRATED SEWER SYSTEM
An Enterprise Fund of the County of Fairfax, Virginia

Published November, 2023

Integrated Sewer System

An Enterprise Fund of the

County of Fairfax, Virginia

Fairfax County
Wastewater Management

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Annual Comprehensive Financial Report

For the Fiscal Year Ended June 30, 2023

Department of Public Works and Environmental Services
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Fairfax, Virginia 22035
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Wastewater Management

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Integrated Sewer System · County of Fairfax, Virginia
Annual Comprehensive Financial Report
For the Fiscal Year Ended June 30, 2023

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FAIRFAX COUNTY
WASTEWATER MANAGEMENT

Quality of Water = Quality of Life

INTRODUCTORY SECTION

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Integrated Sewer System
An Enterprise Fund of the County of Fairfax, Virginia

For its Annual Comprehensive Financial Report
For the Fiscal Year Ended

June 30, 2022

Christopher P. Morrill

Executive Director/CEO

November 3, 2023

The Board of Supervisors
County of Fairfax
Commonwealth of Virginia

Honorable Chairman and Members of the Board:

We are pleased to submit the Annual Comprehensive Financial Report (ACFR) for the County of Fairfax, Virginia (the County) Integrated Sewer System (the System) for the fiscal year ended June 30, 2023. The financial statements included in this report conform to U.S. generally accepted accounting principles (GAAP) as promulgated by the Governmental Accounting Standards Board (GASB). Responsibility for both the accuracy of the presented data and completeness and fairness of the presentation, including all disclosures, rests with management. To the best of our knowledge and belief, the enclosed data are accurate in all material respects and are reported in a manner that presents fairly the financial position and results of operations of the System. All necessary disclosures have been included to enable the reader to gain the maximum understanding of the System's financial affairs.

The General Bond Resolution dated July 29, 1985, governing the issuance of sewer revenue bonds, as modified through July 2009, requires an annual audit of the financial records and transactions of the System by independent certified public accountants. The System's financial statements for the year ended June 30, 2023, were audited by the accounting firm of Cherry Bekaert LLP. The independent auditors concluded, based upon the audit, that there was a reasonable basis for rendering their opinion that the financial statements are fairly presented in conformity with GAAP. The report of independent auditor is presented in the financial section of this ACFR.

This ACFR consists of management's representations concerning the finances of the System. To provide a reasonable basis for making these representations, the System's accounting system is dependent upon a strong foundation of internal accounting controls to ensure that financial information generated is both accurate and reliable; however, because the cost of a control should not exceed the benefits to be derived, the objective is to provide reasonable, rather than absolute assurance that the financial statements are free of any material misstatements. GAAP requires that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of the Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The System's MD&A can be found immediately following the report of independent auditor.

Profile of the System

The Fairfax County, Virginia Integrated Sewer System is operated as the Wastewater Management Program (WWM), one of four major activities of the Department of Public Works and Environmental Services, and governed by the County of Fairfax, Board of Supervisors. The System handles approximately 92 million gallons of wastewater per day (MGD) generated mostly from approximately 959,000 County residents. More than 88 percent of the 425,000 County housing units and virtually all businesses in the County are connected to the public sewer system.

The System consists of approximately 3,300 miles of sewer lines and force mains ranging in size from 8 inches to 72 inches, 70 pump stations ranging in capacity from 0.1 to 37 MGD, and 57 metering stations. The total System workforce is 331 employees. The sewer service area covers approximately 234 square miles in the Potomac River Watershed, a tributary shed of the Chesapeake Bay Basin.

Nearby counties, cities, and towns served by the System receive service through sales of service agreements. The System currently has agreements with the Counties of Loudoun and Arlington, Fort Belvoir, the Cities of Fairfax and Falls Church, and the Towns of Herndon and Vienna. As prescribed by each service agreement, each entity shares in the cost of operating the System. Each entity's share is determined on the basis of actual wastewater flows or reserved treatment capacity.

To treat the wastewater flows generated, the System operates and maintains one advanced wastewater treatment plant, the 67 MGD Noman M. Cole, Jr. Pollution Control Plant, and has 89.50 MGD of purchased capacity entitlement at five non-County facilities, all of which are advanced wastewater treatment facilities. Purchased capacity entitlements are managed through treatment by contract agreements with the District of Columbia Water and Sewer Authority (the Blue Plains Advanced Water Treatment Facility), Loudoun County, Alexandria Renew Enterprises (ARE), Upper Occoquan Sewage Authority (UOSA), and Arlington County. In addition, the System has purchased 0.1 MGD of capacity from the Prince William County Service Authority. As prescribed by each agreement, the System pays its share of the operating, capital, and/or debt costs of each entity's system based on actual wastewater flows and allocated capacity.

Factors Affecting Financial Condition

Local Economy

Business, Professional, and Occupational License (BPOL) and Sales Taxes are two revenue sources that are good indicators of economic activity in the County. In FY 2023, overall BPOL tax receipts increased 5.8 percent over the previous fiscal year. FY 2023 Sales Tax receipts increased 3.9 percent. The unemployment rate in the County as of June 2023 was 2.5 percent. Residential sewer connections in the system, which are a measure of system growth, grew 0.2 percent in fiscal year 2023.

Debt Management

To finance major capital projects, the System borrows money by issuing sewer revenue bonds or sharing in debt issued by other service authorities. Authorization to issue any debt or share in any debt service rests with the County's Board of Supervisors. As of June 30, 2023, the System had $476.9 million in Sewer revenue bonds, $19.5 million in EDA bonds, and $225.1 million in UOSA debt outstanding. The System continues to maintain its status as a top-rated bond issuer: AAA from Fitch Investor Service (Fitch) and Standard and Poor's Corporation (S&P) and AAA from Moody's Investors Service, Inc (Moody's).

Notes (8 and 9) to the Financial Statements provides information pertaining to future debt service payments. Table 3 in the Statistical Section provides historical information regarding debt coverage and debt service requirements of the System.

Relevant Financial Policies

Sewer rates are reviewed and revised annually as part of the County's annual strategic planning and budgeting process in order to minimize the annual cost impact on customers due to increases in funding needs for Wastewater Program funding.

Major Initiatives and Accomplishments

Nutrient Removal at Area Treatment Plants - In August 2004, the Virginia Department of Environmental Quality proposed reduced nutrient waste load allocations for Virginia wastewater treatment facilities as amendments to the Water Quality Management Regulation (9VAC25-720). These load allocations were then incorporated into the Virginia's Phase I Watershed Implementation Plan for meeting the EPA Chesapeake Bay Total Maximum Daily Loads (TMDL). To meet the load allocations, enhanced nutrient removal was required of all wastewater treatment plants serving Fairfax County to meet more stringent Chesapeake Bay water quality standards by January 1, 2011. Significant capital funding has been needed to bring treatment facilities into compliance. At the Noman M. Cole, Jr. Pollution Control Plant, a new Moving Bed Bioreactor was constructed and brought on line in 2012 to comply with the new waste load allocation. As a result of the new facility, the Noman M. Cole, Jr. Pollution Control Plant was under its new waste load allocation by more than 50 percent. In fiscal year 2023, total nitrogen discharges from the County's Noman M. Cole, Jr. Pollution Control Plant averaged less than 2.9 mg/1.

Solid Stabilization and Disposal - The Noman M. Cole, Jr. Pollution Control Plant initiated a Biosolids Program in fiscal year 2014 to meet the new EPA Clean Air Act regulations. Phase I includes replacement of the Venturi Scrubbers on the incinerators to provide compliance with the new Clean Air Act Maximum Available Control Technology requirements that went into effect in March 2016. Phases I & II have been completed. Construction on Phase III of the program focuses on the rehabilitation of the existing incineration system and supporting biosolids processing infrastructure. It commenced in fiscal year 2020. Phase IV is expected to commence construction in fiscal year 2027.

Primary and Secondary Renewal Program - In fiscal year 2016, the Noman M. Cole, Jr. Pollution Control Plant initiated a renewal program of the facility's primary and secondary process areas. The goal of the program is to renew facilities to address current and future process, technological, and capacity needs. The program currently has two major phases, interim sustaining improvements and the major program renewal which includes piloting of technologies. Assessment and design of the interim sustaining improvement was completed, and construction started in fiscal year 2023. Depending on the results of piloting and technologies selected construction on the first phase of the major program is estimated to start in fiscal year 2030.

Major Sustaining Program - In fiscal year 2020, WTD initiated a Major Sustaining Study to evaluate infrastructure throughout the facility, include portions of the advanced water treatment, reclaimed water, and preliminary treatment systems. This evaluation was completed in fiscal year 2023. Upon completion, appropriate projects and schedules will be created to address findings of the study, both in terms of scope and timing. It is anticipated that findings of the evaluation will result in multiple design and construction packages with some their implementation occurring within the next five fiscal years.

Awards

GFOA Certificate of Achievement for Excellence in Financial Reporting - For the twentieth consecutive year, the Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the System for its Annual Comprehensive Financial Report for the fiscal year ended June 30, 2022. In order to be awarded a Certificate of Achievement, a government entity must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both GAAP and applicable financial reporting requirements.

A Certificate of Achievement is valid for one year only. We believe our current ACFR continues to meet Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards of state and local government financial reports.

NACWA Platinum Peak Performance Award - The System's Noman M. Cole, Jr. Pollution Control Plant received the Peak Performance Award from the National Association of Clean Water Agencies (NACWA), recognizing the facility's accomplishments in protecting water quality in the County. The award recognizes plants that obtain permit compliance of federal standards for preventing pollution. The System's Noman M. Cole, Jr. Pollution Control Plant has received NACWA awards for permit compliance since 1984. The plant has protected the water quality of the County's streams and watersheds, as well as the Chesapeake Bay.

Extraordinary Environmental Enterprise - The Wastewater Management program has received the designation of Extraordinary Environment Enterprise (E4) from the Virginia Department of Environmental Quality (DEQ) Virginia Environmental Excellence Program (VEEP) for its Environmental Management System (EMS). Currently approximately 276 public and private organizations participate in the VEEP EMS certification program at the E2, E3, and E4 levels. Of these 276 organizations, approximately 44 facilities within the State have reached the E4 level of certification. This designation recognizes facilities that have fully implemented an EMS emphasizing pollution prevention, continual improvement, environmental outreach, and sustainability. This program encourages facilities to surpass compliance with federal and local regulations and engage in environmental stewardship and sustainability practices.

Utility of the Future Recognition (UOTF) - The Wastewater Management Program retained the Utility of the Future Today recognition by the Water Environment Federation, National Association of Clean Water Agencies, Water Environment & Reuse Foundation and Water Reuse Association. The UOTF concept was introduced in 2016 to guide utilities of all sizes toward smarter, more efficient operations and a progression to full resource recovery with enhanced productivity, sustainability, and resiliency. Fairfax County Wastewater Management was one of the forty-five utilities were honored to receive the UOTF Award.

Virginia Water Environment Association (VWEA) Facility Maintenance Award - The System's Noman M. Cole, Jr. Pollution Control Plant Maintenance Department received the VWEA Facility Maintenance Award in 2023. This award recognizes outstanding performance, professionalism, and dedication specific to the maintenance of the wastewater treatment equipment and processes at a facility with more than 10 maintenance staff. This award is given to recognize an outstanding team who by their efforts have demonstrated excellence in wastewater treatment maintenance programs.

Acknowledgments

We express our sincere appreciation to all staff who contributed to this ACFR, especially the members of the System's Wastewater Planning and Monitoring Division of the Department of Public Works and Environmental Services and the Financial Reporting Division of the Department of Finance, who prepared and compiled this report. We commend them for their professionalism, hard work, and continued efforts to improve this report.

This ACFR reflects our continued commitment to the citizens of Fairfax County, the Board of Supervisors, and all interested readers of this report to provide information in conformance with the highest standards of financial reporting.

Respectfully,

Bryan J. Hill
County Executive

Christina C. Jackson
Chief Financial Officer

Anand Goutam
Financial Manager
Integrated Sewer System

Integrated Sewer System
County of Fairfax, Virginia

Urban County Executive Form of Government
As of June 30, 2023

Board of Supervisors

Jeffrey C. McKay, Chairman	At-large
Penelope A. Gross, Vice Chairman	Mason District
James R. Walkinshaw	Braddock District
Daniel G. Storck	Mount Vernon District
John W. Foust	Dranesville District
Dalia A. Palchik	Providence District
Walter L. Alcorn	Hunter Mill District
Patrick S. Herrity	Springfield District
Rodney L. Lusk	Franconia District
Kathy L. Smith	Sully District

County Executive

Bryan J. Hill

Deputy County Executive

Rachel Flynn

Department of Public Works and Environmental Services

Christopher S. Herrington, Director

Wastewater Collection Division

Shwan Fatah, Director

Wastewater Treatment Division

Michael McGrath, Director

Wastewater Planning and Monitoring Division

Shahram Mohsenin, Director

Department of Management and Budget

Christina C. Jackson, Chief Financial Officer

Department of Finance

Christopher J. Pietsch, Director

Office of the County Attorney

Elizabeth D. Teare, County Attorney

FAIRFAX COUNTY
WASTEWATER MANAGEMENT

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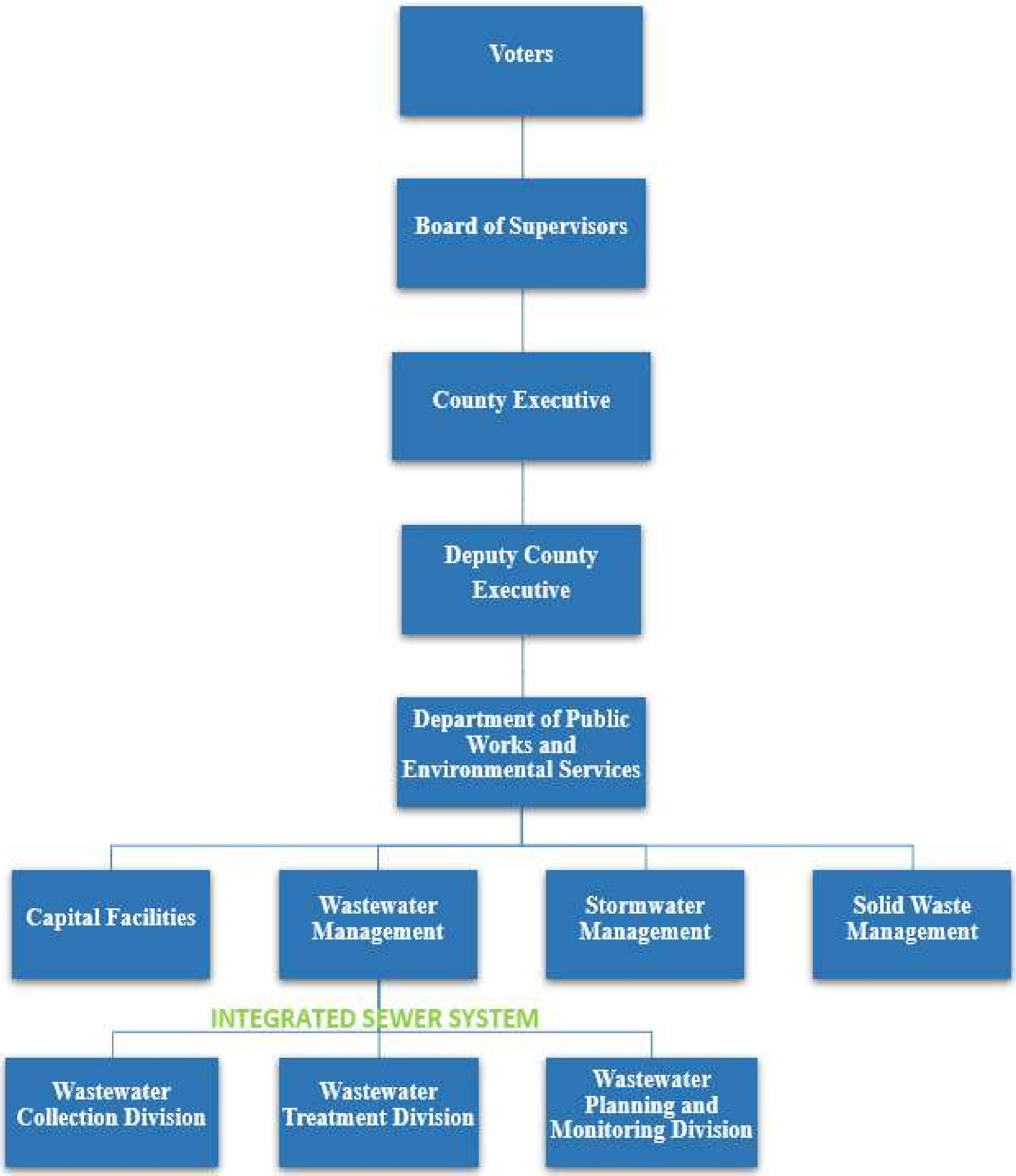
Organization of the Integrated Sewer System · County of Fairfax, Virginia



This report was prepared by:

County of Fairfax, Virginia
Wastewater Management Program and Department of Finance

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Department of Finance
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Regina S. Magalong, Financial Reporting Manager
Daria Johnson
Xuan Wang
Jessica Woo

FAIRFAX COUNTY
WASTEWATER MANAGEMENT

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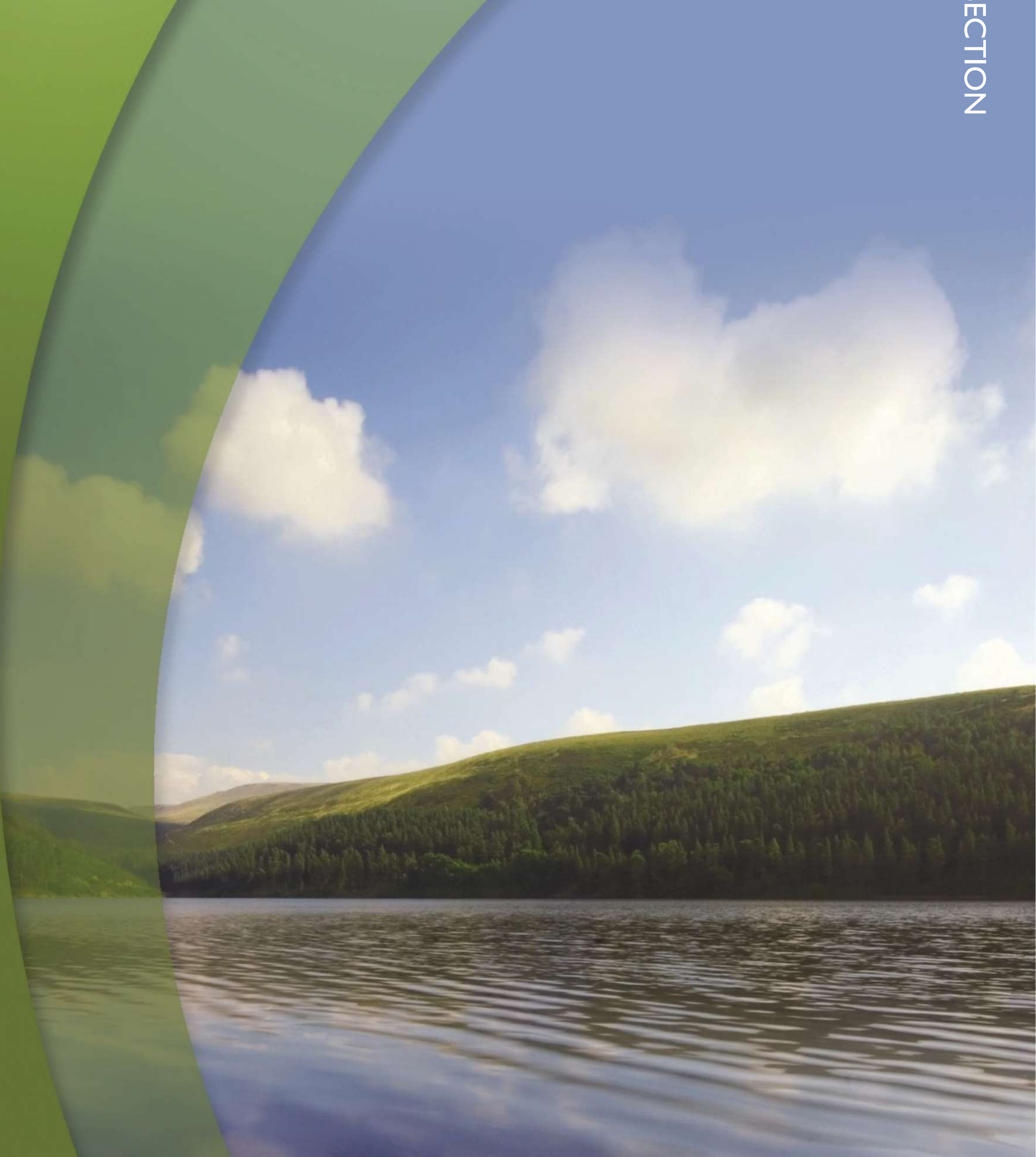

FINANCIAL SECTION

FAIRFAX COUNTY
WASTEWATER MANAGEMENT

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Cherry Bekaert LLP
Your Guide Forward

Report of Independent Auditor

To the Board of Supervisors
County of Fairfax, Virginia

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of the Integrated Sewer System (the "System") an enterprise fund of the County of Fairfax, Virginia, as of and for the year ended June 30, 2023, and the related notes to the financial statements, as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the System as of June 30, 2023, and the changes in its financial position and cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are required to be independent of the County of Fairfax, Virginia and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Emphasis of Matter

As discussed in Note 1a, the financial statements present only the System and do not purport to, and do not, present fairly the financial position of the County of Fairfax, Virginia, as of June 30, 2023, the changes in its financial position, or, where applicable, its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, 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.

Auditor's 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 auditor's 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 generally accepted auditing standards and *Government Auditing Standards* 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 generally accepted auditing standards and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.

