

1800 Limerick Street, Alexandria, Virginia 22314

703.721.3500 AlexRenew.com f 9 6 in









BOARD OF DIRECTORS

John Hill Chair

James Beall Vice Chair

William Dickinson Sec'y-Treas

Adriana Caldarelli

Mark Jinks

CHIEF EXECUTIVE **OFFICER**

Karen L. Pallansch P.E., BCEE, WEF Fellow

GENERAL COUNSEL

McGuire Woods, LLP



MEMORANDUM

TO: AlexRenew Board of Directors

FROM: Secretary-Treasurer

DATE: October 11, 2022

Regular Board of Directors Meeting SUBJECT:

The Regular Meeting of the Board of Directors will be held on Tuesday, October 18, 2022, at 6:00 p.m. at Alexandria Renew Enterprises.

There is currently one item for Board action this month:

Review and Accept Annual Comprehensive Financial Report (Alex Only)



Agenda

Alexandria Renew Enterprises Board of Directors Meeting Tuesday, October 18, 2022 @ 6:00 p.m. 1800 Limerick Street, Ed Semonian Boardroom &

Via livestream: https://voutu.be/PS6NE3W5-kc

No. Item Presenter Action Required

The Tuesday, October 18, 2022, Board of Directors meeting is being held at Alexandria Renew Enterprises (1800 Limerick Street, Ed Semonian Boardroom, Alexandria, VA 22314). Members of the Board and staff are participating in person. The public can access the meeting in the Ed Semonian Boardroom or through the live broadcast on YouTube: https://youtu.be/PS6NE3W5-kc

Public comments will be taken in person at Alexandria Renew Enterprises. Submission of written statements is encouraged. Written statements may be emailed to the Board Secretary at lorna.huff@alexrenew.com.

1	Call to Order (6:00 p.m.)	Chairman	
2.	Approval of Agenda (6:02 p.m.)	Chairman	Approval
3.	Public Comment Period (6:12 p.m.)	Chairman	
4.	Consent Agenda (6:15 p.m.) A. Minutes (Meeting September 20, 2022) (Tab 1)	Chairman	Approval
5.	Finance & Audit Committee Report (6:25) A. Review & Accept Annual Comprehensive Financial Report (Alex Only) (Tab 2)	Chairman Mr. Hill	Information
6.	Unfinished Business (6:35 p.m.) A. CEO Search Progress	Chairman Mr. Hill	Approval
7.	New Business (6:37 p.m.) A. None	Chairman	Approval
8.	AlexRenew Monthly Outcomes Update (6:40 p.m.) (Tab 3)	Ms. Pallansch	Information
9.	Adjourn (7:00 p.m.)	Chairman	

Times shown in parentheses are approximate and serve as guidelines

If you need an interpreter, translator, materials in alternate formats or other accommodations to access this service, activity or program, please call (703) 721-3500 ext. 2260 at least three business days prior to the meeting.

Special Board of Directors Meeting is scheduled for Saturday, October 22, 2022 @ 8:00 a.m.

The next Regular Board of Directors meeting is scheduled for Tuesday, November 15, 2022 @ 6:00 p.m.

Members of the public may park in the parking lot across the street from Alexandria Renew at the corner of Limerick & Bartholomew Streets

Minutes of the 897th Meeting "Celebrating Over 60 Years of Continuous Environmental Excellence"

Alexandria Renew Enterprises 6:00 p.m., Tuesday, September 20, 2022

On Tuesday, September 20, 2022, the Alexandria Renew Enterprises Board of Directors held its regular Board of Directors meeting in the Edward Semonian Board Room at 1800 Limerick Street, with the following present:

Members: Mr. John Hill, Chairman

Mr. James Beall, Vice Chairman

Mr. William Dickinson, Secretary-Treasurer

Ms. Adriana Caldarelli, Member

Mr. Mark Jinks, Member

Staff: Ms. Karen Pallansch, Chief Executive Officer

Ms. Christine McIntyre, Chief Financial Officer Ms. Allison Deines, Director, Policy and Strategy

Ms. Lorna Huff, Secretary to the Board

Counsel: Ms. Amanda Waters, General Counsel,

McGuireWoods LLP

Fairfax County

Representative: Mr. Shahram Mohsenin, Director

Wastewater Planning & Monitoring Division

City Representative: Ms. Erin Bevis-Carver, Director

T&ES/Sanitary Sewer Infrastructure Division

Consultants: Mr. Justin Carl, Owner's Advisor

Brown & Caldwell

Call to Order

The Chairman called the meeting to order at 6:04 p.m.