- 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.

- 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 System's internal control. Accordingly, no such opinion is expressed.

- 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.

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

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the Required Supplemental Information Section, as listed in the table of contents, be presented to supplement the financial statements. Such information is the responsibility of management and, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, 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 financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the Introductory and Statistical Sections but does not include the financial statements and our auditor's report thereon. Our opinion on the 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 audit of the financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the 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.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 3, 2023, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

Cherry Bekaert LLP

Tysons Corner, Virginia
November 3, 2023

Report of Independent Auditor on Bond Compliance

To the Board of Supervisors
County of Fairfax, Virginia

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the Integrated Sewer System (the “System”), an enterprise fund of the County of Fairfax, Virginia, as of and for the year ended June 30, 2023, and the related notes to the financial statements, and have issued our report thereon dated November 3, 2023.

In connection with our audit, nothing came to our attention that caused us to believe the System failed to comply with the terms, covenants, provisions, or conditions of the General Bond Resolution adopted by the Board of Supervisors of Fairfax County on July 29, 1985, as amended and restated through May 18, 2009 (the “Resolution”), insofar as they relate to accounting matters. However, our audit was not directed primarily toward obtaining knowledge of such noncompliance. Accordingly, had we performed additional procedures, other matters may have come to our attention regarding the System’s noncompliance with the above referenced terms, covenants, provisions, or conditions of the Resolution, insofar as they relate to accounting matters.

This report is intended solely for the information and use of the Board of Supervisors of the County of Fairfax, Virginia, management of the System, and U.S. Bank and is not intended to be, and should not be, used by anyone other than these specified parties.

Cherry Bekaert LLP

Tysons Corner, Virginia
November 3, 2023

Cherry Bekaert LLP
Your Guide Forward

Report of Independent Auditor on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Board of Supervisors
County of Fairfax, Virginia

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Integrated Sewer System (the "System"), an enterprise fund of the County of Fairfax, Virginia, as of and for the year ended June 30, 2023, and the related notes to the financial statements, and have issued our report thereon dated November 3, 2023. Our report includes an emphasis of matter paragraph alerting the reader that the System's financial statements do not purport to, and do not, present fairly the financial position of the County of Fairfax, Virginia as of June 30, 2023, the changes in its financial position or its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Report on Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting ("internal control") as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses, or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the System's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Cherry Bekaert LLP

Tysons Corner, Virginia
November 3, 2023

Fairfax County
Wastewater Management

Quality of Water = Quality of Life

Integrated Sewer System · County of Fairfax, Virginia
Management's Discussion and Analysis *(unaudited)*
June 30, 2023

This section of the County of Fairfax, Virginia Integrated Sewer System's (the System) Annual Comprehensive Financial Report presents a discussion and analysis of the System's financial performance for the fiscal year that ended on June 30, 2023.

The System is a County of Fairfax, Virginia (the County) business-type activity, which is funded separately from other County activities. The System is accounted for separately in an enterprise fund and it is included in the County's Annual Comprehensive Financial Report.

We encourage readers to consider the information presented here in conjunction with the System's financial statements and notes to the financial statements to enhance their understanding of the System's financial performance.

Financial Highlights

The System's total net position was $1,439.1 million as of June 30, 2023, compared to $1,378.1 million as of June 30, 2022.

Operating revenues of $242.7 million exceeded operating expenses of 190.9 million, which include depreciation and amortization of $69.8 million, by $51.8 million, for the year ended June 30, 2023. After factoring in non-operating revenues and expenses (availability fees, investment income, interest expense, and capital contributions), the result was a $61.0 million increase in net position for fiscal year 2023.

The System's cash and cash equivalents decreased by $28.6 million, which is primarily due to the cash outflow of capital expenditures during fiscal year 2023. This decrease compares to a $39.1 million decrease in the prior fiscal year, which was also primarily due to the cash outflow of capital expenditures during fiscal year 2022.

Overview of the Financial Statements

The financial section of this annual report consists of (1) the report of independent auditor, (2) this management's discussion and analysis, and (3) the financial statements of the System. The financial statements, which include notes to explain information presented in the financial statements and to provide more detailed data, report information about the System using the economic resources measurement focus and the accrual basis of accounting, which are similar to those used by private sector companies. The following required financial statements provide both short-term and long-term information about the System's overall financial status.

Statement of Net Position

The Statement of Net Position presents information on all of the System's assets, liabilities, and deferred inflows and outflows of resources, with assets and deferred outflows of resources less liabilities and deferred inflows of resources reported as net position. This statement provides information about the nature and the amounts of investments in resources (assets) and the obligations to the System's creditors (liabilities). It provides a basis for evaluating the capital structure of the System and assessing the liquidity and financial flexibility of the System.

Statement of Revenues, Expenses, and Changes in Net Position

All of the revenues and expenses for the fiscal year are accounted for in the Statement of Revenues, Expenses, and Changes in Net Position. This statement measures the results of the System's operations for the fiscal year and can be used to determine whether the System has successfully recovered all of its expenses through its user fees and charges and its other revenues.

Statement of Cash Flows

The Statement of Cash Flows reports all cash receipts, cash payments, and changes in cash from operating, investing, and capital and related financing activities. This statement provides information about all the sources and uses of cash and the net change in the balance of cash and cash equivalents for the fiscal year.

FINANCIAL ANALYSIS OF THE SYSTEM

Net Position

Net position may serve as a useful indicator of an entity's financial position. The following table presents a summary of the Statements of Net Position for the System as of June 30, 2023 and 2022:

Summary of Net Position
As of June 30
($ in millions)

	2023	$ Change	% Change	2022
Assets:				
Current assets:				
Unrestricted	$ 247.4	26.4	11.9	$ 221.0
Restricted	177.0	(45.3)	(20.4)	222.2
Noncurrent assets:				
Capital assets (net)	1,876.6	73.6	4.1	1,803.0
Other non-current assets	0.1	(1.4)	(93.8)	1.5
Total assets	2,301.1	53.4	2.4	2,247.7
Deferred outflows of resources	50.5	2.0	4.0	48.5
Liabilities:				
Current liabilities	83.0	7.6	10.1	75.4
Noncurrent liabilities	821.3	0.6	0.1	820.7
Total liabilities	904.4	8.3	0.9	896.1
Deferred inflows of resources	8.1	(13.9)	(63.2)	22.1
Net position:				
Net investment in capital assets	1,186.1	4.6	0.4	1,181.5
Restricted	54.2	5.7	11.8	48.5
Unrestricted	198.7	50.6	34.2	148.1
Total net position	$ 1,439.1	61.0	4.4	$ 1,378.1

Nearly 82.4 percent and 85.7 percent of the System's total net position for the fiscal years 2023 and 2022, respectively, is represented by its investment in capital assets (e.g. treatment plants, sewer lines, and equipment) net of depreciation and amortization, less contract retainages, contract payable, and less the outstanding debt that was issued to acquire these assets. The $13.9 million decrease in deferred inflows of resources in fiscal year 2023 is primarily attributable to a $12.5 million decrease in deferred inflows of resources related to the pension plan. See Note 6 to the financial statements for more information related to the pension plan and detailed information on the related deferred inflows of resources. The OPEB plan deferred inflows of resources decreased by $0.9 million in fiscal year 2023. Further information regarding the OPEB plan can be found in Note 7 to the financial statements. Excluding the deferred inflows of resources related to the pension and OPEB plans, the total deferred inflows of resources

decreased by $0.3 million due to decreases in deferred gain on refunding of debt. The $2.0 million increase in deferred outflows of resources is primarily the result of a $4.4 million increase in deferred outflow related to pensions offset by $2.7 million decrease in deferred loss on refunding of debt. Although the System's investment in its capital assets is reported net of related debt, it should be noted that the resources to pay this debt must be provided from other resources, since the capital assets themselves are not intended to be used to liquidate these liabilities. The $61.0 million increase in net position in fiscal year 2023 was primarily the result of revenue exceeding expenses due to increased revenue from sales of service and capital contributions.

The restricted portion of net position represents resources that are subject to external restrictions on how they may be used. Certain assets are restricted for capital projects and for debt service. See Note 4 to the financial statements for detailed information pertaining to the restricted net position.

The unrestricted portion of net position represents resources that are not subject to any external restrictions as to use; hence, they are available for future operations. The $50.6 million increase of unrestricted net position for fiscal year 2023 was primarily due to increases in operating revenues.

Changes in Net Position

The following table summarizes the Statements of Revenues, Expenses, and Changes in Net Position for the System for the fiscal years ended June 30, 2023 and 2022:

Summary of Revenues, Expenses, and Changes in Net Position
For the Fiscal Years Ended June 30
($ in millions)

	2023	$ Change	% Change	2022
Operating revenues - sales of service	$ 242.7	11.5	5.0	$ 231.2
Less operating expenses:				
Personnel services	44.4	7.7	21.0	36.7
Materials and supplies	18.7	2.3	14.3	16.3
Contractual services and other	58.0	7.4	14.7	50.6
Depreciation and amortization	69.8	2.4	3.6	67.4
Total operating expenses	190.9	20.0	11.7	171.0
Operating income	51.8	(8.6)	(14.2)	60.2
Nonoperating revenues (expenses):				
Availability fees	23.5	7.2	43.8	16.4
Investment and other revenues	6.5	6.1	1,263.3	0.5
Interest and other expenses	(25.1)	0.6	(2.2)	(25.7)
Total nonoperating revenues (expenses), net	5.0	13.8	(156.2)	(8.8)
Income before contributions	56.7	5.2	10.2	51.4
Capital contributions	4.2	2.0	85.5	2.3
Change in net position	61.0	7.3	13.5	53.7
Total net position at beginning of year	1,378.1	53.7	4.1	1,324.4
Total net position at end of year	$ 1,439.1	61.0	4.4	$ 1,378.1

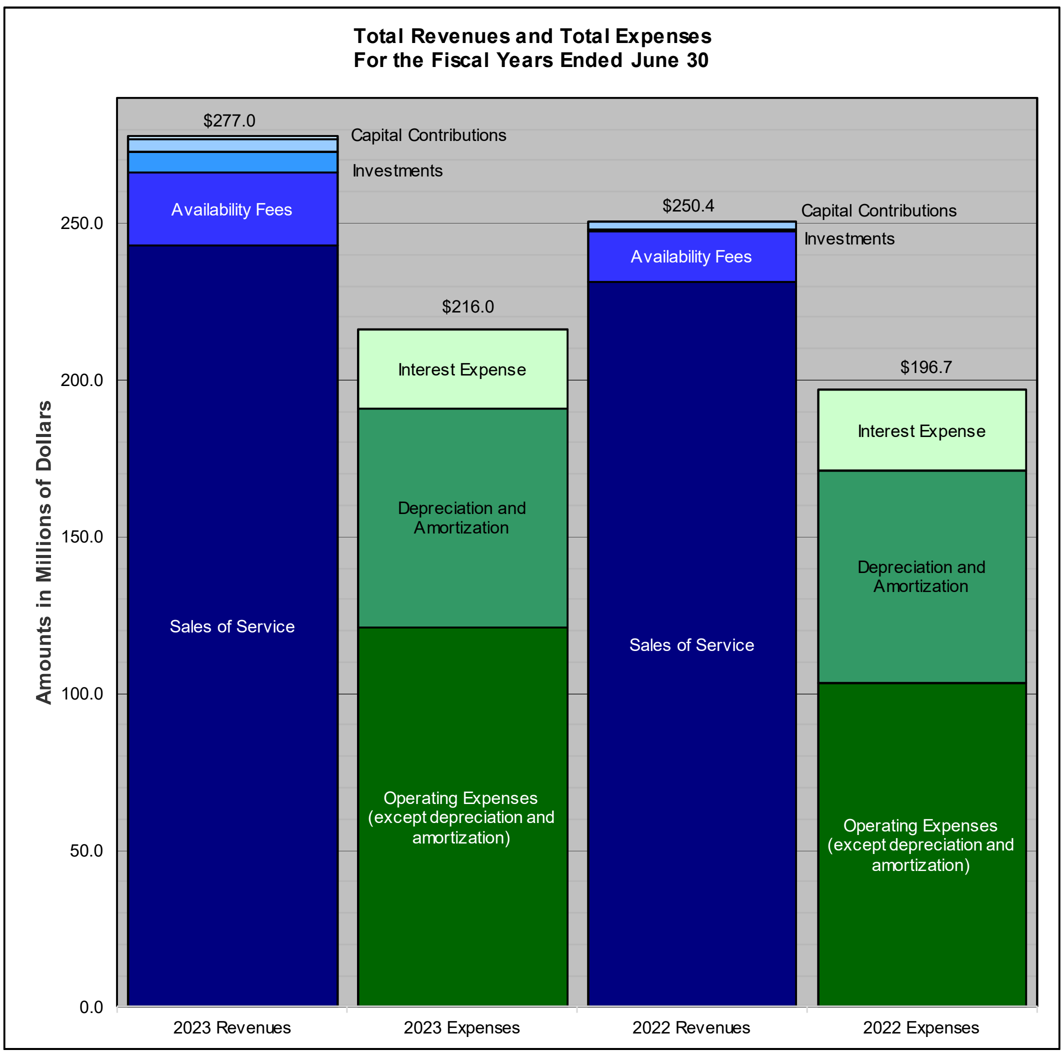
The System's operating revenues consist of volumetric service charges and a service base charge to County users and to neighboring jurisdictions, which reflects a 5.95 percent rate increase during fiscal year 2023. Operating income in fiscal year 2023 decreased 14.2 percent compared to prior year, which is consistent with the increase in operating expenses. Operating expenses increased $20.0 million in fiscal year 2023. This was primarily due to increases in personnel and contractual services.

Sewer rates are established by the County Board of Supervisors (the Board) pursuant to Chapter 67.1 of the County Code. Rates and code language are reviewed annually as part of the County's annual strategic planning and budgeting processes and are revised as necessary to ensure that rates generate revenues equitably from new and existing customers, based on the allocation of capital and operating costs, so that growth pays for growth.

System operations and upgrades are funded primarily through sewer service charges to existing customers based on water consumption, in 1,000 gallons, as measured by a water service meter. System expansion and increased treatment capacity is funded primarily through availability fees, one-time charges collected from new sewer customers prior to connection to the System.

The System owns and operates one treatment facility rated at 67.0 million gallons of wastewater per day (MGD), has a 22.1 MGD capacity entitlement in a joint venture facility, and has acquired capacity entitlements totaling 67.5 MGD at five facilities owned by neighboring jurisdictions. The System's share of renovation, upgrade, and expansion costs at non-System-owned facilities is reported as purchased capacity and amortized over ninety-nine years.

A graphic comparison of total revenues, including capital contributions, to total expenses for fiscal years 2023 and 2022 is shown below:



Capital Assets and Long-term Debt

Capital Assets

As of June 30, 2023, the System's gross investment in capital assets amounted to $3,298.5 million, or $1,876.6 million after deducting accumulated depreciation and amortization, as summarized in the table below:

Capital Assets
As of June 30
($ in millions)

	2023	$ Change	% Change	2022
Land	$ 24.4	(0.1)	(0.4)	$ 24.5
Easement	1.0	0.3	42.9	0.7
Construction in progress	197.8	17.2	9.5	180.6
Buildings and improvements	97.0	4.9	5.3	92.1
Infrastructure	1,749.6	82.3	4.9	1,667.3
Equipment and vehicles	19.2	2.2	12.9	17.0
Purchased capacity	1,209.5	36.6	3.1	1,172.9
Gross capital assets	3,298.5	143.4	4.5	3,155.1
Accumulated depreciation and amortization	(1,421.9)	(69.8)	5.2	(1,352.1)
Total capital assets, net	$ 1,876.6	73.6	4.1	$ 1,803.0

The $143.4 million increase in gross capital assets during fiscal year 2023 reflects the following major capital asset additions, which were funded with available resources:

- The ongoing improvement costs of the System's wastewater treatment facilities at its Noman M. Cole Pollution Control Plant amounted to $62.3 million.
- The System's share of the ongoing upgrade costs of the Alexandria Sanitation Authority, Upper Occoquan Sewage Authority, the District of Columbia's wastewater treatment facilities, and Arlington County's wastewater treatment facilities, which provide services to certain County residents, were $9.2 million, $19.5 million, $7.4 million, and $0.6 million, respectively.
- Improvements to sewer lines and pumping stations in the System, other than donations from developers, totaled $38.1 million.
- Developers contributed sewer lines and manholes valued at $4.1 million.

Additional information relative to the System's capital assets can be found in Note 5 to the financial statements.

Long-term Debt

The following is a summary of the System's gross outstanding long-term debt as of June 30, 2023 and 2022:

Gross Outstanding Debt
As of June 30
($ in millions)

	2023	$ Change	% Change	2022
Sewer revenue bonds, net of premiums	$ 476.9	(12.3)	(2.5)	$ 489.2
Subordinated bonds:				
EDA revenue bonds	19.5	(0.5)	(2.5)	20.0
System's share of UOSA's debt	225.1	4.2	1.9	220.9
Total outstanding debt	$ 721.4	(8.7)	(1.2)	$ 730.1

The $476.9 million of outstanding sewer revenue bonds and sewer revenue refunding bonds, issued by the System in 2021, 2017, 2016, and 2014, are currently rated AAA by Fitch and S&P and AAA by Moody's. These credit ratings are higher than those obtained by most sewer authorities and they have enabled the County to sell bonds on behalf of the System at lower interest rates, thereby achieving savings throughout the life of the bonds.

The System did not issue any Sewer revenue bonds or Sewer revenue refundng bonds in fiscal year 2023.

In November 2021, the Fairfax County Economic Development Authority (EDA) issued $74.6 million of Series 2021A EDA Revenue Bonds to fund the costs of construction of a joint Stormwater/Wastewater facility and to pay the issuance costs of the Series 2021A bonds. Of the total par value in the amount of $74.6 million, Wastewater's component share is $20.0 million.

The Upper Occoquan Service Authority (UOSA), a joint venture that operates a regional sewage facility, issued regional sewer system revenue refunding bonds in November 2013, May 2013, November 2004, and February 2007 to advance refund certain of its outstanding bonds. In December 2010 and 2007, UOSA issued regional sewer system revenue bonds to fund certain capital improvements. In fiscal year 2012, UOSA entered into VRA loans 2011A and 2011B to fund costs related to the Energy Service project and Phase 1 of the Nutrient Compliance Improvement project (P1NR), respectively. In fiscal year 2015, UOSA advance refunded a portion of the total Series 2007A and 2007B bonds. Of the outstanding balance, $93,175,291 was advance refunded into the Series 2014 bonds. In fiscal year 2016, UOSA advance refunded the $19,015,689 remaining outstanding balance of the Series 2007B bonds into the Series 2016B bonds. In fiscal year 2020, UOSA issued regional sewer system revenue bonds to fund improvements to UOSA's regional advanced wastewater treatment system. In fiscal year 2021, UOSA advance refunded the $91,146,092 remaining outstanding balance of the Series 2014 bonds into the Series 2020 bonds. In fiscal year 2023, UOSA issued another regional sewer system revenue bonds to fund improvements to UOSA's regional advanced wastewater treatment system. As of June 30, 2023, the System's share of UOSA's outstanding debt was $225.1 million.

The System is required by the covenants of the 2009 General Bond Resolution to generate net revenues at least equal to the debt service on its sewer revenue bonds each year. Net revenues are defined as all revenues, except grants and contributed assets, less operating expenses, except depreciation and amortization. The ratio of net revenues to debt service for the senior sewer revenue bonds was 3.83 and 4.33 for fiscal years 2023 and 2022, respectively. The fiscal year 2023 ratio is less favorable than the fiscal year 2022 ratio. Taking all long-term debt into account, the ratio is 2.34 and 2.43 for fiscal years 2023 and 2022, respectively. The fiscal year 2023 ratio is less favorable than the fiscal year 2022 ratio.

Additional information related to the debt coverage ratios is contained in Table 3.2 of the statistical section of this report. Additional information relative to the System's long-term debt and Economic Development Authority Revenue Bonds can be found in Note 8 and Note 9, respectively, to the financial statements.

Economic Factors and Next Year's Budget and Rates

The following factors, decisions, and conditions are expected to have a significant effect on the financial position and the results of operations for fiscal year 2024 and beyond:

The sewer service charge rate to System users will increase from $8.09 to $8.46 per 1,000 gallons of water consumption and the sewer service base charge will increase from $40.14 to $44.81 per quarter for residential customers for fiscal year 2024. Subsequent rate increases for the sewer service charge to $8.81, $9.33, $9.83, $10.35, along with increases to the sewer service base charge to $49.73, $52.62, $55.41, and $58.35 for fiscal years 2025, 2026, 2027, and 2028, respectively, have also been approved. The base charge for commercial customers is based on the meter size.

Sewer availability fees will increase in fiscal year 2024. Rates for single family homes will increase from $8,592 to $8,860, rates for townhouses and apartments will increase from $6,874 to $7,088, and rates for hotels and motels will increase from $2,148 to $2,215. Nonresidential rates will increase from $430 per fixture unit to $443 per fixture unit. Subsequent rate increases for availability fees have been adopted for fiscal years 2025, 2026, 2027, and 2028. The individual rate for each year can be found in Board Item attachments 1a and 1b. Unit sales of sewer availability taps averaged 175 per month during the first quarter of fiscal year 2024, compared to 61 per month during the comparable period of fiscal year 2023.

Fiscal year 2023 revenue increased approximately 10.0% mainly as a result of a combination of a 43.8% increase in Availability Charges and a 5.0% increase in Sewer Service Charge. Revenue from Availability Charges is directly linked to construction in the county and can fluctuate from one year to the next. There was also a large increase in interest income due to sharply rising interest rates.

Delinquent accounts decreased 10.0 percent in fiscal year 2023, partially due to the use of the Low-Income Household Water Assistance Program (LIHWAP) funds to reduce outstanding delinquent account balances. Delinquencies are relatively low and did not have a significant financial impact on the System. Delinquencies are expected to be relatively stable in future years.

Interest rates on the County's investments through the first quarter of fiscal year 2024 have been approximately 4.1 percent, an increase from fiscal year 2023 rates.

The System's adopted budget for operating expenses, excluding depreciation and amortization, for fiscal year 2024 is $125.9 million. The System's adopted budget for capital asset acquisitions for fiscal year 2024 is $219.9 million, to be funded with available resources and bond proceeds. This budget includes $60.0 million for the rehabilitation and renovation of the System's sewer lines, $30.0 million for upgrades to the county-owned treatment plant, to be funded with available resources. This budget also includes $18.5 million for renovations to the System's sewer lines, $49.8 million for upgrades to the county-owned treatment plant, $22.5 million for the Developers Reimbursement Program, and $17.4 million, $2.9 million, and $18.8 million for the System's share of the upgrade costs of the Alexandria Renew Enterprises, Arlington, and District of Columbia wastewater treatment facilities, respectively, to be funded with bond proceeds.

CONTACTING THE SYSTEM'S FINANCIAL MANAGEMENT

This financial report is designed to provide the System's customers, investors, and creditors with a general overview of the System's finances and to demonstrate the System's accountability for the money it receives. If you have questions about this report or need additional financial information, please contact the County of Fairfax, Virginia, Department of Finance, 12000 Government Center Parkway, Fairfax, Virginia, 22035.

Fairfax County Wastewater Management

Quality of Water = Quality of Life

Integrated Sewer System • County of Fairfax, Virginia
Statement of Net Position
June 30, 2023

		2023
Assets		
Current assets:		
Cash and cash equivalents	$	181,796,264
Due from other governmental entities (Note 2):		
Service charges		31,389,899
Unbilled service charges		33,179,135
Accounts receivable		703,111
Inventories		326,342
Total unrestricted assets		247,394,751
Restricted assets (Note 4):		
Cash and cash equivalents		90,762,795
Temporary investments with fiscal agent (Note 3)		54,235,528
Investments with fiscal agent (Note 3)		31,958,291
Total restricted assets		176,956,614
Total current assets		424,351,365
Long-term assets:		
Capital assets (Note 5):		
Non-depreciable:		
Land		24,477,054
Easement		987,850
Construction in progress		197,768,389
Depreciable/amortizable:		
Building and improvements		96,950,088
Infrastructure		1,749,603,548
Equipment and vehicles		19,200,009
Purchased capacity		1,209,528,528
Gross capital assets		3,298,515,466
Accumulated depreciation and amortization		(1,421,884,174)
Total capital assets, net		1,876,631,292
Other non-current assets:		
Accounts receivable		90,993
Total long-term assets		1,876,722,285
Total assets		2,301,073,650
Deferred Outflows of Resources		
Deferred outflows related to pensions (Note 6)		17,151,670
Deferred outflows related to other postemployment benefits (Note 7)		3,050,110
Deferred loss on refunding of debt		30,268,346
Total deferred outflows of resources		50,470,126
Total assets and deferred outflows of resources	$	2,351,543,776

continued

		2023
Liabilities		
Current liabilities:		
Accrued salaries and wages	$	1,583,706
Accounts payable and accrued liabilities		3,440,336
Contracts payable		22,548,677
Contract retainages		7,211,361
Accrued interest payable		9,792,799
Compensated absences (Note 8)		1,674,413
Bonds payable (Note 8)		35,894,701
EDA bonds payable (Note 9)		887,254
Total current liabilities		83,033,247
Long-term liabilities:		
Net pension liability (Note 6)		45,202,652
Net other postemployment benefits liability (Note 7)		193,667
Compensated absences (Note 8)		1,887,599
Bonds payable and related premiums (Note 8)		750,864,764
EDA bonds payable (Note 9)		23,187,399
Total long-term liabilities		821,336,081
Total liabilities		904,369,328
Deferred Inflows of Resources		
Deferred inflows related to pensions (Note 6)		681,910
Deferred inflows related to other postemployment benefits (Note 7)		3,282,771
Deferred gain on refunding of debt		4,145,925
Total deferred inflows of resources		8,110,606
Total liabilities and deferred inflows of resources		912,479,934
Net Position		
Net investment in capital assets		1,186,134,177
Restricted for (Note 4):		
Debt service		54,235,528
Unrestricted		198,694,137
Total net position	$	1,439,063,842

See accompanying notes to the financial statements.

concluded

Integrated Sewer System · County of Fairfax, Virginia
Statement of Revenues, Expenses, And Changes in Net Position
For the Fiscal Year Ended June 30, 2023

	2023
Operating Revenues	
Sales of service	$ 242,725,291
Total operating revenues	242,725,291
Operating Expenses	
Personnel services	44,399,195
Materials and supplies	18,672,298
Contractual services	55,093,396
Depreciation and amortization	69,828,776
Professional fees	2,949,545
Total operating expenses	190,943,210
Operating income	51,782,081
Nonoperating Revenues (Expenses)	
Availability fees	23,514,132
Interest income	6,541,726
Interest expense	(25,119,429)
Gain on disposal of capital assets	30,589
Total nonoperating revenues, net	4,967,018
Income before contributions	56,749,099
Capital Contributions	
Grants	112,808
From developers	4,123,030
Total capital contributions	4,235,838
Change in net position	60,984,937
Total net position at beginning of year	1,378,078,905
Total net position at end of year	$ 1,439,063,842

See accompanying notes to financial statements.

INTEGRATED SEWER SYSTEM · COUNTY OF FAIRFAX, VIRGINIA
STATEMENT OF CASH FLOWS
For the Fiscal Year Ended June 30, 2023

	2023
Cash Flows from Operating Activities	
Receipts from customers and users	$ 237,981,619
Payments to employees	(44,628,255)
Payments to suppliers and contractors	(77,766,321)
Net cash provided by operating activities	115,587,043
Cash Flows from Capital and Related Financing Activities	
Capital grants received	112,808
Decrease in contracts payable	(1,351,398)
Increase in contract retainages	7,211,361
Availability fees received	23,514,132
Principal payments on revenue bonds	(27,831,369)
Interest payments on revenue bonds	(26,951,366)
Purchase of capital assets other than purchased capacity	(102,693,211)
Acquisition of purchased capacity	(17,161,861)
Proceeds from the sale of capital assets	30,589
Net cash used in capital and related financing activities	(145,120,315)
Cash Flows from Investing Activities	
Sale of restricted investments	33,483,255
Purchase of restricted investments	(38,720,321)
Interest received	6,160,014
Net cash provided by investing activities	922,948
Net Decrease in Cash and Cash Equivalents	(28,610,324)
Cash and cash equivalents at beginning of year, unrestricted and restricted	301,169,383
Cash and cash equivalents at end of year, unrestricted and restricted	$ 272,559,059

Reconciliation of Operating Income to Net Cash Provided by Operating Activities

Operating income	$ 51,782,081
Adjustments to reconcile operating income to net cash provided by operating activities:	
Depreciation and amortization expense	69,828,776
Changes in assets and liabilities:	
Increase in due from other governmental entities	(4,743,672)
Decrease in inventories and other assets	349,765
Decrease in accounts payable and accrued liabilities, net of interest	(1,753,037)
Increase in pension and OPEB related deferred outflows, deferred inflows, and change in liabilities	123,130
Total adjustments	63,804,962
Net cash provided by operating activities	$ 115,587,043

Noncash Investing, Capital, and Financing Activities

Capital contributions - sewer lines, manholes, etc.	$ 4,123,030
Increase in long-term debt resulting from the issuance of loans/revenue bonds by UOSA	19,647,019
Amortization of bond premium	4,257,909
Increase in fair value of investments not classified as cash and cash equivalents	147,098
Removal of purchased capacity through credit of UOSA debt	184,391
UOSA adjustment to bond payments	22,035
Decrease in long-term debt resulting from the sale of purchased capacity	(374,455)

See accompanying notes to the financial statements.

Fairfax County
Wastewater Management

Quality of Water = Quality of Life

INTEGRATED SEWER SYSTEM · COUNTY OF FAIRFAX, VIRGINIA
NOTES TO THE FINANCIAL STATEMENTS
June 30, 2023

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Reporting Entity and Basis of Presentation

The County of Fairfax, Virginia Integrated Sewer System (the System) is an enterprise fund of the County of Fairfax, Virginia (the County), and provides sewer services to approximately 1.0 million residents through a County-wide sewer system of over 3,300 miles of sewer lines. The sewer service area, approximately 234 square miles, is defined and controlled through the County of Fairfax Board of Supervisors. The System is governed by the Board and managed and operated separately as the Wastewater Management Program, one of five major activities of the County's Department of Public Works and Environmental Services.

As a County business-type activity, System financial information is separately accounted for in an enterprise fund and is included in the County's Annual Comprehensive Financial Report (ACFR).

These financial statements are only of the operations of the System and are not intended to present the financial position, changes in financial position, or, where applicable, cash flows of the County. The financial statements of the System 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.

(b) Measurement Focus and Basis of Accounting

The System is required to recover the costs of providing services, including capital costs, through user charges. Accordingly, the System uses enterprise fund accounting, an economic resources measurement focus, and the accrual basis of accounting. Consequently, revenues are recognized when earned and expenses are recorded as incurred. The System defines operating revenues and expenses as those directly related to providing sewer services. Operating revenues consist of charges to System users. Operating expenses include personnel, materials and supplies, services purchased from other local jurisdictions, and depreciation and amortization of capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses. These include sewer availability fees, bond issue costs, gain (loss) on disposal of capital assets, investment earnings, and interest on outstanding debt.

(c) Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (the GAAP) requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

(d) Tax Status

The System, as part of a local government, is not subject to federal, state, or local income taxes and, accordingly, no provision for income taxes is made.

(e) Sewer Service Charges

The major sources of revenue for the System are sales to existing customers for continuing sewer service. Customers are charged for sewer service based on metered water usage in addition to a base charge, which is determined by meter size. Sewer service charges are designed to recover the costs of operation and maintenance of the System as well as debt service and capital project costs attributable to supporting or improving wastewater treatment services to the System's customers. Sewer service charges are recorded as operating revenue.

(f) Unbilled Service Charges

An estimated amount has been recorded for services rendered but not yet billed as of the close of the fiscal year. This estimated receivable is calculated by prorating water consumption and billings for certain prior months.

(g) Availability Charges

New customers connecting to the System are required to pay an availability fee before obtaining a building permit in the County. Availability fees are used to recover the construction and financing costs associated with expanding System capacity. Availability fees are reported as nonoperating revenue.

In fiscal year 2015, a payment plan for an availability charge was established with a customer. This payment arrangement necessitated presenting the accounts receivables due beyond one year, as a long-term receivable.

(h) Cash and Investments on Deposit with the County

The System maintains the majority of its available cash in a cash and investment pool administered by the County. Such amounts are considered to be cash equivalents for purposes of the Statement of Cash Flows. To optimize investment returns, the System's funds are invested together with all other County pooled funds, all of which are fully insured or collateralized. The County allocates, on a monthly basis, any investment earnings based on the System's average balance in pooled cash and investments, less an administrative charge.

(i) Flow Assumption for Restricted Assets

Restricted assets are liquid assets which have third-party limitations on their use. When both restricted and unrestricted assets are available for use, it is the System's policy to use restricted resources first and then unrestricted assets when needed. See Note 4 for additional information regarding restricted assets.

(j) Investments

Pooled investments and investments held by fiscal agent consist primarily of U.S. government securities that mature in less than one year from the date of purchase and discount government-sponsored enterprise (GSE) securities, which are stated at amortized cost unless otherwise noted.

(k) Inventories

Inventories are carried at cost using an average unit cost method. The System's inventories consist of operating supplies and certain system replacement parts.

(l) Capital Assets

Capital assets that individually cost $10,000 or more with a useful life of more than one year are capitalized and recorded at cost. Contributed capital assets are recorded at their estimated acquisition value on the date of donation. Capital assets are depreciated or amortized over their estimated useful lives using the straight-line method. The estimated useful lives are as follows:

Infrastructure	50 years
Buildings	20-50 years
Purchased capacity	30-99 years
Improvements	15-25 years
Equipment	5-20 years
Vehicles	5-12 years

For constructed assets, all costs necessary to bring such assets to the condition and location necessary for their intended use are initially treated as construction in progress and, subsequently, as buildings, improvements, infrastructure, or purchased capacity once the assets are substantially complete. Depreciation and amortization on constructed assets begin when the assets are substantially ready for their intended use.

(m) Retirement and Other Postemployment Benefits Plans

Employees of the System participate in the Fairfax County Employees' Retirement System (Retirement plan) and the Fairfax County Other Postemployment Benefits (OPEB) plan. The net pension liability, net OPEB liability, and associated deferred outflows of resources and deferred inflows of resources are reported with a one-year lag when compared with the fiduciary net positions as reported by the retirement plan and OPEB plan. Employer contributions to the retirement plan and OPEB plan during the current fiscal year are reflected as deferred outflows of resources which will impact the net pension liability and net OPEB liability of the subsequent year. Benefits and refunds are recognized when due and payable in accordance with the terms of the plans. Detailed information about the retirement plan is found in Note 6 and detailed information about the OPEB plan is found in Note 7.

(n) Compensated Absences

Employees earn vacation pay based on a prescribed formula, which allows employees with less than 10 years of service to accumulate a maximum of 240 hours and employees with 10 years or more of service to accumulate a maximum of 320 hours of vacation benefits as of the end of each calendar year. In addition, employees may accrue compensatory leave for hours worked in excess of their scheduled hours. Compensatory leave in excess of 240 hours at the end of the calendar year is forfeited. The current pay rate and certain employer-related fringe benefits are used to calculate the year end accruals. At June 30, 2023, the System accrued $3,562,012 for such compensated absences.

(o) Intergovernmental Agreements

The County has entered into several intergovernmental agreements for the purpose of sharing sewage flow and treatment facility costs. The payments to other governmental units made to reimburse operating costs are reported as expenses in the year incurred. The interest payments for debt service are reported as nonoperating expenses. The payments made for construction costs for facility capacity expansions are reported as purchased capacity (Notes 5 and 10). Through these capital payments, the System has exclusive entitlements to treatment capacities at other governmental sewage treatment facilities.

(p) Net Position

Net position is comprised of three categories: Net investment in capital assets; Restricted net position; and Unrestricted net position. The first category of net position consists of capital assets, net accumulated depreciation, reduced by contract retainages and the outstanding balance of debt that is attributable to these capital assets. As of June 30, 2023, the System had $1,186,134,177 net investment in capital assets. Restricted net position is restricted assets reduced by liabilities and deferred inflows of resources related to those assets. As of June 30, 2023, the System had $54,235,528 restricted net position. Net position which is neither restricted nor related to net investment in capital assets is reported as unrestricted net position.

(2) DUE FROM OTHER GOVERNMENTAL ENTITIES

Amounts due from other governmental entities consist of customer service charges, which are billed and collected by Fairfax Water and other local water authorities, and sales of sewer services to other jurisdictions which utilize the System's sewage treatment and collection facilities.

The Board appoints the members of the Board of Fairfax Water; however, the County's accountability does not extend beyond making the appointments. During fiscal year 2023, Fairfax Water collected $224.1 million on behalf of the System. As of June 30, 2023, the System had receivables of $52.4 million due from Fairfax Water and $12.9 million due from other governmental entities.

(3) DEPOSITS AND INVESTMENTS

The System's available cash is invested in the County's cash and investment pool. The County maintains an investment policy, the overall objectives of which are the preservation of capital and the protection of investment principal; maintenance of sufficient liquidity to meet operating requirements; conformance with federal, state, and other legal requirements; diversification to avoid incurring unreasonable risks regarding specific security types or individual financial institutions; and attainment of a market rate of return. Oversight of investment activity is the responsibility of the Investment Committee, which is comprised of the chief financial officer and certain key management and investment staff.

The Code of Virginia (the Code) authorizes the County and the System to purchase the following types of investments:

- Commercial paper
- U.S. Treasury and agency securities
- U.S. Treasury strips
- Certificates of deposits and bank notes
- Insured deposits
- Demand deposit accounts
- Money market funds
- Bankers' acceptances
- Repurchase agreements
- Medium term corporate notes
- Local government investment pool (LGIP)
- Asset-backed securities
- Hedged debt obligations of sovereign governments
- Securities lending programs
- Obligations of the Asian Development Bank
- Obligations of the African Development Bank

- Obligations of the International Bank for Reconstruction and Development
- Obligations of the Commonwealth of Virginia and its instrumentalities
- Obligations of counties, cities, towns, and other public bodies located within the Commonwealth of Virginia
- Obligations of state and local government units located within other states
- Savings accounts or time deposits in any bank or savings institution within the Commonwealth that complies with the Code
- Qualified investment pools
- Supranationals

However, the County's investment policy precludes the investment of pooled funds in derivative securities, reverse repurchase agreements, security lending programs, asset-backed securities, hedged debt, obligations of sovereign governments, obligations of the Commonwealth and its instrumentalities, obligations of counties, cities, towns, and other public bodies located within the Commonwealth, and obligations of state and local government units located within other states.

(a) Interest Rate Risk

The System's investment in the pool is covered by the County's policy to minimize the risk that the fair value of securities in its portfolio will fall due to changes in market interest rates. To achieve this minimization of risk, the County structures the pooled investment portfolio so that sufficient securities mature to meet cash requirements for ongoing operations, thereby avoiding the need to sell securities on the open market prior to maturity. Pooled investments that are purchased to meet liquidity needs shall have a target weighted average maturity of 90 days or less. All other pooled funds are invested primarily in shorter-term securities with a maximum of five years or less from settlement date.

(b) Credit Risk

It is the County's policy to minimize the risk of loss due to the failure of an issuer or other counter party to an investment to fulfill its obligations. The County pre-qualifies financial institutions, broker-dealers, intermediaries, and advisers with which the County does business. Based on the County's investment policy, the pooled investments are limited to relatively low-risk types of securities and are diversified so that potential losses on individual securities will be minimized. Also, new investments shall not be made in securities that are listed on Moody's Watchlist or Standards & Poor's, Inc. (S&P) Credit Watch with a short term negative rating. Moody's, S&P, and Fitch Ratings, Inc. (Fitch) are nationally recognized statistical rating organizations (NRSROs) serving investors, regulators, and issuers. The policy specifies the following acceptable credit ratings for specific types of investments in the pooled portfolio:

- U.S. government agency and GSE instruments should have a rating of at least P-1 by Moody's and A-1 by S&P. In those instances when an instrument does not have a rating, a thorough credit and financial analysis will be conducted by County investment staff.

- Prime quality commercial paper must be rated by at least two of the following: Moody's, with a minimum rating of Prime 1; S&P, with a minimum rating of A-1; Fitch, with a minimum rating of F-1; or by Duff and Phelps, Inc., with a minimum rating of D-1.

- Mutual funds must have a rating of AAA or better by S&P, Moody's, or another nationally recognized rating agency.

- Negotiable certificates of deposit must have a rating of at least A-1 by S&P and P-1 by Moody's if less than one year and a rating of AA by S&P if more than one year.

- Bankers' acceptances must have a rating of at least A-1 by S&P and P-1 by Moody's.

- Commonwealth's LGIP bond funds must have a rating of AAA by S&P and the Virginia Investment Pool Stable NAV Liquidity Pool must have a rating of AAAm by S&P.

- Corporate notes must have a rating of at least AA by Moody's and a rating of at least AA by S&P.

- Supranationals must have a rating of AAA or better by S&P or Moody's.

The portfolio weighted average maturity for the County's entire cash and investment pool was 1,154 days as of June 30, 2023. The County's portfolio, as of June 30, 2023, consisted of investments with credit quality ratings as follows:

AA	A-1	AAA-m	Aaa/AAA	Unrated	Total
39.0%	37.6%	12.3%	0.8%	10.3%	100.0%

(c) Concentration of Credit Risk

The County's investment policy sets the following limits for the types of securities held in its pooled investment portfolio:

U.S. Treasury securities and agencies	100%	maximum
Negotiable certificates of deposit	40%	maximum
Banker's acceptances	35%	maximum
Commercial paper	35%	maximum
Repurchase agreements	30%	maximum
Mutual funds	30%	maximum
Virginia Investment Pool - LGIP daily liquidity	30%	maximum
Corporate notes	25%	maximum
Non-negotiable certificates of deposit	25%	maximum
Virginia Investment Pool - LGIP bond fund	25%	maximum
Insured certificates of deposit	15%	maximum
Bank demand deposit	10%	maximum
Supranationals	10%	maximum

In addition, not more than 5 percent of the total pooled funds available for investment at the time of purchase may be invested in any one issuing or guaranteeing corporation for commercial paper, corporate notes, negotiable certificates of deposits, bankers' acceptances, and supranationals.

(d) Custodial Credit Risk

For deposits, custodial credit risk is the risk that in the event of a failure of a depository financial institution, the reporting entity may not recover its deposits. In accordance with the Virginia Security for Public Deposits Act (the Act), all of the County's deposits are covered by federal depository insurance or collateralized in accordance with the Act, which provides for the pooling of collateral pledged by financial institutions with the Treasurer of Virginia to secure public deposits as a class. No specific collateral can be identified as security for one public depositor and public depositors are prohibited from holding collateral in their name as security for deposits. If any member financial institution fails, the entire collateral pool becomes available to satisfy the claims of governmental entities. If the value of the pool's collateral is inadequate to cover a loss, additional amounts are assessed on a pro rata basis to the members of the pool. The State Treasury Board is responsible for monitoring compliance with the collateralization and reporting requirements of the Act and for notifying local governments of compliance by participating financial institutions. A multiple financial institution collateral pool that provides for additional assessments is similar to depository insurance. Therefore, funds deposited in accordance with the requirements of the Act are considered to be fully insured.