Approval of Agenda

The Chairman requested that members review and approve the agenda. Ms. Caldarelli moved, and Mr. Dickinson seconded. The Board unanimously approved.

Public Comment Period

There were no members of the public in attendance and the Chairman closed the public comment period.

Consent Agenda

The Chairman requested that members review the Minutes from the July 19, 2022 Board meeting. There being no questions or comments, the Chairman requested a motion to approve the Consent Agenda. Ms. Caldarelli moved approval and Mr. Beall seconded. The Board unanimously approved.

Introduction of New Board Member

The Chairman introduced Mr. Mark Jinks, the Authority's new Board member. Mr. Jinks is Alexandria's former City Manager. Mr. Hill thanked Mr. Jinks for serving and looked forward to his insight and contributions to AlexRenew's Board.

Unfinished Business

A. <u>CEO Search Progress Report</u>

Discussion

The Chairman reported on the progress of the CEO Search. He reviewed a timeline of critical dates for Board involvement and the CEO Recruitment timeline. He requested that members attend a meeting on Saturday, October 22, to review applications provided by Polihire. Members will provide the Chairman with their availability.

New Business

A. Review and Approve Revised Electronic Participation

Discussion

The Chairman recognized Ms. Waters who reported the General Assembly amended its FOIA law on virtual meetings and remote participation. AlexRenew is required to update its current policy. Ms. Waters reviewed the changes made to the Electronic Participation policy and the procedural requirements for the public body to hold virtual meetings and the circumstances under which a member can participate remotely.

Members discussed the new policy. There being no additional questions or comments, the Chairman requested a motion to approve. Mr. Dickinson moved and Mr. Beall seconded. The Board unanimously approved.

Be It Resolved That: The Board adopts the revised Electronic Policy.

B. Introduction of Commonwealth Interceptor Upgrade Project

Discussion

The Chairman recognized Ms. Pallansch. She provided a presentation on the Commonwealth Interceptor Upgrade project (See attached). The presentation discussed the impact of excess infiltration and inflow (I&I) into the Commonwealth Interceptor due to intense rainfall events. These events have exacerbated basement backups along the Commonwealth Interceptor. She further reviewed the impacts of the excess infiltration and inflow from the Interceptor Separate Sanitary Sewer System.

Noting that the RiverRenew project is a water quality project, it will not relieve Commonwealth Interceptor issues. AlexRenew risks from excess I&I from the Commonwealth Separate Sanitary Sewer System include non-compliance with the permit, damage to the Interceptor, human health impacts and property damage. Approaches to minimize surcharging include improving existing stormwater capacity, disconnection of rain leaders, removal of cross-connections and increasing the

Board of Directors Page **3** of **3** 9/20/2022

capacity of the Commonwealth Interceptor from a 36" to a 48" pipe. Increasing the capacity of the Commonwealth Interceptor reduces the negative impacts of excessive I&I in the Commonwealth Interceptor. The cost of the program is estimated at \$70 million with a proposed schedule of late 2022 through 2027.

Members discussed the program and Ms. Pallansch provided back up information. There were no additional questions or comments and the Chairman moved to the CEO Monthly Outcomes Report.

CEO Monthly Outcome Reports

Ms. Pallansch referenced her written report and inquired if members had questions or comments. She noted that under Adaptive Culture, the lost time hours have been reset due to an employee incident on August 31. She highlighted AlexRenew awards for the month including Laboratory of Excellence certification from the Virginia Environmental Lab Accreditation Program (VELAP), Extraordinary Environmental Enterprise from the Department of Environmental Quality, and the Utility of the Future Program from the WEF and NACWA.