For investments, custodial credit risk is the risk that the County will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party in the event of the failure of a counter party. Per policy, all of the pooled investments purchased by the County are insured, collateralized, registered, or are securities held by their agent in the County's name.

Additional information, including information by investment type related to the interest rate risk and the credit risk pertaining to the entire cash and investment pool, can be found in the County's ACFR for the fiscal year ended June 30, 2023.

(e) Fair Value Measurement

The System's money market cash and cash equivalents are held by the County and are reported at amortized cost, which approximates fair value. The reporting entity categorizes its fair value measurements within the fair value hierarchy established by GAAP. The hierarchy is based on the source and type of information used to determine the fair value of the asset. Level 1 information is unadjusted quoted prices for identical instruments in accessible active markets. Level 2 information is quoted prices for similar assets in active markets, quoted prices for identical or similar assets in inactive markets, or quoted prices that are observable, either directly or indirectly from a source other than an active market. Level 3 includes unobservable information to arrive at a valuation. As of June 30, 2023, the System's total investments were $61,093,743 carried at amortized cost.

(4) Restricted Assets and Restricted Net Position

As of June 30, 2023, the System had restricted cash and investments of $176,956,614 for certain purposes in order to manage its funds in accordance with the 1985 General Bond Resolution (the Resolution), as modified through July 2009. The Resolution requires the System to set aside or restrict funds for certain purposes including sewer construction, extensions and improvements, establishing a long-term debt service reserve, and funding current debt service requirements. The System's restricted assets and restricted net position as of June 30, 2023 are as follows:

	2023
Assets restricted for:	
Capital projects	$ 90,762,795
Long-term debt service requirements:	
Sewer revenue bonds:	
Series 2014, 2016A, 2017, 2021A, and 2021B	31,958,291
Total long-term debt service requirements	31,958,291
Current debt service requirements	54,235,528
Total restricted assets	176,956,614
Less related debt:	
Long-term debt service requirements	(31,958,291)
Long-term debt related to unspent bond proceeds	(90,762,795)
Total restricted net position	$ 54,235,528

(5) CAPITAL ASSETS

Changes in capital assets for the fiscal year ended June 30, 2023 are as follows:

	Balances June 30, 2022	Increases	Decreases	Balances June 30, 2023
Capital assets:				
Non-depreciable:				
Land	$ 24,477,054	$ -	$ -	$ 24,477,054
Easement	699,856	287,994	-	987,850
Construction in progress	180,601,998	77,157,903	(59,991,512)	197,768,389
Depreciable and amortizable:				
Buildings and improvements	92,099,752	4,850,336	-	96,950,088
Infrastructure	1,667,343,110	82,260,438	-	1,749,603,548
Equipment and vehicles	16,948,926	2,251,083	-	19,200,009
Purchased capacity	1,172,904,039	36,624,489		1,209,528,528
Total capital assets	3,155,074,735	203,432,243	(59,991,512)	3,298,515,466
Accumulated depreciation and amortization for:				
Buildings and improvements	(58,713,833)	(2,158,525)	-	(60,872,358)
Infrastructure	(757,994,834)	(35,892,413)	-	(793,887,247)
Equipment and vehicles	(13,040,616)	(1,240,640)	-	(14,281,256)
Purchased capacity	(522,306,115)	(30,537,198)	-	(552,843,313)
Total accumulated depreciation and amortization	(1,352,055,398)	(69,828,776)	-	(1,421,884,174)
Total capital assets, net	$ 1,803,019,337	$ 133,603,467	$ (59,991,512)	$ 1,876,631,292

Changes in purchased capacity, net of accumulated amortization, for the year ended June 30, 2023, in relation to each jurisdiction, are as follows:

	Balances June 30, 2022	Additions (net of disposals)	Amortization	Balances June 30, 2023
Purchased capacity, net:				
Blue Plains	$ 222,113,077	$ 7,410,145	$ (7,147,704)	$ 222,375,518
UOSA	139,232,761	19,462,628	(10,616,418)	148,078,971
Alexandria Renew Enterprises	244,744,840	9,164,429	(10,408,834)	243,500,435
Arlington County	31,412,305	587,287	(1,659,035)	30,340,557
Prince William County Service Authority	273,600	-	(30,400)	243,200
Loudoun Water	12,821,341	-	(674,807)	12,146,534
Total purchased capacity, net	$ 650,597,924	$ 36,624,489	$ (30,537,198)	$ 656,685,215

(6) RETIREMENT PLAN

(a) Plan Description

Employees of the System are provided with pensions through the Fairfax County Employees' Retirement System (ERS), a single-employer defined benefit pension plan, presented as a cost-sharing plan in the System's financial statements, which covers full-time and certain part-time employees of Fairfax County and its component units who are not covered by other plans of the County or the Virginia Retirement System.

(b) Benefits Provided

Benefit provisions are established and may be amended by County ordinances. All benefits vest at five years of creditable service. Members who were hired before January 1, 2013 may elect to join Plan A or Plan B, and members who were hired on or after January 1, 2013 may elect to join Plan C or Plan D. To be eligible for normal retirement, an individual must meet the following criteria: (a) attain the age of 65 with five years of creditable service, (b) for Plans A and B, attain the age of 50 with age plus years of creditable service being greater than or equal to 80, or (c) for Plans C and D, attain the age of 55 with age plus years of service being greater than or equal to 85. The normal retirement benefit is calculated using average final compensation (i.e., the highest 78 consecutive two week pay periods or the highest 36 consecutive monthly pay periods) and years (or partial years) of creditable service at date of termination. In addition, if normal retirement occurs before Social Security benefits are scheduled to begin, an additional monthly benefit is paid to retirees. The plan provides that unused sick leave credit may be used in the calculation of average final compensation by projecting the final salary during the unused sick leave period. Those who commenced employment on or after January 1, 2013, may not use more than 2,080 hours of accrued sick leave toward service credit for retirement or Deferred Retirement Option Program (DROP) entry. The benefit for early retirement is actuarially reduced and payable at early termination.

Effective July 1, 2005, DROP was established for eligible members of the ERS. Members who are eligible for normal service retirement are eligible to participate in this program. DROP provides the ability for an employee to retire for purposes of the pension plan, while continuing to work and receive a salary for a period of three years. During the DROP period, the pension plan accumulates the accrued monthly benefit into an account balance identified as belonging to the member. The account balance is credited with interest in the amount of 5.0% per annum, compounded monthly. The monthly benefit is calculated using service and final compensation as of the date of entry in DROP, with increases equal to the annual cost-of-living adjustment provided for retirees.

(c) Funding Policy

All contribution requirements for ERS are established and may be amended by County ordinances, including member contribution rates. Plan A and Plan C require member contributions of 4.00 percent of compensation up to the wage base and 5.33 percent of compensation in excess of the Social Security wage base. Plan B, Plan D, and Plan E require member contributions of 5.33 percent of compensation.

The County is required to contribute at an actuarially determined rate. The rate for the year ended June 30, 2023, was 28.88 percent of annual covered payroll. The employer contribution made during the measurement period of the liability, for fiscal year 2022 determined contribution, was $5,510,228. This is prior year's subsequent period contribution. For fiscal year 2023, employer contribution, a deferred outflow of resources as of June 30, 2023, was $6,388,345. This is current year's subsequent period contribution.

(d) Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2023, the System reported a liability of $45,202,652 for its proportionate share of the net pension liability. The ERS calculated total pension liability was based on participant data collected as of December 31, 2021 and an actuarial valuation as of June 30, 2022, using the entry age actuarial cost method, with a measurement date of June 30, 2022. At June 30, 2022, the System's proportion was 2.41 percent, an increase of 0.05 percent from its proportion measured as of June 30, 2021.

For the year ended June 30, 2023, the System recognized pension expense of $6,692,821. As of June 30, 2023, the System reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 4,690,025	$ (681,910)
Changes of assumptions	3,372,597	-
Net difference between projected and actual earning on pension plan investments	580,552	-
Change in proportion applicable to the System	2,120,150	-
System contributions subsequent to the measurement date	6,388,346	-
Total	$ 17,151,670	$ (681,910)

Deferred outflows of resources in the amount of $6,388,346 related to pensions resulting from System contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2024. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in future pension expense as follows:

Year ended June 30: Measurement Date June 30 of Prior Year	
2024	$ 2,739,202
2025	2,316,417
2026	1,224,899
2027	3,800,896
	$ 10,081,414

(e) Actuarial Assumptions

The reported total pension liability (TPL) calculation was based on participant data collected as of December 31, 2021 and an actuarial valuation as of June 30, 2022, using the entry age actuarial cost method with a measurement date of June 30, 2022. Significant actuarial assumptions used in the valuation include the following:

Actuarial Assumptions

Inflation	2.25%
Salary increases, including inflation	2.25% plus merit
Investment rate of return, net of plan investment expenses	6.75%
Projected period of unfunded benefit payments	None
Mortality	Health and Disabled Annuity PubG-2010 Combined Mortality projected using MP-2020

The actuarial assumptions used in the June 30, 2022 valuation were based on the results of an actuarial experience study for the period July 1, 2015 to June 30, 2020.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense, and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the ERS's target asset allocation as of June 30, 2022, are summarized below:

Long-Term Expected Real Rate of Return/Target Allocation

Asset Class	Long-Term Expected Real Rate of Return	Target Allocation*
US Leverage Cost	1.9%	-35.0%
Non-US Leverage Cost	1.1%	-26.0%
US Large-Cap Equity	7.7%	11.0%
US Small/Mid-Cap Equity	8.7%	3.0%
Non-US Developed Equity (USD Hedge)	8.3%	6.0%
Non-US Developed Small-Cap Equity	9.3%	3.0%
Emerging Market Equity	12.5%	3.0%
Global Equity	8.6%	5.0%
Private Equity - Growth	14.6%	1.0%
Private Equity - Venture	20.8%	1.0%
Private Equity	13.2%	2.0%
US TIPS	2.3%	16.0%
US Treasury Bond	2.1%	-3.0%
US Mortgage-Backed Securities	2.5%	2.0%
US High Yield Corporate Bond	5.7%	4.0%
Emerging Market External Debt	5.3%	4.0%
Emerging Market Local Currency Debt	6.0%	2.0%
Non-US Government Bond	2.2%	2.0%
Non-US Government Bond (USD Hedge)	2.0%	2.0%
Non-US Inflation-Linked Bond (USD Hedg	1.3%	12.0%
Private Debt - Credit Opportunities	8.0%	6.0%
Private Debt - Distressed	8.8%	4.0%
Private Debt - Direct Lending	8.1%	1.0%
US Long-Term Treasury Bond (10-30 Yea	2.6%	5.0%
20+ Year US Treasury STRIPS	3.9%	3.0%
US High Yield Securitized Bond	5.1%	2.0%
US High Yield Collateralized Loan Obligati	6.3%	4.0%
10 Year US Treasury Bond	2.6%	8.0%
10 Year Non-US Government Bond (USD	1.2%	18.0%
Commodity Futures	5.0%	7.0%
Public Real Assets (Multi-Asset)	6.0%	2.0%
US REIT	9.0%	5.0%
Gold	5.1%	3.0%
Core Real Estate	6.7%	1.0%
Private Real Assets - Infrastructure	7.4%	4.0%
Hedge Fund - Macro	5.1%	8.0%
Hedge Fund - Credit	5.8%	4.0%
Hedge Fund	5.6%	3.0%

*Target totals may exceed 100% due to futures and other derivatives

(f) Discount Rate

The discount rate used to measure the total pension liability was 6.75 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that County contributions will be made according to the County's stated policy. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. A schedule of funding progress can be found in the required supplementary information section of the report.

(g) Sensitivity of the System's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the System's proportionate share of the net pension liability calculated using the discount rate of 6.75 percent, as well as what the System's share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower (5.75 percent) or one percentage point higher (7.75 percent) than the current rate:

Sensitivity of Net Pension Liability to Changes in Discount Rate

	1% Decrease 5.75%	Current Discount Rate 6.75%	1% Increase 7.75%
Total pension liability	$ 181,544,288	$ 162,017,117	$ 145,672,308
Plan fiduciary net position	(116,814,465)	(116,814,465)	(116,814,465)
Net pension liability	$ 64,729,823	$ 45,202,652	$ 28,857,843
Plan fiduciary net position as a percentage of the total pension liability	64.3%	72.1%	80.2%

(h) Pension Plan Fiduciary Net Position

The retirement system is considered a part of the County's reporting entity, and the retirement system's financial statements are included in the County's basic financial statements as a trust fund.

Information concerning ERS as a whole, including the pension plan's fiduciary net position, is available in the County ACFR for the fiscal year ended June 30, 2023. Additionally, the ERS issues a publicly available annual financial report that includes financial statements and required supplementary information. That report may be obtained by writing to the Employees' Retirement System, 12015 Lee Jackson Memorial Highway, Suite 350, Fairfax, Virginia 22033, or by calling (703) 279-8200. The reports are also available at the following links:
ERS: https://www.fairfaxcounty.gov/retirement/financial-publications
County: https://www.fairfaxcounty.gov/finance/financialreporting/annualcomprehensivefinancialreport

(7) OTHER POSTEMPLOYMENT BENEFITS

The Fairfax County OPEB Plan (the OPEB Plan) is a single-employer defined benefit plan administered by the County, presented as a cost-sharing plan in the System's financial statements. The Plan provides eligible retirees and their spouses the opportunity to continue participation in medical, dental, vision, and life insurance benefits. The Plan benefits correspond with the benefits available to active employees. The benefit provisions of the Plan are established, and may be amended, by the Board. Fiduciary oversight of OPEB and deferred compensation is provided by the members of the Local Finance Board. The members of the Local Finance Board are the CFO/Director of Management and Budget, the Director of Finance, the Director of Human Resources, and the Executive Director of the Retirement Agency. The Plan does not issue a stand-alone financial report. Financial information about the Plan and its fiduciary net position is available in the County's ACFR, available online at the address stated above.

In order to participate in the Plan, an employee must meet retirement criteria for the ERS. The retiree must have the applicable benefit(s) in place as an active employee and must maintain continuous participation in the benefit plan into retirement. Upon retirement, the County no longer contributes to the benefit premium payments of the participant and the participant becomes responsible for 100 percent of the applicable premiums, less any applicable subsidies.

Beginning in fiscal year 2006, the amount of monthly medical subsidy provided by the County is based on the participant's years of service, and ranges from $30 per month to $220 per month. Employees who retired prior to July 1, 2003 are eligible for the greater of the amount based on the current subsidy structure or the amount calculated based on the subsidy structure in place prior to July 2003. In addition, the Board has established a program to subsidize the continuation of term life insurance at reduced coverage amounts for retirees. Retirees generally pay for 50 percent of their coverage amount at age-banded premium rates, with the County incurring the balance of the cost. In order to receive these subsidies, retirees must be 55 years or older and have a minimum of five years of service credit. If participation in any of the benefit areas is discontinued, eligibility is lost, and a retiree may not re-enroll into the Plan's benefits. Consequently, all inactive employees are considered to be receiving benefits of the Plan.

Contributions to the Plan are made by appropriation from the Board, based on an actuarially determined amount. The employer contribution made during the measurement period of the liability was $446,602. The System's contribution to the Plan for fiscal year 2023 was $357,704. Plan members are not required to contribute to the OPEB trust fund.

(a) Actuarial Assumptions

The total OPEB liability was determined by an actuarial valuation as of June 30, 2021, rolled forward to June 30, 2022, using the following actuarial assumptions:

Actuarial cost method	Entry age normal
Asset valuation method	Market value of assets
Investment rate of return	7.00%, net of OPEB plan investment expense, including inflation.
Retirement age	Varies by age and pension plan.
Mortality	Pub-2010, "General" classification, Employees & Healthy Annuitant mortality table, projected using scale MP-2021, sex-distinct. Disabled mortality table Pub-2010, "General" classification, Disabled Retirement mortality table, projected using scale MP-2021, sex distinct.
Healthcare cost trend rate	6.7% - 11.9%, decreasing to 4.5%

The actuarial assumptions used in the valuation were based on the results of an actuarial experience study for the period July 1, 2015 to June 30, 2020.

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Plan's target allocations as of June 30, 2022, are as follows:

Long-Term Real Expected Rate of Return/Target Allocation

Asset Class	Long-Term Expected Real Rate of Return	Target Allocation
Domestic Equity (Large Cap)	7.30%	25.78%
Domestic Equity (Small Cap)	7.80%	9.86%
International Equity	7.60%	11.98%
Emerging Markets Equity	8.20%	4.59%
Long / Short Equity	7.20%	4.70%
Core US Fixed Income	3.70%	4.04%
Core Plus US Fixed Income	4.90%	14.05%
Absolute Return Fixed Income	3.30%	3.60%
Real Estate	5.10%	12.48%
Private Equity	10.20%	7.06%

There are no concentrations in any one organization that represents 5 percent or more of the fiduciary net position in the Plan. The Plan's funds are invested in domestic equity, international equity, and fixed income funds through the Virginia Pooled OPEB Trust Fund, established as the investment vehicle for participating employers. The County is not involved in the administration of these funds. Further information about the Virginia Pooled OPEB Trust Fund, sponsored by VML/VACo Finance, including financial statements, can be obtained by writing to VML/VACo Finance Program, 8 East Canal Street, Suite 100, Richmond, Virginia 23219.

(b) Discount Rate

The discount rate used to measure the total OPEB liability was 7.00 percent. The projection of cash flows used to determine the discount rate assumed OPEB plan member contributions will be made at the current contribution rate and that County contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits of current OPEB plan members and their beneficiaries are included. Projected County contributions that are intended to fund the service costs of future OPEB plan members and their beneficiaries, as well as projected contributions from future OPEB plan members, are not included. Based on these assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected future OPEB payments for current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

(c) Net OPEB Liability

At June 30, 2023, the System reported a liability of $193,667 for its proportionate share of the net OPEB liability. The actuary calculated total OPEB (asset) liability was based on participant data collected as of June 30, 2021 and an actuarial valuation of the same date rolled forward to June 30, 2022, using the entry age actuarial cost method, with a measurement date of June 30, 2022. At June 30, 2022, the System's proportion was 2.35 percent, a decrease of 0.06 percent from its proportion measured as of June 30, 2021.

The net OPEB liability was measured as of June 30, 2022, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date. The System's net OPEB liability is determined by the System's proportionate share of the OPEB plan participation. The System's share of the net OPEB liability at June 30, 2023 is presented below:

Total OPEB liability	$	9,179,460
Plan fiduciary net position (market value of assets)		(8,985,793)
Net OPEB liability	$	193,667
Plan fiduciary net position as a percentage of the OPEB liability		97.89%

(d) Sensitivity of the System's Proportionate Share of the Net OPEB Asset to Changes in the Discount Rate and Healthcare Trend Rate

The following presents the System's share of the net OPEB asset using the discount rate of 7.00 percent, as well as what the System's share of the net OPEB asset would be if the discount rate was one percentage point higher (8.00 percent) or one percentage point lower (6.00 percent) than the current rate:

Sensitivity of Net OPEB (Asset) Liability to Changes in Discount Rate

	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
Total OPEB liability	$ 10,603,759	$ 9,179,460	$ 8,040,182
Plan fiduciary net position	(8,985,793)	(8,985,793)	(8,985,793)
Net OPEB (asset) liability	$ 1,617,966	$ 193,667	$ (945,611)

The following table on the next page presents the System's share of the net OPEB (asset) liability calculated using the current healthcare trend rates (4.50 percent), as well as what the System's share of the net OPEB (asset) liability would be with healthcare trend rates at one percentage point lower (ultimate rate decreasing to 3.50 percent) or one percentage point higher (ultimate rate increasing to 5.50 percent) than the current rates:

Sensitivity of Net OPEB (Asset) Liability to Changes in Healthcare Trend Rate

	1% Decrease (Varied decreasing to 3.50%)	Current Discount Rate (Varied decreasing to 4.50%)	1% Increase (Varied decreasing to 5.50%)
Total OPEB liability	$ 7,820,913	$ 9,179,460	$ 10,945,093
Plan fiduciary net position	(8,985,793)	(8,985,793)	(8,985,793)
Net OPEB (asset) liability	$ (1,164,880)	$ 193,667	$ 1,959,300

(e) OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended June 30, 2023, the System recognized OPEB expense of ($270,244). As of June 30, 2023, the System reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 1,316,586	$ (107,532)
Changes of assumptions	1,006,525	(3,136,506)
Net difference between projected and actual earning on OPEB plan investments	369,295	
Change in proportion applicable to the System	-	(38,733)
System contributions subsequent to the measurement date	357,704	-
Total	$ 3,050,110	$ (3,282,771)

Deferred outflow of resources in the amount of $357,704, reported above as System contributions subsequent to the measurement date, will be recognized as a reduction of the net OPEB liability in the fiscal year ending June 30, 2024. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year ended June 30: Measurement Date June 30 of Prior Year	
2024	$ (55,849)
2025	(70,372)
2026	(163,236)
2027	12,398
2028	(283,612)
Thereafter	(29,694)
	$ (590,365)

(8) LONG-TERM LIABILITIES

The following is a summary of the changes in the System's long-term liabilities for the fiscal year ended June 30, 2023:

	Balances June 30, 2022	Increases	Decreases	Balances June 30, 2023	Current Portions
Compensated absences	$ 3,151,845	$ 2,189,911	$ (1,779,744)	$ 3,562,012	$ 1,674,413
Sewer revenue refunding bonds - Series 2014	36,150,000	-	(4,485,000)	31,665,000	4,735,000
Sewer revenue refunding bonds - 2016A Series	156,685,000	-	(6,290,000)	150,395,000	6,615,000
Sewer revenue bonds - Series 2017	80,155,000	-	(1,545,000)	78,610,000	1,620,000
Sewer revenue bonds - Series 2021A	191,990,000	-	-	191,990,000	3,130,000
Sewer revenue refunding bonds - Series 2021B	24,210,000	-	-	24,210,000	-
Premium on sewer revenue refunding bonds (net)	88,796,559	-	(4,005,655)	84,790,904	4,005,655
Subordinated revenue bonds - EDA2021A	20,055,000	-	(605,000)	19,450,000	635,000
Premium on EDA S2021A revenue bonds (net)	4,876,907	-	(252,254)	4,624,653	252,254
Subordinated UOSA revenue bonds	220,894,723	19,647,019	(15,443,181)	225,098,561	15,789,046
Net pension liability	27,987,014	23,694,342	(6,478,704)	45,202,652	-
Net OPEB (asset) liability	-	2,724,295	(2,530,628)	193,667	-
	$ 854,952,048	$ 48,255,567	$ (43,415,166)	$ 859,792,449	$ 38,456,368

(a) Sewer Revenue Bonds

The System issues bonds under the 1985 General Bond Resolution (the Resolution) adopted by the County Board. The Resolution includes a rate covenant under which the System agrees to charge reasonable rates for the use of services rendered by the System. Furthermore, the System will adjust the rates from time to time in order to generate net revenues sufficient to provide an amount equal to 100 percent of its annual principal and interest requirements, as well as the System's annual commitments to fund its proportionate share of other jurisdictions' debt service requirements. Pursuant to the Resolution, the System is required to maintain a reserve equal to the lesser of (i) the maximum principal and interest requirements of the outstanding bonds for any bond year or (ii) 125 percent of the average annual principal and interest for any bond year. In the opinion of the System's management, the System is in compliance with all Resolution covenants. Payment of the principal and interest on all Sewer revenue bonds is secured by a pledge of gross revenues derived from the System after provisions for payment of the operating expenses of the System. The bonds do not constitute general obligations of the County and authorization to issue any additional debt rests with the Board. In addition, the System is required to adhere to and is in compliance with the rebate and reporting requirements of the federal regulations pertaining to arbitrage.

On October 14, 2004, the System issued $94,005,000 of sewer revenue refunding bonds (Series 2004), with an average interest rate of 4.61 percent, to advance refund $91,430,000 of the outstanding Series 1996 bonds with an average interest rate of 5.82 percent. The net proceeds were used to redeem the Series 1996 bonds on July 15, 2006.

On August 8, 2012, the System issued $90,710,000 of sewer revenue bonds (Series 2012), with an average interest rate of 4.53 percent, to fund upgrade costs allocable to the System at certain treatment facilities that are owned by or that provide service to the County, the purchase of additional capacity at certain wastewater treatment facilities for the benefit of the County, and the costs of certain additions, extensions, and improvements to the County's sewage collection, treatment, and disposal systems.

On April 16, 2014, the System issued $61,755,000 of sewer revenue refunding bonds (Series 2014), with an average interest rate of 4.14 percent, to refund $69,745,000 of the outstanding Series 2004 bonds with an average interest rate of 4.61 percent. The net proceeds were used to redeem the Series 2004 bonds on July 15, 2014. This refunding resulted in a deferred net loss of $4,045,945, which is being amortized over 15 years, but an aggregate decrease in the overall debt service of $15,461,166.

On May 12, 2016, the System issued $164,450,000 of sewer revenue refunding bonds (Series 2016A), with a weighted average rate of 3.92 percent, to advance refund $123,065,000 of the outstanding Series 2009 bonds with an average interest rate of 4.80 percent and $46,720,000 of the outstanding Series 2012 bond with an average interest rate of 4.67 percent. This refunding resulted in a deferred net loss of $12,406,377, which is being amortized over 24 years, and a remaining outstanding balance of $13,400,000 unrefunded Series 2009 bonds and $39,545,000 unrefunded Series 2012 bonds. This refunding resulted in an aggregate decrease in the overall debt service of $35,116,418.

On June 28, 2017, the System issued $85,785,000 of sewer revenue bonds (Series 2017), with an average interest rate of 4.77 percent, to fund certain additions, extensions, and improvements to the County's sewage collection, treatment, and disposal systems, capital improvement costs allocable to the County at certain wastewater treatment facilities that provide service to the County, the purchase of any necessary additional capacity at certain wastewater treatment facilities for the benefit of the County, the costs of issuing the Series 2017 bonds, and the necessary deposit to the reserve subfund.

On June 9, 2021, the System issued $191,990,000 of Sewer Revenue Bonds (Series 2021A), with an average interest rate of 4.66 percent to pay the costs of certain additions, extensions and improvements to the County's sewage collection, treatment and disposal systems, pay for capital improvement costs allocable to the County at certain wastewater treatment facilities that provide service to the County and, if necessary, purchase additional capacity at certain wastewater treatment facilities for the benefit of the County, the costs of issuing the Series 2021A bonds, and the necessary deposit to the reserve subfund.

On June 9, 2021, the System took advantage of lower market interest rates and issued $24,210,000 of Sewer Revenue Refunding Bonds (Series 2021B), with an average interest rate of 3.67 percent to refund $28,625,000 of the outstanding Series 2012 Bonds with an average interest rate of 4.50 percent. The net proceeds were used to redeem the Series 2012 bonds on July 15, 2021. This refunding resulted in a deferred net gain of $3,969,019, which is being amortized over 21 years, and an aggregate decrease in the overall debt service of $11,937,848.

The outstanding bonds as of June 30, 2023, consist of $31,665,000 of Series 2014 revenue refunding bonds, $150,395,000 of Series 2016A revenue refunding bonds, $78,610,000 of Series 2017 revenue bonds, $191,990,000 of Series 2021A revenue bonds, and $24,210,000 of Series 2021B revenue refunding bonds that bear interest at varying rates and mature in varying amounts. The bond principal and interest payment schedule details are as follows, found on the next page:

Fiscal Year	Series 2014 Principal	Series 2014 Interest	Series 2014 Total	Series 2016A Principal	Series 2016A Interest	Series 2016A Total	Series 2017 Principal	Series 2017 Interest	Series 2017 Total
2024	$ 4,735,000	1,082,875	5,817,875	$ 6,615,000	5,944,856	$ 12,559,856	$ 1,620,000	3,890,000	5,510,000
2025	4,995,000	839,625	5,834,625	6,950,000	5,605,731	12,555,731	1,700,000	3,807,000	5,507,000
2026	5,205,000	636,675	5,841,675	7,310,000	5,249,231	12,559,231	1,790,000	3,719,750	5,509,750
2027	5,390,000	477,750	5,867,750	7,685,000	4,874,356	12,559,356	1,880,000	3,628,000	5,508,000
2028	5,570,000	299,425	5,869,425	8,035,000	4,521,856	12,556,856	1,975,000	3,531,625	5,506,625
2029-2033	5,770,000	100,975	5,870,975	45,675,000	17,111,855	62,786,855	11,515,000	16,029,375	27,544,375
2034-2038	-	-	-	47,220,000	7,459,897	54,679,897	14,785,000	12,758,125	27,543,125
2039-2043	-	-	-	20,905,000	741,850	21,646,850	18,975,000	8,559,375	27,534,375
2044-2048	-	-	-	-	-	-	24,370,000	3,168,000	27,538,000
Total	$ 31,665,000	$ 3,437,325	$ 35,102,325	$ 150,395,000	$ 51,509,632	$ 201,904,632	$ 78,610,000	$ 59,091,250	$ 137,701,250

Fiscal Year	Series 2021A Principal	Series 2021A Interest	Series 2021A Total	Series 2021B Principal	Series 2021B Interest	Series 2021B Total
2024	$ 3,130,000	8,647,100	$ 11,777,100	$ -	895,650	$ 895,650
2025	3,290,000	8,486,600	11,776,600	-	895,650	895,650
2026	3,460,000	8,317,850	11,777,850	-	895,650	895,650
2027	3,640,000	8,140,350	11,780,350	-	895,650	895,650
2028	3,825,000	7,953,725	11,778,725	-	895,650	895,650
2029-2033	22,270,000	36,618,000	58,888,000	-	4,478,250	4,478,250
2034-2038	28,570,000	30,322,875	58,892,875	7,275,000	4,261,575	11,536,575
2039-2043	35,460,000	23,425,950	58,885,950	16,935,000	1,925,900	18,860,900
2044-2048	44,805,000	14,085,325	58,890,325	-	-	-
2049-2052	43,540,000	3,570,200	47,110,200	-	-	-
Total	$ 191,990,000	$ 149,567,975	$ 341,557,975	$ 24,210,000	$ 15,143,975	$ 39,353,975

Per the bond agreements, upon the occurrence of any event of default, Trustees may proceed to protect and enforce its rights and rights of the Bond Holders under the laws of the Commonwealth or the General Bond Resolution or by proceedings in the office of any board having jurisdiction, either for the specific performance of any agreement or for the enforcement of any proper legal or equitable remedy. In the enforcement of any remedy under the General Bond Resolution, the Trustee or the Bond Holders will be entitled to sue for, enforce payment of amounts remaining due for principal, interest, interest on overdue payments of principal, all costs and expenses of collection and all proceedings under the General Bond Resolution. The acceleration clause allows the lender, upon default, to accelerate payment of the entire unpaid Bond principal and interest.

(b) Upper Occoquan Service Authority (UOSA) Debt

In December 2003, UOSA issued $58,150,000 of regional sewer system revenue refunding bonds (UOSA 2003), of which the System's share is $36,848,116, to advance refund the outstanding UOSA 1993 bonds. This refunding resulted in a deferred net gain of $1,514,494, which is being amortized over the life of the UOSA 2003 bonds.

In July 2005, UOSA issued $82,465,000 of regional sewer system revenue refunding bonds (UOSA 2005), of which the System's share is $53,201,198, to advance refund another portion of the outstanding UOSA 1995 bonds. This refunding resulted in a deferred net gain of $1,909,604, which is being amortized over the life of the UOSA 2005 bonds.

In February 2007, UOSA issued $90,315,000 of regional sewer system revenue refunding bonds (UOSA 2007A), of which the System's share is $58,265,521, to advance refund another portion of the outstanding UOSA 1995 bonds. This refunding resulted in a deferred net loss of $83,868, which is being amortized over the life of the UOSA 2007A bonds.

In December 2007, UOSA issued $119,715,000 of regional sewer system revenue bonds (UOSA 2007B), of which the System's share is $53,925,458, to fund the expansion of its wastewater treatment and conveyance facilities.

In December 2010, UOSA issued $85,180,000 of regional sewer system revenue bonds (UOSA 2010), of which the System's share is $34,113,615, to fund certain capital improvements.

In July 2011, UOSA entered into VRA loan Series 2011A to fund costs related to the Energy Service (ESCO) project. In December 2011, UOSA entered into VRA loan Series 2011B to fund Phase 1 of the Nutrient Compliance Improvement Project (P1NR).

In May 2013, UOSA issued $101,615,000 of regional sewer system revenue refunding bonds (UOSA 2013A), of which the System's share is $65,555,566, to advance refund the outstanding UOSA 2005 bonds. This refunding resulted in a deferred net loss of $12,354,368, which is being amortized over the life of the UOSA 2013A bonds, but an aggregate decrease in the overall debt service of approximately $4.9 million.

In November 2013, UOSA issued $37,735,000 of regional sewer system revenue refunding bonds (UOSA 2013B), of which the System's share is $23,911,671, to advance refund the outstanding UOSA 2003 bonds. This refunding resulted in a deferred net loss of $2,520,436, which is being amortized over the life of the UOSA 2013B bonds, but an aggregate decrease in the overall debt service of approximately $2.1 million. In fiscal year 2022, the UOSA 2013B bonds reached final maturity.

In fiscal year 2015, UOSA issued regional sewer system revenue refunding bonds (UOSA 2014) to advance refund the outstanding UOSA 2007A bonds and a portion of the outstanding UOSA 2007B bonds. Of the $112,190,980 UOSA 2007 bonds outstanding balance, $93,175,291 was refunded into the UOSA 2014 bonds. This resulted in a deferred net gain of $2,029,199, which is being amortized over 24 years, and an aggregate decrease in the overall debt service of $6,359,186.

In fiscal year 2016, UOSA issued regional sewer system revenue refunding bonds (UOSA 2016B) to advance refund the $19,015,689 remaining outstanding UOSA 2007B bonds. This refunding resulted in a deferred net gain of $533,782, which is being amortized over 22 years, and an aggregate decrease in the overall debt service of $4,676,694.

In December 2019, UOSA issued $52,440,000 of regional sewer system revenue bonds (UOSA 2019), of which the System's share is $21,410,631, to fund improvements to UOSA's regional advanced wastewater treatment system.

In November 2020, UOSA issued $199,755,000 of regional sewer system revenue refunding bonds (UOSA 2020), of which the System's share is $111,228,596, to advance refund the $91,146,092 remaining outstanding UOSA 2014 bonds. This refunding resulted in a deferred net loss of $19,939,089, which is being amortized over 20 years, but an aggregate decrease in the overall debt service of $2,594,724.

In December 2022, UOSA issued $48,830,000 of regional sewer system revenue bonds (UOSA 2022), of which the System's share is $19,647,019, to fund improvements to UOSA's regional advanced wastewater treatment system.

The System's share of UOSA's total outstanding debt as of June 30, 2023 is $225,098,561 and it is subordinate to the sewer revenue bonds issued by the System. The System's share of outstanding UOSA regional sewer system revenue and refunding bonds as of June 30, 2023 is as follows:

Fiscal Year	UOSA Principal	UOSA Interest	UOSA Total
2024	$ 15,789,046	$ 5,646,193	$ 21,435,239
2025	16,487,000	5,264,418	21,751,418
2026	24,063,051	4,840,782	28,903,833
2027	17,964,867	4,391,365	22,356,232
2028	18,227,848	4,120,542	22,348,390
2029-2033	45,862,877	17,171,594	63,034,471
2034-2038	36,815,303	12,303,758	49,119,061
2039-2043	31,157,142	5,909,157	37,066,299
2044-2048	8,560,818	2,743,198	11,304,016
2049-2053	9,056,084	1,145,662	10,201,746
2054	1,114,525	44,581	1,159,106
Total	$ 225,098,561	$ 63,581,250	$ 288,679,811

Per the bond agreements, upon the occurrence of any event of default, bondholders have the right to direct the method and place of conducting all proceedings to be taken in connection with the enforcement of the terms and conditions of the Trust Agreement. Bondholders do not have the right to institute any suit, action, or proceeding in equity or at law for enforcement of the Trust Agreement for the execution trust unless the specific terms of the bond agreement are met. Nothing in the Trust Agreement shall affect or impair the right of any bondholder to enforce legal action for payment of the principal, premium, and interest upon maturity of the bond.

(9) Economic Development Authority Bonds

On November 23, 2021, the Fairfax County Economic Development Authority (EDA) issued $74,605,000 of Fairfax County Facilities Revenue Bonds Series 2021A, with an average interest rate of 4.60 percent, to fund the costs of construction of a joint Stormwater/Wastewater facility to be used to consolidate the functions and operations of Fairfax County's Stormwater and Wastewater divisions (the "2021 Public Works Project") and to pay the issuance costs of the Series 2021A bonds. Of the total par value in the amount of $74,605,000, Stormwater's component share is $54,550,000, while Wastewater's component share is $20,055,000. The outstanding bonds as of June 30, 2023 consist of $52,910,000 for the Stormwater component and $19,450,000 for the Wastewater component.

Fiscal Year	EDA S2021A Principal	EDA S2021A Interest	EDA S2021A Total
2024	$ 635,000	$ 902,375	$ 1,537,375
2025	670,000	869,750	1,539,750
2026	700,000	835,500	1,535,500
2027	735,000	799,625	1,534,625
2028	775,000	761,875	1,536,875
2029-2033	4,510,000	3,171,250	7,681,250
2034-2038	5,770,000	1,915,200	7,685,200
2039-2042	5,655,000	492,450	6,147,450
Total	$ 19,450,000	$ 9,748,025	$ 29,198,025

(10) Commitments and Contingencies

(a) Cost Sharing Agreement with Alexandria Renew Enterprises (AlexRenew)

The System is obligated under an agreement with AlexRenew to share in the construction and operating costs and debt service requirements for AlexRenew's sewage treatment facility. Currently, the System has a capacity entitlement of 32.4 MGD, which is 60 percent of the facility's total capacity of 54.0 MGD. Although the System is allowed one nonvoting representative at the meetings of AlexRenew, the System has no significant influence in the management of the treatment facility. In addition, the System has no direct ongoing equity interest in the assets or liabilities of AlexRenew. Accordingly, the System does not account for this commitment as a joint venture.

A new construction program to build enhanced nutrient removal facilities has been initiated. The System paid AlexRenew $9,164,429 for purchased capacity in fiscal year 2023 to fund its share of the construction and land acquisition costs. The System estimates its share of the remaining construction costs to be $118,939,000, of which $17,388,000 is expected to be incurred in fiscal year 2024 and the remaining balance over fiscal years 2025 to 2032. In addition, the System made total payments of $11,827,697 to AlexRenew during fiscal year 2023 for its share of AlexRenew's operating costs.

(b) Cost Sharing Agreement with the District of Columbia (District)

The System is obligated under the 2012 Blue Plains Intermunicipal Agreement (2012 IMA), which replaced the 1985 IMA, between the County, the District, the District of Columbia Water and Sewer Authority (DC Water), Montgomery County in Maryland, Prince George's County in Maryland, and the Washington Suburban Sanitary Commission, to share the construction and operating costs of the Blue Plains Wastewater Treatment Plant, which is operated by DC Water. Currently, the System has a capacity entitlement of 31.0 MGD, which is approximately 8.4 percent of the Plant's total capacity of 370.0 MGD. DC Water has a Board of Directors comprised of six members from the District, two each from Montgomery and Prince George's Counties, and one from the County. The System has no significant control over plant operations and construction and no ownership interest in the assets of DC Water. Accordingly, the System does not account for this commitment as a joint venture.

The Blue Plains Plant is currently undergoing a major renovation of its nitrogen removal facilities and the construction of new wet weather flow facilities. The System paid DC Water $7,410,145 for purchased capacity in fiscal year 2023 to fund its share of construction costs. The System estimates its share of the remaining construction costs to be $210,961,000, of which $20,810,000 is expected to be incurred in fiscal year 2024, and the remaining balance over fiscal years 2025 to 2032. In addition, the System made total payments of $18,012,612 to DC Water during fiscal year 2022 for its share of the Blue Plains Plant's operating costs.

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(c) Joint Venture – Upper Occoquan Service Authority (UOSA)

UOSA is a joint venture created under the provisions of the Virginia Water and Waste Authorities Act on March 3, 1971 by a concurrent resolution of the governing bodies of the County, Prince William County, the City of Manassas, and the City of Manassas Park to finance, construct, and operate a regional sewage treatment facility. Currently, the System has a capacity entitlement of 22.1 MGD, which is 41 percent of the facility's total capacity of 54.0 MGD. The governing body of UOSA is an eight-member board of directors consisting of two members from each participating jurisdiction, appointed to four-year terms. The UOSA Board of Directors adopts an annual operating budget based on projected sewage flows.

The County has no explicit and measurable interest in UOSA, but does have an ongoing financial responsibility for its share of UOSA's construction costs, operating costs, and annual debt service. There are no ongoing construction costs for UOSA and the System did not purchase capacity from UOSA in fiscal year 2023. In addition, the System made total payments to UOSA of $14,783,192 in fiscal year 2023 to pay its share of UOSA's operating costs.

Summarized UOSA financial information as of and for the year ended June 30, 2022, the most recent available audited financial information, is shown below:

	2022
Total assets	$ 516,740,870
Deferred outflows of resources	26,351,328
Total liabilities	(511,581,240)
Deferred inflows of resources	(11,399,652)
Net position	$ 20,111,306
Operating revenues	$ 31,886,427
Operating expenses	(59,694,039)
Nonoperating revenues and expenses, net	(4,323,085)
Capital contributions	24,964,139
Decrease in net position	$ (7,166,558)

The complete financial statements for UOSA can be obtained by writing to UOSA at 14631 Compton Road, Centreville, Virginia 20121 or by accessing UOSA's website.

(d) Cost Sharing Agreement with Arlington County, Virginia (Arlington)

The System is obligated under the 1989 Sewage Conveyance Treatment and Disposal Agreement with Arlington to share the construction and operating costs of the sewage treatment facility owned and operated by Arlington. Currently, the System has a capacity entitlement of 3.0 MGD, which is 7.5 percent of the facility's total capacity of 40.0 MGD. The System has no direct ongoing equity interest in the facility's assets and liabilities. Furthermore, the System has no significant influence in the management of Arlington's treatment facility. Accordingly, the System does not account for this commitment as a joint venture.

The Arlington facility has recently completed a major upgrade to meet new water quality standards. The System paid Arlington $587,287 for purchased capacity in fiscal year 2023 to fund its share of construction costs. The System estimates its share of the remaining construction costs to be $13,632,000, of which $3,226,000 is expected to be incurred in fiscal year 2024 and the remaining balance over fiscal years 2025 to 2032. In addition, the System made total payments of $2,447,972 to Arlington during fiscal year 2023 for its share of Arlington's operating costs.

(e) Cost Sharing Agreement with Loudoun County, Virginia, Sanitation Authority (Loudoun Water)

The System is obligated under the Broad Run Water Reclamation Facility Capacity Agreement with Loudoun Water to share the construction and operating costs and debt service requirements of the sewage treatment facility owned and operated by Loudoun Water. Currently, the System has a capacity entitlement of 1.0 MGD, which is 9.0 percent of the facility's total capacity of 11.0 MGD. The System has no direct ongoing interest in the facility's assets and liabilities. Furthermore, the System has no significant influence in the management of Loudoun Water's treatment facility. Accordingly, the System does not account for this commitment as a joint venture.

The System will incur operating costs once it starts to deliver flows to Loudoun Water's facilities, which has not happened to date and is not expected to start in fiscal year 2024. The Broad Run Plant is a new facility; therefore, no construction or debt service requirements are expected in the near future.

(f) Other Commitments

As of June 30, 2023, the System had contractual commitments, excluding the above noted AlexRenew, District, UOSA, Arlington, and Loudoun Water contractual commitments, of $62,915,406 for the construction of various sewer projects.

(g) Other Contingencies

The System is contingently liable with respect to lawsuits and other claims which arise in the ordinary course of its operations. It is the opinion of the management of the System and the County, as well as the County Attorney, that any losses which may ultimately be incurred as a result of those lawsuits and claims will not be material to the System's financial statements.

(11) RISK MANAGEMENT

The System 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 citizens; and natural disasters. For all of these risks, the System participates in the County's insurance program, which includes self-insurance and the purchase of certain commercial insurance policies. The System is charged by the County for costs associated with workers' compensation, vehicle and general liability risks, and the costs associated with other risks borne by the County. There were no claims settlements in excess of insurance coverage in any of the past three fiscal years. Information regarding the County's insurance program is available in the County's ACFR for the fiscal year ended June 30, 2023.

(12) IMPLEMENTATION OF NEW ACCOUNTING PRONOUNCEMENTS

In fiscal year 2023, the System implemented the following standard, which had no material impact on the System's financial statements:

GASB Statement No. 91, *Conduit Debt Obligations*
This Statement eliminates an existing option for issuers to report conduit debt obligations as their own liabilities and is intended to eliminate diversity in practice associated with reporting and disclosure of information.

GASB Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*
This Statement establishes definitions of public-private and public-public partnership arrangements (PPPs) and financial reporting for availability payment arrangements (APAs). Also providing uniform guidance on accounting and financial reporting for transactions that meet those definitions. The required disclosures are intended to allow users to understand the scale and important aspects of a government's PPPs and evaluate a government's future obligations and assets resulting from PPPs and APAs.

GASB Statement No. 96, *Subscription-Based Information Technology Arrangements*
This Statement establishes standards of accounting and financial reporting for Subscription-Based Information Technology Arrangements (SBITAs).

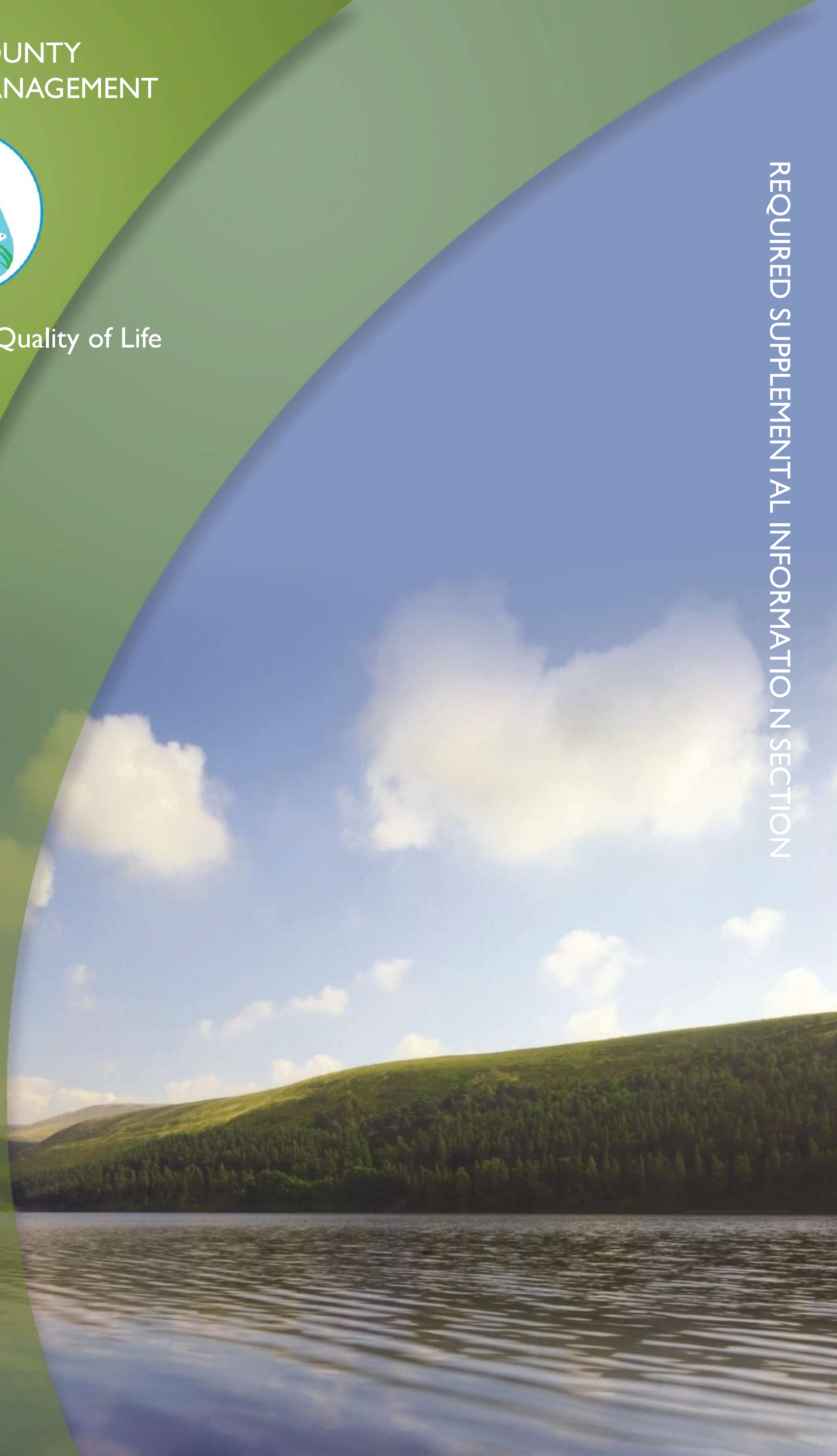
GASB Statement No. 99, *Omnibus 2022*
This Statement enhances comparability in accounting and financial reporting and improves the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics. The requirements related to leases, PPPs, and SBITAs are effective for fiscal year 2023.

Fairfax County Wastewater Management

Quality of Water = Quality of Life

FAIRFAX COUNTY
WASTEWATER MANAGEMENT

Quality of Water = Quality of Life



REQUIRED SUPPLEMENTAL INFORMATIO N SECTION

FAIRFAX COUNTY
WASTEWATER MANAGEMENT

Quality of Water = Quality of Life

INTEGRATED SEWER SYSTEM · COUNTY OF FAIRFAX, VIRGINIA
REQUIRED SUPPLEMENTARY INFORMATION (*unaudited)*

1.0 SUPPLEMENTAL PENSION INFORMATION

Tables indicating the System's proportionate share of the net pension liability and a schedule of the System's contributions to the pension plan.

TABLE 1.1

Schedule of the Proportionate Share of the Net Pension Liability

ERS Pension Plan

Last Ten Fiscal Years*

	2023	2022	2021	2020	2019
System's proportion of the net pension liability	2.4050%	2.3646%	2.2545%	2.1775%	2.1448%
System's proportion share of the net pension liability	$ 45,202,652	$ 27,987,014	$ 41,009,432	$ 36,801,215	$ 35,395,232
System's covered payroll	19,079,737	19,004,173	18,667,714	16,926,367	15,992,847
System's proportionate share of the net pension liability as a percentage of its covered payroll	236.90%	147.30%	219.68%	217.42%	221.32%
Plan fiduciary net position as a percentage of the total pension liability	72.10%	81.30%	69.50%	70.80%	70.50%

	2018	2017	2016	2015
System's proportion of the net pension liability	2.1835%	2.1338%	2.0718%	2.1040%
System's proportion share of the net pension liability	$ 35,335,899	$ 32,568,322	$ 26,649,164	$ 21,919,467
System's covered payroll	15,952,731	15,115,867	14,239,466	14,130,410
System's proportionate share of the net pension liability as a percentage of its covered payroll	221.50%	215.46%	187.15%	155.12%
Plan fiduciary net position as a percentage of the total pension liability	69.90%	70.20%	74.20%	78.30%

The amounts presented for each fiscal year were determined as of June 30, year shown is fiscal year of presentation.

*This schedule is intended to show information for 10 years. 2015 is the first year implemented, additional years will be displayed as they become available.

Unaudited - see accompanying report of independent auditor

TABLE 1.2

Schedule of Pension Contributions
ERS Pension Plan
Last Ten Fiscal Years*

	Actuarial Determined Contribution	Contributions in Relations to the Actuarial Determined Contribution	Contribution Deficiency (Excess)	System's Covered Payroll	Contributions as a Percentage of Covered Payroll
2023	$ 6,388,346	$ 6,388,346	$ -	$ 22,120,308	28.88 %
2022	5,510,229	5,510,229	-	19,079,737	28.88
2021	5,387,683	5,387,683	-	19,004,173	28.35
2020	5,292,297	5,292,297	-	18,667,714	28.35
2019	4,593,816	4,593,816	-	16,926,367	27.14
2018	4,044,590	4,044,590	-	15,992,847	25.29
2017	3,653,175	3,653,175	-	15,952,731	22.90
2016	3,323,979	3,323,979	-	15,115,867	21.99
2015	2,869,250	2,869,250	-	14,239,466	20.15
2014	2,727,132	2,727,132	-	14,130,410	19.30

*This schedule is intended to show information for 10 years. 2015 is the first year implemented, additional years will be displayed as they become available.

Unaudited - see accompanying report of independent auditor

2.0 SUPPLEMENTAL OPEB INFORMATION

Tables indicating the System's proportionate share of the total OPEB liability, the net OPEB liability, and a schedule of the System's contributions to the OPEB plan.

TABLE 2.1

Schedule of the Proportionate Share of the Net OPEB (Asset) Liability
OPEB Plan
Last Ten Fiscal Years*

	2023	2022	2021	2020	2019	2018
System's proportion of the net OPEB liability	2.3500 %	2.4100 %	2.4100 %	2.3800 %	2.4100 %	2.4305 %
System's proportionate share of the net OPEB (asset) liability	$ 193,667	$ (1,014,287)	$ 420,338	$ 3,455,612	$ 2,223,715	$ 1,039,781
System's covered employee payroll	24,148,013	24,753,206	23,173,524	22,199,783	21,706,117	22,072,644
System's proportionate share of the net OPEB (asset) liability as a percentage of covered employee payroll	0.80% %	(4.10) %	1.81 %	15.57 %	10.24 %	4.71 %
Plan fiduciary net position as a percentage of the total OPEB (asset) liability	97.89 %	111.02 %	94.99 %	69.11 %	76.97 %	86.73 %

The amounts presented for each fiscal year were determined as of June 30, year shown is fiscal year of presentation.

*This schedule is intended to show information for 10 years. FY2018 is the first year implemented, additional years will be displayed as they become available.

Unaudited - see accompanying report of independent auditor

TABLE 2.2

Schedule of OPEB Contributions
OPEB Plan
Last Ten Fiscal Years*
(Dollar amounts in thousands)

	2023	2022	2021	2020
Actuarially determined contribution	$ 216	$ 279	$ 455	$ 391
Contributions made in relation to the actuarially determined contribution	358	447	436	474
Contribution deficiency (excess)	(142)	(168)	19	(83)
Covered employee payroll	25,029	24,148	24,753	23,174
Contributions as a percentage of covered employee payroll	1.43% %	1.85 %	1.76 %	2.05 %

	2019	2018	2017
Actuarially determined contribution	$ 543	$ 516	$ 493
Contributions made in relation to the actuarially determined contribution	611	580	680
Contribution deficiency (excess)	(68)	(64)	(187)
Covered employee payroll	22,200	21,706	22,073
Contributions as a percentage of covered employee payroll	2.75 %	2.67 %	3.08 %

*This schedule is intended to show information for 10 years. FY2018 is the first year implemented. Additional years will be displayed as they become available.

Unaudited - see accompanying report of independent auditor

Fairfax County Wastewater Management

Quality of Water = Quality of Life

FAIRFAX COUNTY
WASTEWATER MANAGEMENT

Quality of Water = Quality of Life

STATISTICAL SECTION

FAIRFAX COUNTY
WASTEWATER MANAGEMENT

Quality of Water = Quality of Life

Integrated Sewer System · County of Fairfax, Virginia
Statistical Section *(unaudited)*

1.0 Financial Trends

Financial trend information is intended to assist users in understanding how the System's financial position has changed over time. There are four tables presented in this section.

Table 1.1 - Net Position by Component (a) - Last Ten Fiscal Years

	Fiscal Year				
	2023	2022	2021	2020	2019
Net investment in capital assets	$ 1,186,134,177	$ 1,181,439,831	$ 1,207,780,108	$ 1,112,420,058	$1,065,086,054
Restricted	54,235,528	48,522,726	17,941,505	20,281,937	19,398,343
Unrestricted	198,694,137	148,116,348	98,648,390	133,460,268	119,690,633
Total net position	$ 1,439,063,842	$ 1,378,078,905	$ 1,324,370,003	$ 1,266,162,263	$1,204,175,030

	Fiscal Year				
		Restated (a)			Restated (a)
	2018	2017	2016	2015	2014
Net investment in capital assets	$ 1,038,360,082	$ 1,003,960,254	$ 940,641,576	$ 892,414,328	$ 843,276,715
Restricted	18,178,132	14,185,711	73,853,503	66,038,662	43,116,468
Unrestricted	99,372,962	90,123,639	38,417,623	66,651,531	100,358,086
Total net position	$ 1,155,911,176	$ 1,108,269,604	$ 1,052,912,702	$ 1,025,104,521	$ 986,751,269

Source: Fairfax County Wastewater Management Program

Notes:

(a) Certain amounts for fiscal years 2014 and 2017 have been reclassified and/or adjusted for comparability and/or to retroactively reflect accounting changes made during this period. Fiscal year 2014 was related to GASB 68 and fiscal year 2017 was related to GASB 75.

Unaudited - see accompanying report of independent auditor.

TABLE 1.2 - CHANGES IN NET POSITION - LAST TEN FISCAL YEARS

	Fiscal Year				
	2023	2022	2021	2020	2019
Operating revenues:					
Sales of service	$ 242,725,291	$ 231,214,007	$ 216,447,771	$ 217,853,523	$ 210,961,807
Operating expenses:					
Personnel services	44,399,195	36,692,825	39,859,440	39,488,665	33,607,870
Materials and supplies	18,672,298	16,235,691	16,915,830	16,675,060	17,903,555
Contractual services	55,093,396	48,993,834	50,889,539	50,821,222	49,486,830
Depreciation and amortization	69,828,776	67,411,472	65,629,470	64,683,862	64,666,137
Professional fees and other	2,949,545	1,623,269	1,530,292	474,940	360,872
Total operating expenses	190,943,210	170,957,091	174,824,571	172,143,749	166,025,264
Operating income	51,782,081	60,256,916	41,623,200	45,709,774	44,936,543
Nonoperating revenues (expenses):					
Availability fees	23,514,132	16,355,051	34,714,848	22,180,962	21,473,258
Investment earnings	6,541,726	479,834	790,769	2,859,826	3,675,949
Interest expense	(25,119,429)	(25,737,037)	(19,458,780)	(21,212,596)	(22,702,763)
Amortization of bond issuance costs	-	-	(993,208)	(6,938)	-
Amortization of deferred amounts on refundings	-	-	-	-	-
Gain (loss) on disposal of capital assets	30,589	70,862	55,287	(37,398)	21,249
Total nonoperating revenues (expenses), net	4,967,018	(8,831,290)	15,108,916	3,783,856	2,467,693
Income before contributions and special items	56,749,099	51,425,626	56,732,116	49,493,630	47,404,236
Capital contributions:					
Grants from the Commonwealth	112,808	618	51,862	68,519	197,696
From developers	4,123,030	2,282,658	1,423,762	2,526,683	661,922
Special items:					
Gain on sale of purchased capacity	-	-	-	9,898,401	-
Change in net position	$ 60,984,937	$ 53,708,902	$ 58,207,740	$ 61,987,233	$ 48,263,854

continued

Source: Fairfax County Wastewater Management Program

Notes:
(a) Certain amounts for fiscal year 2017 have been restated due to the implementation of GASB 75.

Unaudited - see accompanying report of independent auditor.

Fiscal Year					
2018	2017 (a)	2016	2015	2014	
					Operating revenues:
$ 199,758,856	$ 195,753,184	$ 190,433,799	$ 187,538,854	$ 188,168,475	Sales of service
					Operating expenses:
32,841,348	33,131,199	29,532,231	26,416,320	27,576,508	Personnel services
17,421,987	15,588,636	15,409,135	14,063,157	15,635,981	Materials and supplies
50,481,605	46,232,788	46,873,730	51,342,024	47,658,923	Contractual services
63,654,892	63,441,165	61,090,693	58,046,612	55,558,575	Depreciation and amortization
251,504	721,903	637,717	490,055	240,007	Professional fees and other
164,651,336	159,115,691	153,543,506	150,358,168	146,669,994	Total operating expenses
35,107,520	36,637,493	36,890,293	37,180,686	41,498,481	Operating income
					Nonoperating revenues (expenses):
25,974,491	25,206,124	14,681,449	21,689,013	24,007,197	Availability fees
2,525,508	1,022,586	1,171,307	780,354	484,332	Investment earnings
(23,635,250)	(19,502,116)	(20,601,532)	(23,677,340)	(26,960,382)	Interest expense
-	(673,776)	(605,018)	-	(343,229)	Amortization of bond issuance costs
-	-	-	(945,079)	(994,404)	Amortization of deferred amounts on refundings
54,378	152,917	(8,326,757)	48,459	122,334	Gain (loss) on disposal of capital assets
4,919,127	6,205,735	(13,680,551)	(2,104,593)	(3,684,152)	Total nonoperating revenues (expenses), net
40,026,647	42,843,228	23,209,742	35,076,093	37,814,329	Income before contributions and special item
					Capital contributions:
5,315,145	9,394,529	1,958,258	900,914	591,814	Grants from the Commonwealth
2,299,780	3,119,145	2,640,181	2,376,245	3,482,762	From developers
					Special items:
-	-	-	-	-	Gain on sale of purchased capacity
$ 47,641,572	$ 55,356,902	$ 27,808,181	$ 38,353,252	$ 41,888,905	Change in net position

concluded

Unaudited - see accompanying report of independent auditor.

TABLE 1.3 - OPERATING REVENUE DETAIL - LAST TEN FISCAL YEARS

	Fiscal Year				
	2023	2022	2021	2020	2019
Sewer service:					
County connections	$232,904,778	$ 220,776,399	$ 205,801,851	$ 208,257,853	$ 198,631,795
City of Fairfax	2,071,199	2,060,877	2,280,047	1,913,176	2,275,982
Town of Herndon	1,461,205	2,327,963	1,643,043	1,398,220	2,571,350
Arlington County	715,272	630,962	772,690	606,531	839,357
Fort Belvoir	2,142,140	2,132,407	2,692,819	2,263,915	3,051,171
City of Falls Church	712,905	659,381	672,472	595,412	716,759
Town of Vienna	640,414	668,834	651,000	680,750	810,220
Other (a)	834,676	611,919	603,980	764,050	786,530
Other services	1,242,702	1,345,265	1,329,869	1,373,616	1,278,643
Total operating revenues	$ 242,725,291	$ 231,214,007	$ 216,447,771	$ 217,853,523	$ 210,961,807

	Fiscal Year				
	2018	2017	2016	2015	2014
Sewer service:					
County connections	$ 190,500,757	$ 186,702,496	$ 180,554,128	$ 176,558,827	$ 176,471,310
City of Fairfax	2,257,047	2,304,397	2,301,634	1,667,693	2,158,338
Town of Herndon	1,376,980	1,281,635	1,034,990	3,229,858	3,758,078
Arlington County	614,338	339,303	727,823	705,557	540,121
Fort Belvoir	2,327,058	2,204,729	2,542,802	2,189,831	2,431,455
City of Falls Church	820,972	684,338	1,095,921	1,049,188	1,022,967
Town of Vienna	501,998	479,276	454,525	467,888	455,670
Other (a)	608,854	722,920	824,581	755,256	563,866
Other services	750,582	1,034,090	897,395	914,756	766,670
Total operating revenues	$ 199,758,586	$ 195,753,184	$ 190,433,799	$ 187,538,854	$ 188,168,475

Source: Fairfax County Wastewater Management Program

Notes:
(a) Other sewer service revenues include revenues from Fairfax Water and the County's solid waste resource recovery facility.

Unaudited - see accompanying report of independent auditor.

Table 1.4 - Operating Expenses Detail - Last Ten Fiscal Years

	Fiscal Year				
	2023	2022	2021	2020	2019
Wastewater treatment expenses (a):					
Noman M. Cole, Jr.	$ 29,360,315	$ 26,000,825	$ 23,792,593	$ 23,065,261	$ 23,524,169
Alexandria Renew Enterprises	11,827,697	10,785,305	11,272,272	11,083,752	11,122,097
DCWASA Blue Plains	18,012,612	13,788,885	15,317,242	15,930,135	15,517,396
Upper Occoquan Service Authority	14,783,192	13,846,223	13,515,517	14,281,321	12,979,718
Arlington County	2,447,972	2,045,814	2,616,182	2,073,297	2,592,200
City of Falls Church Sewer	171,177	354,238	617,828	381,118	415,768
Other (b)	975,458	911,968	615,213	587,386	529,851
Total wastewater treatment expenses	77,578,423	67,733,258	67,746,847	67,402,270	66,681,199
Other operating expenses:					
Pumping, collection, and inspection	21,320,454	16,907,313	18,819,691	19,289,862	16,834,560
System repairs and renovations	273,055	353,428	360,614	422,944	456,351
Planning, engineering, and monitoring support	15,067,213	11,290,219	15,332,664	13,860,598	11,057,216
Billing and bill collection	6,875,289	7,261,401	6,935,285	6,484,213	6,329,801
Depreciation and amortization	69,828,776	67,411,472	65,629,470	64,683,862	64,666,137
Total operating expenses	$ 190,943,210	$ 170,957,091	$ 174,824,571	$ 172,143,749	$ 166,025,264

	Fiscal Year				
	2018	2017	2016	2015	2014
Wastewater treatment expenses (a):					
Noman M. Cole, Jr.	$ 23,094,407	$ 20,837,175	$ 20,325,332	$ 18,425,015	$ 19,931,898
Alexandria Renew Enterprises	13,575,257	13,350,729	11,590,585	13,380,703	13,133,545
DCWASA Blue Plains	14,271,793	10,644,395	12,800,588	15,016,549	11,815,951
Upper Occoquan Service Authority	12,977,850	13,420,485	13,472,493	12,687,555	12,276,384
Arlington County	2,453,677	2,066,590	2,012,313	2,711,644	2,225,036
City of Falls Church Sewer	420,592	-	48,617	664,936	-
Other (b)	616,062	556,511	533,502	1,074,445	496,374
Total wastewater treatment expenses	67,409,638	60,875,885	60,783,430	63,960,847	59,879,188
Other operating expenses:					
Pumping, collection, and inspection	18,119,901	18,347,241	16,671,232	13,512,902	13,280,579
System repairs and renovations	505,937	238,102	194,724	260,030	115,557
Planning, engineering, and monitoring support	8,794,593	8,511,113	8,387,796	8,771,586	10,240,019
Billing and bill collection	6,166,375	6,194,078	6,415,631	5,806,191	7,596,076
Depreciation and amortization	63,654,892	63,441,165	61,090,693	58,046,612	55,558,575
Total operating expenses	$ 164,651,336	$ 157,607,584	$ 153,543,506	$ 150,358,168	$ 146,669,994

Source: Fairfax County Wastewater Management Program

Notes:

(a) Wastewater treatment expenses are direct operating expenses, excluding depreciation and amortization.

(b) Other plants include Harbor View and Prince William County Service Authority.

Unaudited - see accompanying report of independent auditor.

2.0 REVENUE CAPACITY

Revenue capacity information is intended to assist users in understanding and assessing the factors affecting the system's ability to generate its own-source revenues. There are six tables presented in this section.

TABLE 2.1 - SEWER RATE STRUCTURE (a) - LAST TEN FISCAL YEARS

Fiscal Year	Availability Charge (b) (Per Unit) Single Family Residence	Townhouse/ Apartment	Commercial Fixture	Retail Sewer Service Charge (c) (Per 1,000 gallons)	Retail Residential Sewer Service Base Charge (d) (Per Bill)
2023	$ 8,592	$ 6,874	$ 430	$ 8.09	$ 40.14
2022	8,507	6,806	425	7.72	36.54
2021	8,340	6,672	417	7.28	32.91
2020	8,340	6,672	417	7.28	32.91
2019	8,100	6,480	405	7.00	30.38
2018	8,100	6,480	405	6.75	27.62
2017	7,750	6,200	401	6.68	24.68
2016	7,750	6,200	401	6.65	20.15
2015	7,750	6,200	401	6.62	15.86
2014	7,750	6,200	401	6.55	12.79

Connection Charge (e) - Effective July 1, 2011, the rate was increased to $152.50 per foot. Prior to this date, the rate was $6.00 per foot since December 1970.

Lateral Spur Charge (f) - The rate has been $600 per spur connection since March 1981.

Source: Fairfax County Wastewater Management Program

Notes:

(a) Sewer rates are established by the Board of Supervisors pursuant to Chapter 67.1 of the County Code. Rates and code language are reviewed annually by the County staff as part of the County's annual long-range planning and short-term budgeting process and revised as necessary. These rates are in effect for County customers only. Customers outside the County are billed subject to sale of service agreements.

(b) Availability Charge - This is a one-time charge collected from all new customers prior to connection to the System to cover in part the new customer's proportionate cost of System facilities beyond the collector system. Residential units pay on a per unit basis. Commercial units pay an equivalent residential (single family residence) unit fee for the first 19 plumbing fixture units, then on a per fixture unit basis for any fixture units in excess of the residential equivalent amount.

(c) Retail Sewer Service Charge - Single family residences and townhouses are billed sewer service charges quarterly based on water consumption from the previous winter quarter. Apartment and nonresidential complexes are billed based on consumption used during the billing period. These charges are collected by three water billing agents: Fairfax Water, the City of Falls Church, and the Town of Vienna.

(d) Beginning in FY 2010, a base charge of $5.00 per bill is assessed, in addition to the sewer service charge, to partially recover fixed expenses for billing, wastewater collection, engineering, planning, and administrative expenses.

(e) Connection Charge: frequently called the front footage charge, this is a one-time charge collected from new customers prior to connection to the System as a partial repayment of County installed collector sewers.

(f) Lateral Spur Charge: this is a one-time charge that applies only to those new customers who are connecting to County installed sanitary sewers where the lateral spurs have been installed at County expense.

Unaudited - see accompanying report of independent auditor.

Table 2.2 - Customer Base by Treatment Plant - Last Ten Fiscal Years

	Fiscal Year				
Treatment Plant	**2023**	**2022**	**2021**	**2020**	**2019**
Noman M. Cole, Jr.	151,599	153,495	153,178	152,990	150,482
DCWASA Blue Plains	90,955	91,430	90,927	90,617	89,578
Alexandria Renew Enterprises	69,217	70,480	70,323	70,232	68,754
Upper Occoquan Service Authority	50,446	50,832	50,563	50,435	49,734
Arlington County	10,838	11,000	10,990	10,976	10,733
Other (a)	378	377	376	376	375
Customer base	373,433	377,614	376,357	375,626	369,656

	Fiscal Year				
Treatment Plant	**2018**	**2017**	**2016**	**2015**	**2014**
Noman M. Cole, Jr.	150,103	149,880	149,667	149,344	149,172
DCWASA Blue Plains	89,182	88,920	88,701	88,325	88,139
Alexandria Renew Enterprises	68,663	68,606	68,455	68,293	68,207
Upper Occoquan Service Authority	49,576	49,467	49,428	49,351	49,288
Arlington County	10,716	10,706	10,688	10,675	10,664
Other (a)	373	372	372	369	368
Customer base	368,613	367,951	367,311	366,357	365,838

Source: Fairfax County Wastewater Management Program

Notes:

(a) Other service areas include Harbor View and Prince William County Service Authority. In addition, there are holding tank facilities in the Town of Clifton and Gunston Wiley.

Unaudited - see accompanying report of independent auditor.

TABLE 2.3 - CUSTOMER BASE BY SERVICE CLASS - LAST TEN FISCAL YEARS

	Fiscal Year				
Service Class	**2023**	**2022**	**2021**	**2020**	**2019**
Residential units:					
Single family	168,380	167,978	167,359	166,981	166,462
Multi-family	96,348	96,327	96,264	96,263	96,258
Townhouse	80,327	80,045	79,502	79,155	78,636
Total residential units	345,055	344,350	343,125	342,399	341,356
Nonresidential units (a)	28,378	28,367	28,335	28,330	28,300
Total customer base	373,433	372,717	371,460	370,729	369,656

	Fiscal Year				
Service Class	**2018**	**2017**	**2016**	**2015**	**2014**
Residential units:					
Single family	165,936	165,552	165,113	164,418	164,021
Multi-family	96,256	96,251	96,247	96,226	96,212
Townhouse	78,159	77,905	77,722	77,549	77,469
Total residential units	340,351	339,708	339,082	338,193	337,702
Nonresidential units (a)	28,262	28,243	28,229	28,164	28,136
Total customer base	368,613	367,951	367,311	366,357	365,838

Source: Fairfax County Wastewater Management Program
Notes:
(a) Nonresidential units include long-term care, dorms, and extended-stay rooms.

Unaudited - see accompanying report of independent auditor.

Table 2.4 - Number of Sewer Connections Sold (a) - Last Ten Fiscal Years

	Fiscal Year				
Service Class	**2023**	**2022**	**2021**	**2020**	**2019**
Residential units:					
Single family	160	248	228	156	225
Multi-family	1,444	931	3,076	1,655	1,121
Townhouse	394	476	555	430	436
Total residential units	1,998	1,655	3,859	2,241	1,782
Nonresidential units (b)	267	-	1	-	5
Total sewer connections sold	2,265	1,655	3,860	2,241	1,787
Additional commercial fixture units sold	20,077	11,200	19,443	12,414	12,562

	Fiscal Year				
Service Class	**2018**	**2017**	**2016**	**2015**	**2014**
Residential units:					
Single family	135	227	161	189	168
Multi-family	2,575	2,709	1,386	1,608	2,571
Townhouse	424	213	136	195	84
Total residential units	3,134	3,149	1,683	1,992	2,823
Nonresidential units (b)	9	18	12	19	571
Total sewer connections sold	3,143	3,167	1,695	2,011	3,394
Additional commercial fixture units sold	12,315	12,151	9,163	12,898	12,463

Source: Fairfax County Wastewater Management Program

Notes:

(a) The number of sewer connections sold includes only County customers. Availability fees are generated by sewer connections sold. See Table 2.1 for the rate structure.

(b) Nonresidential units include long-term care, dorms and extended-stay rooms.

Unaudited - see accompanying report of independent auditor.

TABLE 2.5 - NUMBER OF NEW SEWER CONNECTIONS - LAST TEN FISCAL YEARS

	Fiscal Year				
Service Class	**2023**	**2022**	**2021**	**2020**	**2019**
Residential units:					
Single family	402	619	378	519	526
Multi-family	21	63	1	5	2
Townhouse	282	543	347	519	477
Total residential units	705	1,225	726	1,043	1,005
Nonresidential units (a)	11	32	5	30	38
Total new sewer connections	716	1,257	731	1,073	1,043

	Fiscal Year				
Service Class	**2018**	**2017**	**2016**	**2015**	**2014**
Residential units:					
Single family	384	439	695	397	755
Multi-family	5	4	21	14	5
Townhouse	254	183	173	80	168
Total residential units	643	626	889	491	928
Nonresidential units (a)	19	14	65	28	44
Total new sewer connections	662	640	954	519	972

Source: Fairfax County Wastewater Management Program

Notes:

(a) Nonresidential units include long-term care, dorms and extended-stay rooms.

Unaudited - see accompanying report of independent auditor.

TABLE 2.6 - TEN LARGEST CUSTOMERS - CURRENT YEARS AND NINE YEARS AGO

	Fiscal Year 2023			Fiscal Year 2014		
Name	Annual Revenues	Rank	Percentage of Total Operating Revenues	Annual Revenues	Rank	Percentage of Total Operating Revenues
INOVA Health Systems - Fair Oaks Hospital	$ 440,377	1	0.18 %	$ 144,536	10	0.08 %
Skyline Plaza	349,483	2	0.14			
INOVA Fairfax Hospital	319,380	3	0.13	517,919	1	0.28
5599 Seminary Rd. Owner, LLC	293,168	4	0.12			
Rotonda Condominium	268,885	5	0.11			
Skyline Sq. Owners Assoc.	258,295	6	0.11			
Skyline House	206,265	7	0.08			
Woodlake Towers Inc.	199,983	8	0.08			
7931 Patriot Drive Owners, LLC	178,332	9	0.07			
Southern Management Corporation	139,247	10	0.06			
Green Springs Village	-	-	-	506,771	2	0.27
Reston Hospital Center	-	-	-	268,307	3	0.14
Fairmont Residential	-	-	-	263,321	4	0.14
Montebello Condo Unit	-	-	-	224,451	5	0.12
Homart Development Corp.	-	-	-	203,085	6	0.11
BECO Management	-	-	-	181,844	7	0.10
Hyatt Regency Reston	-	-	-	145,007	8	0.08
ZML-Reston Town Center LLC	-	-	-	144,800	9	0.08
Totals	$ 2,653,415		1.09 %	$ 2,600,041		1.40 %

Source: Fairfax County Wastewater Management Program and FY2014 Comprehensive Annual Financial Report

Unaudited - see accompanying report of independent auditor.

3.0 - DEBT CAPACITY

Debt capacity information is intended to assist users in understanding and assessing the System's debt burden and its ability to issue additional debt. There are three tables in this section.

TABLE 3.1 - RATIOS OF OUTSTANDING DEBT - LAST TEN FISCAL YEARS

	Fiscal Year				
	2023	2022	2021	2020	2019
Senior debt:					
2021A Sewer revenue bonds	$ 238,079,347	$ 239,722,949	$ 241,366,552	$ -	$ -
2021B Sewer revenue refunding bonds	28,310,470	28,525,812	28,741,153	-	-
2017 Sewer revenue bonds	93,045,628	95,191,070	97,276,512	99,306,954	101,287,396
2016 Sewer revenue refunding bonds	167,949,353	175,271,962	180,254,571	185,102,180	186,134,789
2014 Sewer revenue refunding bonds	34,276,106	39,274,766	44,043,426	48,592,086	52,935,746
2012 Sewer revenue bonds	-	-	2,386,175	37,803,997	39,888,736
2009 Sewer revenue bonds	-	-	-	-	4,146,400
Total senior debt	561,660,904	577,986,559	594,068,389	370,805,217	384,393,067
Subordinate debt:					
EDA S2021A revenue bonds	24,074,653	24,931,907	-	-	-
Upper Occoquan Service Authority bonds	225,098,561	220,894,723	238,023,361	230,580,059	220,716,512
Virginia Resources Authority bonds	-	-	3,253,412	9,155,312	15,001,542
Total subordinate debt	249,173,214	245,826,630	241,276,773	239,735,371	235,718,054
Total outstanding debt	$ 810,834,118	$ 823,813,189	$ 835,345,162	$ 610,540,588	$ 620,111,121
Outstanding debt ratios:					
Per capita (a)	$ 691	$ 704	$ 713	$ 523	$ 538
Percent of personal income (a)	0.73%	0.78%	0.83%	0.63%	0.69%
Per connection (b)	$ 2,171	$ 2,210	$ 2,220	$ 1,647	$ 1,678
To operating revenues (c)	$ 3.34	$ 3.56	$ 3.86	$ 2.80	$ 2.94

	Fiscal Year				
	2018	2017	2016	2015 (d)	2014 (d)
Senior debt:					
2017 Sewer revenue bonds	$ 103,222,838	$ 103,823,280	$ -	$ -	$ -
2016 Sewer revenue bonds	187,167,398	188,200,007	189,232,620	-	-
2014 Sewer revenue bonds	57,059,406	60,998,066	64,786,726	68,475,386	68,989,046
2012 Sewer revenue bonds	41,883,475	43,788,214	45,612,953	101,522,504	103,487,772
2009 Sewer revenue bonds	7,603,470	10,890,540	14,022,610	146,030,833	149,111,493
2004 Sewer revenue refunding bonds	-	-	-	-	3,413,434
Total senior debt	396,936,587	407,700,107	313,654,909	316,028,723	325,001,745
Subordinate debt:					
Upper Occoquan Service Authority bonds	231,842,892	242,574,706	254,524,994	265,680,629	277,293,041
Virginia Resources Authority bonds	20,792,625	26,529,083	32,085,998	37,440,694	42,671,739
Total subordinate debt	252,635,517	269,103,789	286,610,992	303,121,323	319,964,780
Total outstanding debt	$ 649,572,104	$ 676,803,895	$ 600,265,901	$ 619,150,046	$ 644,966,525
Outstanding debt ratios:					
Per capita (a)	$ 568	$ 594	$ 526	$ 544	$ 570
Percent of personal income (a)	0.75%	0.79%	0.70%	0.76%	0.80%
Per connection (b)	$ 1,762	$ 1,839	$ 1,634	$ 1,690	$ 1,763
To operating revenues (c)	$ 3.25	$ 3.46	$ 3.15	$ 3.30	$ 3.43

Source: Fairfax County Wastewater Management Program

Notes:

(a) See Table 4.1 for population and personal income data. Ratios are based on the population and personal income data as of the prior calendar year.

(b) See Tables 2.2 and 2.3 for customer base data.

(c) See Table 1.3 for operating revenue data.

(d) For FY 2014 - 2015, amounts for bonds are reported gross, excluding premiums and/or discounts and deferred amounts on refundings.

Unaudited - see accompanying report of independent auditor.

Table 3.2 - Pledged Revenue Coverage - Last Ten Fiscal Years

				Debt Service Requirements (e)			Debt Coverage (f)		
							Senior	Total	
Fiscal Year	Gross Revenues (a)	Operating Expenses (b)	Net Revenue Available for Debt Service	Senior Debt (c)	Subordinate Debt (d)	Total	w/o AF	w/AF	w/o AF
2023	$ 272,781,149	$ 121,114,434	$ 151,666,715	$ 33,483,256	$ 21,299,479	$ 54,782,735	3.83	2.77	2.34
2022	248,048,892	103,545,619	144,503,273	29,626,582	23,169,298	52,795,880	4.33	2.74	2.43
2021	251,953,388	109,195,101	142,758,287	25,134,131	24,839,693	49,973,824	4.30	2.86	2.16
2020	242,894,311	107,459,887	135,434,424	25,062,781	24,626,802	49,689,583	4.52	2.73	2.28
2019	236,111,014	101,359,127	134,751,887	25,026,131	25,002,875	50,029,006	4.53	2.69	2.26
2018	228,258,855	100,996,444	127,262,411	21,798,234	21,545,695	43,343,929	4.65	2.94	2.34
2017	221,981,894	94,166,419	127,815,475	17,319,472	25,812,397	43,131,869	5.92	2.96	2.38
2016	206,286,555	92,452,813	113,833,742	20,896,350	26,219,955	47,116,305	4.74	2.42	2.10
2015	210,056,680	92,311,556	117,745,124	20,524,756	26,239,074	46,763,830	4.68	2.52	2.04
2014	212,782,338	91,111,419	121,670,919	21,889,744	26,107,036	47,996,780	4.46	2.53	2.03

Source: Fairfax County Wastewater Management Program

Notes:

(a) Gross revenues include all revenues except amortization of deferred gains on bond refundings and gains on disposals of capital assets.

(b) Operating expenses do not include depreciation and amortization.

(c) Senior debt includes sewer revenue and revenue refunding bonds issued by the System and the System's share of debt of the Alexandria Sanitation Authority.

(d) Subordinate debt is paid after senior debt and operating expenses. It includes debt service on the System's share of debt of UOSA Revenue Bonds and VRA Revenue Bonds.

(e) The same resources are used for all debt service requirements. See Table 3.3 for details of principal and interest amounts.

(f) The minimum senior debt service coverage should be no less than 1.25 times the debt service requirements for the fiscal year.

Unaudited - see accompanying report of independent auditor.

TABLE 3.3 - DEBT SERVICE REQUIREMENTS (a) - LAST TEN FISCAL YEARS

	Fiscal Year				
	2023	2022	2021	2020	2019
Senior debt:					
2021A Sewer revenue bonds	$ 8,725,350	$ 5,235,210	$ -	$ -	$ -
2021B Sewer revenue refunding bonds	895,650	537,390	-	-	-
2017 Sewer revenue bonds	5,506,400	5,507,000	5,510,300	5,509,600	5,505,325
2016 Sewer revenue refunding bonds	12,557,481	10,453,732	10,454,956	6,697,181	6,697,181
2014 Sewer revenue refunding bonds	5,798,375	5,786,875	5,774,125	5,765,750	5,731,750
2012 Sewer revenue bonds	-	2,106,375	3,394,750	3,395,125	3,395,875
2009 Sewer revenue bonds	-	-	-	3,695,125	3,696,000
Total senior debt	33,483,256	29,626,582	25,134,131	25,062,781	25,026,131
Subordinate debt:					
EDA S2021A revenue bonds	1,538,375	337,244	-	-	-
Upper Occoquan Service Authority bonds	19,761,104	19,555,443	18,864,801	18,651,910	19,027,983
Virginia Resources Authority bonds	-	3,276,611	5,974,892	5,974,892	5,974,892
Total subordinate debt	21,299,479	23,169,298	24,839,693	24,626,802	25,002,875
Total debt service requirements	$ 54,782,735	$ 52,795,880	$ 49,973,824	$ 49,689,583	$ 50,029,006

	Fiscal Year				
	2018	2017	2016	2015	2014
Senior debt:					
2017 Sewer revenue bonds	$ 2,293,053	$ -	$ -	$ -	$ -
2016 Sewer revenue refunding bonds	6,697,181	4,520,597	-	-	-
2014 Sewer revenue refunding bonds	5,722,625	5,707,375	5,688,250	1,901,681	-
2012 Sewer revenue bonds	3,392,125	3,394,125	5,556,950	5,554,675	5,556,200
2009 Sewer revenue bonds	3,693,250	3,697,375	9,651,150	9,650,025	9,651,900
2004 Sewer revenue refunding bonds	-	-	-	3,418,375	6,681,644
Total senior debt	21,798,234	17,319,472	20,896,350	20,524,756	21,889,744
Subordinate debt:	-				
Upper Occoquan Service Authority bonds	15,570,803	19,837,505	20,016,677	20,035,797	19,903,758
Virginia Resources Authority bonds	5,974,892	5,974,892	6,203,278	6,203,277	6,203,278
Total subordinate debt	21,545,695	25,812,397	26,219,955	26,239,074	26,107,036
Total debt service requirements	$ 43,343,929	$ 43,131,869	$ 47,116,305	$ 46,763,830	$ 47,996,780

Source: Fairfax County Wastewater Management Program

(a) Debt service amounts reported in this table include both principal and interest payments on bonds based on a cash basis.

Unaudited - see accompanying report of independent auditor.

4.0 Demographic and Economic Information

Demographic and economic information is intended to assist users in understanding the socioeconomic environment within which a government entity operates and to provide information that facilitates comparisons of financial statement information over time and among environments. There are two tables presented in this section.

Table 4.1 - Demographic and Economic Statistics - Last Ten Calendar Years

Calendar Year	County Population: Total (a)	County Population: On County Sewer (b)	Personal Income (c) (000s)	Per Capita Personal Income (c)	Unemployment Rate (d)
2022	1,172,646	959,000	$ 111,022,605	$ 94,677	2.5 %
2021	1,170,443	957,500	105,777,709	88,971	3.5
2020	1,171,848	954,000	100,944,159	86,141	5.6
2019	1,166,965	952,000	96,205,762	82,441	2.3
2018	1,152,873	949,000	90,357,574	78,376	2.4
2017	1,142,888	945,000	86,834,344	75,978	3.0
2016	1,138,652	941,000	85,311,224	74,923	3.2
2015	1,142,234	937,000	85,675,546	75,007	3.1
2014	1,137,538	936,245	81,620,627	71,752	3.5
2013	1,130,924	935,435	80,982,075	71,607	3.7

Notes:

(a) Total population data includes the Cities of Fairfax and Falls Church and is obtained from the U.S. Census Bureau's American Fact Finder.

(b) Population data for those on County Sewer is obtained from the Fairfax County Wastewater Management Program.

(c) Personal income data is obtained from the Bureau of Economic Analysis, U.S. Department of Commerce and includes the Cities of Fairfax and Falls Church. Data for only Fairfax County is not available; however, it is believed that the inclusion of these Cities does not significantly affect the County's data. Fairfax County data for 2022 is estimated using percent change in per capita personal income from 2021.

(d) Unemployment rates are obtained from the Virginia Employment Commission's Annual Unemployment Statistics for the calendar year, not seasonally adjusted.

Unaudited - see accompanying report of independent auditor.

TABLE 4.2 - PRINCIPAL EMPLOYERS - CURRENT YEAR AND NINE YEARS AGO

	Fiscal Year 2023 (a)			Fiscal Year 2014 (a)		
Employer	Number of Employees (b)	Rank	Pct. of Total County Employment (c)	Number of Employees (b)	Rank	Pct. of Total County Employment (c)
Federal Government	27,821	1	4.48 %	23,586	2	4.09 %
Fairfax County Public Schools	25,526	2	4.11	24,590	1	4.27
Inova Health System	20,000	3	3.22	7,000-10,000	4	1.47
Fairfax County Government	12,426	4	2.00	12,240	3	2.12
George Mason University	5,000-9,999	5	1.21	5,000-10,000	5	1.30
Booz-Allen Hamilton	5,000-9,999	6	1.21	4,000-6,999	6	0.95
Amazon	5,000-9,999	7	1.21	-	-	-
Capital One	5,000-9,999	8	1.21	-	-	-
Science Applications International Corporation (d)	5,000-9,999	9	1.21	4,000-6,999	10	0.95
Federal Home Loan Mortgage	5,000-9,999	10	1.21	4,000-6,999	7	0.95
General Dynamics	-	-	-	4,000-6,999	8	0.95
Northrop Grumman	-	-	-	4,000-6,999	9	0.95
Lockheed Martin Corporation	-	-	-	1,000-3,999	-	0.43
Computer Science Corporation				1,000-3,999	-	0.43
Navy Federal Credit Union				1,000-3,999	-	0.43
Total			21.07 %			19.29 %

Source: Fairfax County Economic Development Authority, using Virginia Employment Commission data; Fairfax County Public Schools; Fairfax County Department of Management and Budget

Notes:

(a) Employment information for fiscal year 2023, excluding data for Fairfax County Government and Fairfax County Public Schools, is from the 4th quarter of calendar year 2022 VEC and Fairfax County's Economic Development Authority (Jan 23). Employment information for fiscal year 2014 is as presented in the fiscal year 2014 Comprehensive Annual Financial Report.

(b) Employment estimates for separate facilities of the same firm have been combined to create company totals. Employment ranges for the private sector are given to ensure confidentiality.

(c) Percentages are based on the midpoint of the employment range. Average total County employment for fiscal year 2023 is estimated at 625,452 based on Virginia Employment Commission. Average total County employment for fiscal year 2014 was estimated at 590,282.

(d) Science Applications International Corporation employment is reported prior to the September 2013 split into two independent companies (SAIC and Leidos).

Unaudited - see accompanying report of independent auditor.

5.0 Operating Information

Operating information is intended to provide contextual information about a government entity's operations and resources to assist readers in using financial statement information to understand and assess a government entity's economic condition. There are nine tables presented in this section.

Table 5.1 - Wastewater Management Employees by Division (a) - Last Ten Fiscal Years

	Fiscal Year				
Division	**2023**	**2022**	**2021**	**2020**	**2019**
Planning & Administration	33	32	32	31	29
Laboratory	23	23	23	23	23
Collection	139	139	139	139	138
Treatment	136	136	135	135	134
Total	331	330	329	328	324

	Fiscal Year				
Division	**2018**	**2017**	**2016**	**2015**	**2014**
Planning & Administration	29	32	35	35	35
Laboratory	23	21	19	19	19
Collection	134	134	132	132	132
Treatment	131	132	129	129	129
Total	317	319	315	315	315

Source: Fairfax County Wastewater Management Program

Notes:
(a) Number of employees represents full time equivalents as of June 30 of the fiscal year.

Unaudited - see accompanying report of independent auditor.

TABLE 5.2 - TREATMENT PLANT CAPACITIES (MGD) - LAST TEN FISCAL YEARS

	Fiscal Year				
Treatment Plant	**2023**	**2022**	**2021**	**2020**	**2019**
Noman M. Cole, Jr.	67.00	67.00	67.00	67.00	67.00
DCWASA Blue Plains	31.00	31.00	31.00	31.00	31.00
Alexandria Renew Enterprises	32.40	32.40	32.40	32.40	32.40
Upper Occoquan Service Authority	22.10	22.10	22.10	22.10	22.60
Arlington County	3.00	3.00	3.00	3.00	3.00
Loudoun Water	1.00	1.00	1.00	1.00	1.00
Other (a)	0.18	0.18	0.18	0.18	0.18
Treatment plant capacity	156.68	156.68	156.68	156.68	157.18

	Fiscal Year				
Treatment Plant	**2018**	**2017**	**2016**	**2015**	**2014**
Noman M. Cole, Jr.	67.00	67.00	67.00	67.00	67.00
DCWASA Blue Plains	31.00	31.00	31.00	31.00	31.00
Alexandria Renew Enterprises	32.40	32.40	32.40	32.40	32.40
Upper Occoquan Service Authority	22.60	22.60	22.60	22.60	22.60
Arlington County	3.00	3.00	3.00	3.00	3.00
Loudoun Water	1.00	1.00	1.00	1.00	1.00
Other (a)	0.18	0.18	0.18	0.18	0.18
Treatment plant capacity	157.18	157.18	157.18	157.18	157.18

Source: Fairfax County Wastewater Management Program

Notes:
(a) Other plants include Harbor View and Prince William County Service Authority.

Unaudited - see accompanying report of independent auditor.

Table 5.3 - Average Wastewater Flows (MGD) by Treatment Plant - Last Ten Fiscal Years

	Fiscal Year				
Treatment Plant	**2023**	**2022**	**2021**	**2020**	**2019**
Noman M. Cole, Jr.	35.38	38.56	40.54	37.08	42.24
DCWASA Blue Plains	26.86	27.70	26.86	27.53	31.66
Alexandria Renew Enterprises	15.75	17.34	18.06	16.18	21.64
Upper Occoquan Service Authority	11.78	12.30	13.06	12.43	14.44
Arlington County	2.18	2.17	2.11	2.18	2.34
Other (a)	0.04	0.05	0.06	0.04	0.06
Total system flow	91.98	98.12	100.69	95.44	112.38

	Fiscal Year				
Treatment Plant	**2018**	**2017**	**2016**	**2015**	**2014**
Noman M. Cole, Jr.	36.95	35.64	37.78	38.36	39.77
DCWASA Blue Plains	26.80	25.36	27.14	28.17	29.98
Alexandria Renew Enterprises	17.31	15.46	16.52	16.39	19.07
Upper Occoquan Service Authority	12.47	11.86	12.64	12.76	13.53
Arlington County	2.25	2.18	2.08	2.04	1.96
Other (a)	0.02	0.02	0.04	0.03	0.03
Total system flow	95.80	90.52	96.20	97.75	104.34

Source: Fairfax County Wastewater Management Program

Notes:
(a) Other plants include Loudoun Water, Harbor View, and Prince William County Service Authority.

Unaudited - see accompanying report of independent auditor.

Table 5.4 - Average Wastewater Flows (MGD) by Source - Last Ten Fiscal Years

	Fiscal Year				
Source	**2023**	**2022**	**2021**	**2020**	**2019**
County connections	83.51	88.77	89.77	85.66	100.21
City of Fairfax	2.00	2.49	2.88	2.34	3.06
Town of Herndon	2.75	2.64	2.97	3.02	3.36
Arlington County	1.11	1.20	1.39	1.24	1.59
Fort Belvoir	0.88	0.92	1.23	1.02	1.40
City of Falls Church	1.01	1.00	1.18	1.05	1.24
Town of Vienna	0.69	0.90	0.97	0.89	1.14
Other (a)	0.04	0.20	0.29	0.22	0.38
Total system flow	91.98	98.12	100.68	95.44	112.38

	Fiscal Year				
Source	**2018**	**2017**	**2016**	**2015**	**2014**
County connections	85.93	80.85	85.82	87.93	92.26
City of Fairfax	2.57	2.95	3.24	2.84	3.20
Town of Herndon	2.88	2.68	2.43	2.46	2.66
Arlington County	1.17	1.09	1.35	1.37	1.39
Fort Belvoir	1.18	1.08	1.29	1.13	2.70
City of Falls Church	1.04	0.86	0.94	0.89	0.98
Town of Vienna	0.75	0.69	0.75	0.77	0.86
Other (a)	0.28	0.32	0.38	0.36	0.29
Total system flow	95.80	90.52	96.20	97.75	104.34

Source: Fairfax County Wastewater Management Program

Notes:

(a) Other sources of wastewater include Loudoun County, Fairfax Water, and the County's solid waste resource recovery facility.

Unaudited - see accompanying report of independent auditor.

Table 5.5 - Maximum Monthly Flows (MGD) by Treatment Plant - Last Ten Fiscal Years

	Recent Five Years		Past Ten Years	
Treatment Plant	**Flow**	**Month**	**Flow**	**Month**
Noman M. Cole, Jr.	46.51	Mar-19	46.51	Mar-19
DCWASA Blue Plains	36.16	Aug-21	36.16	Aug-21
Alexandria Renew Enterprises	25.14	Dec-18	25.14	Dec-18
Upper Occoquan Service Authority	16.68	Nov-18	16.68	Nov-18
Arlington County	2.47	Dec-18	2.47	Dec-18

Source: Fairfax County Wastewater Management Program

Unaudited - see accompanying report of independent auditor.

TABLE 5.6 - AVERAGE UNUSED CAPACITY (MGD) BY TREATMENT PLANT (a) - LAST TEN FISCAL YEARS

	Fiscal Year				
Treatment Plant	**2023**	**2022**	**2021**	**2020**	**2019**
Noman M. Cole, Jr.	31.62	28.44	26.46	29.92	24.76
DCWASA Blue Plains	4.14	3.30	4.14	3.47	(0.66)
Alexandria Renew Enterprises	16.65	15.06	14.34	16.22	10.76
Upper Occoquan Service Authority	10.32	9.80	9.04	9.67	8.16
Arlington County	0.82	0.83	0.89	0.82	0.66
Loudoun Water	1.00	1.00	1.00	1.00	1.00
Other (b)	0.14	0.13	0.12	0.14	0.12
Total unused capacity	64.70	58.56	55.99	61.24	44.80

	Fiscal Year				
Treatment Plant	**2018**	**2017**	**2016**	**2015**	**2014**
Noman M. Cole, Jr.	30.05	31.36	29.22	28.64	27.23
DCWASA Blue Plains	4.20	5.64	3.86	2.83	1.02
Alexandria Renew Enterprises	15.09	16.94	15.88	16.01	13.33
Upper Occoquan Service Authority	10.13	10.74	9.96	9.83	9.07
Arlington County	0.75	0.82	0.92	0.97	1.04
Loudoun Water	1.00	1.00	1.00	1.00	1.00
Other (b)	0.16	0.16	0.14	0.15	0.15
Total unused capacity	61.38	66.66	60.98	59.43	52.84

Source: Fairfax County Wastewater Management Program

Notes:
(a) See Table 5.2 for treatment plant capacity.

(b) Other plants include Harbor View and Prince William County Service Authority.

Unaudited - see accompanying report of independent auditor.

TABLE 5.7 - AVERAGE CAPACITY UTILIZATION (a) BY TREATMENT PLANT - LAST TEN FISCAL YEARS

	Fiscal Year				
Treatment Plant	**2023**	**2022**	**2021**	**2020**	**2019**
Noman M. Cole, Jr.	52.80 %	57.55 %	60.51 %	55.34 %	63.04 %
DCWASA Blue Plains	86.63	89.35	86.65	88.79	102.13
Alexandria Renew Enterprises	48.61	53.52	55.74	49.95	66.79
Upper Occoquan Service Authority	53.32	55.66	59.10	56.24	63.89
Arlington County	72.60	72.33	70.33	72.80	78.00
Other (b)	20.00	27.78	31.11	20.00	33.33
Total system capacity utilization	58.71 %	62.62 %	64.26 %	60.91 %	71.50 %

	Fiscal Year				
Treatment Plant	**2018**	**2017**	**2016**	**2015**	**2014**
Noman M. Cole, Jr.	55.15 %	53.19 %	56.39 %	57.25 %	59.36 %
DCWASA Blue Plains	86.45	81.81	87.55	90.87	96.71
Alexandria Renew Enterprises	53.43	47.72	50.99	50.59	58.86
Upper Occoquan Service Authority	55.18	52.48	55.93	56.46	59.87
Arlington County	75.00	72.67	69.33	68.00	65.33
Other (b)	11.11	11.11	22.22	16.67	16.11
Total system capacity utilization	60.95 %	57.59 %	61.20 %	62.19 %	66.38 %

Source: Fairfax County Wastewater Management Program

Notes:
(a) See Table 5.2 for treatment plant capacity.

(b) Other plants include Harbor View and Prince William County Service Authority.

Unaudited - see accompanying report of independent auditor.

Table 5.8 - Average Unit Cost of Wastewater Treatment ($/MG) by Treatment Plant - Last Ten Fiscal Years

	Fiscal Year				
Treatment Plant	**2023**	**2022**	**2021**	**2020**	**2019**
Noman M. Cole, Jr.	$ 2,597	$ 2,043	$ 1,834	$ 1,979	$ 1,705
DCWASA Blue Plains	1,852	1,364	1,562	1,586	1,343
Alexandria Renew Enterprises	2,391	1,704	1,710	1,876	1,408
Upper Occoquan Service Authority	3,561	3,050	2,836	3,148	2,442
Arlington County	3,203	2,530	3,399	2,601	3,032

	Fiscal Year				
Treatment Plant	**2018**	**2017**	**2016**	**2015**	**2014**
Noman M. Cole, Jr.	$ 1,903	$ 1,856	$ 1,651	$ 1,542	$ 1,509
DCWASA Blue Plains	1,452	1,150	1,245	1,460	1,080
Alexandria Renew Enterprises	2,148	2,366	1,938	2,237	1,887
Upper Occoquan Service Authority	2,825	3,070	2,868	2,701	2,486
Arlington County	2,982	2,595	2,703	3,642	3,110

Source: Fairfax County Wastewater Management Program

Unaudited - see accompanying report of independent auditor.

TABLE 5.9 - CAPITAL ASSET STATISTICS - LAST TEN FISCAL YEARS

	Treatment Plants (a)				
Fiscal Year	System-Owned	Purchased Capacity	Number of Pumping Stations	Number of Metering Stations	Miles of Sewer Pipe
2023	1	6	70	57	3,300
2022	1	6	63	57	3,300
2021	1	6	63	57	3,250
2020	1	6	63	57	3,243
2019	1	6	63	57	3,249
2018	1	6	63	57	3,247
2017	1	6	59	54	3,242
2016	1	6	59	54	3,431
2015	1	6	59	54	3,425
2014	1	6	59	54	3,420

Source: Fairfax County Wastewater Management Program

Notes:

(a) The System owns one treatment plant, the Noman M. Cole Jr. Plant, and has purchased capacity in the following treatment plants owned by other local jurisdictions: DC Water Blue Plains, Alexandria Renew Enterprises, Upper Occoquan Service Authority, Arlington County, Loudoun Water, and Prince William County Service Authority.

Unaudited - see accompanying report of independent auditor.

6.0 Miscellaneous Information

Miscellaneous information is additional information presented that may be of interest to readers of this report. There are two tables and a wastewater treatment plant service area map presented in this section.

Table 6.1 - Wastewater Flow (GPD) per Capita by Treatment Plant - Last Ten Fiscal Years

	Fiscal Year				
Treatment Plant	**2023**	**2022**	**2021**	**2020**	**2019**
Noman M. Cole, Jr.	90	98	104	94	108
DCWASA Blue Plains	117	121	118	120	140
Alexandria Renew Enterprises	88	97	101	90	122
Upper Occoquan Service Authority	92	96	102	96	114
Arlington County	78	77	75	77	84
Total system flow per capita	96	102	106	99	118
Annual rainfall, inches	30.02	41.98	51.31	41.92	65.40

	Fiscal Year				
Treatment Plant	**2018**	**2017**	**2016**	**2015**	**2014**
Noman M. Cole, Jr.	95	92	98	100	103
DCWASA Blue Plains	119	113	122	128	135
Alexandria Renew Enterprises	98	87	94	94	109
Upper Occoquan Service Authority	99	94	101	104	108
Arlington County	81	79	76	75	71
Total system flow per capita	101	96	103	105	112
Annual rainfall, inches	44.24	31.03	36.55	41.63	48.57

Source: Fairfax County Wastewater Management Program

Unaudited - see accompanying report of independent auditor.

Table 6.2 - Wastewater Flow (GPD) per Connection by Treatment Plant - Last Ten Fiscal Years

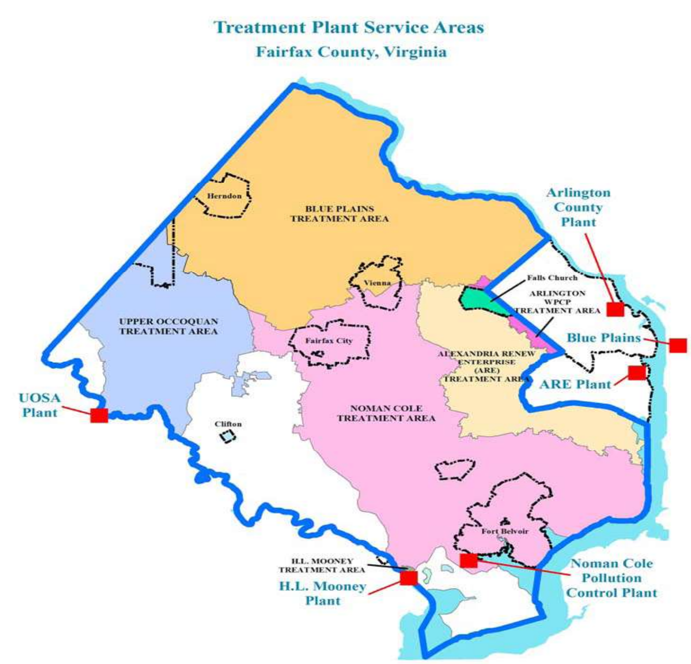
	Fiscal Year				
Treatment Plant	**2023**	**2022**	**2021**	**2020**	**2019**
Noman M. Cole, Jr.	233	255	268	246	281
DCWASA Blue Plains	295	305	298	306	353
Alexandria Renew Enterprises	228	251	262	235	315
Upper Occoquan Service Authority	234	244	261	249	290
Arlington County	201	200	195	202	218
Total system flow per connection	263	263	271	257	304

	Fiscal Year				
Treatment Plant	**2018**	**2017**	**2016**	**2015**	**2014**
Noman M. Cole, Jr.	247	238	252	257	267
DCWASA Blue Plains	302	286	306	319	340
Alexandria Renew Enterprises	253	226	241	240	280
Upper Occoquan Service Authority	252	240	256	261	275
Arlington County	211	204	195	191	184
Total system flow per connection	261	246	262	267	285

Source: Fairfax County Wastewater Management Program

Unaudited - see accompanying report of independent auditor.

Wastewater Treatment Plant Service Area Map



FAIRFAX COUNTY
WASTEWATER MANAGEMENT

Quality of Water = Quality of Life

The three droplets in the logo range in color from dark to medium to light tones to signify the purification process that takes place at treatment facilities.

The end result of this process is water that is returned to the County's streams at a high level of quality that supports a healthy ecosystem and end uses such as recreational boating, swimming and fishing.

The fish—the alewife—portrayed within the droplet, along with the aquatic grasses shown, are bellwethers of a hospitable environment.

The slogan, "Quality of Water = Quality of Life," represents the care taken by Wastewater Management to produce an end product that enhances the quality of residents' environmental and recreational lives.

About the Fairfax County Wastewater Management Logo

VISION We aspire to achieve a pure and natural state of air and water quality by providing superior wastewater utility service in a spirit of teamwork and excellent customer service.

MISSION Our mission is to collect, treat, and monitor wastewater in compliance with all regulatory requirements, using state-of-the-art technology in the most effective manner. We work to improve the environment and enhance the quality of life in Fairfax County.

FAIRFAX COUNTY
WASTEWATER MANAGEMENT

Quality of Water = Quality of Life

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A Publication of the County of Fairfax, Virginia
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