RiverRenew Dashboard

Ms. Pallansch reported that the tunnel boring machine (Hazel) is scheduled to begin drilling in early October. Photos will be available on AlexRenew's social media platforms (Facebook and Twitter) and shared with members as tunnel work continues. She noted that AlexRenew is still a little behind but that staff is working with the contractors and delays are being monitored.

Financial Report

Ms. Pallansch referenced the financial report and inquired if members had questions or comments. The Chairman noted that the numbers look positive. Joint IRR and budget spending are accelerating due primarily to RiverRenew spending.

There being no additional business, the Chairman requested a motion to adjourn. Ms. Caldarelli moved and Mr. Dickinson seconded. The Board unanimously approved. The meeting adjourned at 7:22 p.m.

APPROVED:			_
		Secretary-Treasurer	_



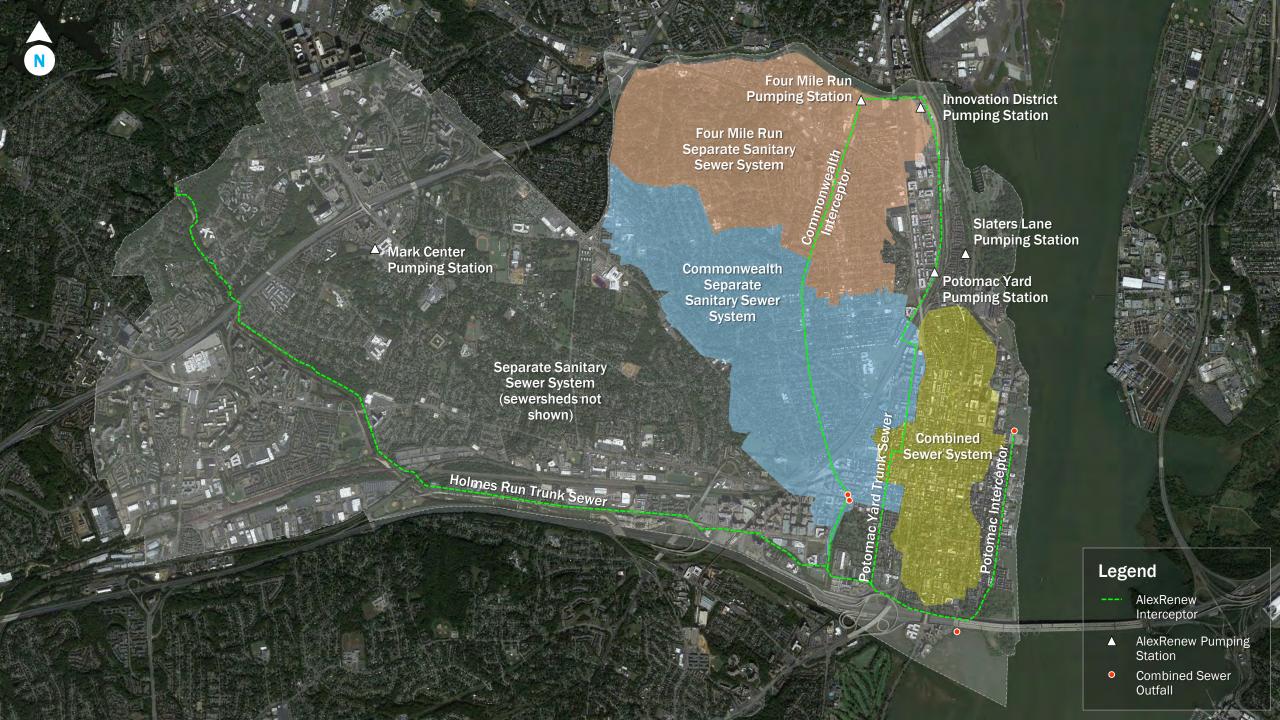
Presentation outline.

- Background on excess infiltration and inflow into the Commonwealth Separate Sanitary Sewer System
- Impacts of excess infiltration and inflow on AlexRenew's Commonwealth Interceptor
- Does RiverRenew address excess infiltration and inflow into the Commonwealth Interceptor?
- Mitigating Commonwealth Interceptor risks associated with excess infiltration and inflow



Background on excess infiltration and inflow into the Commonwealth Separate Sanitary Sewer System





AlexRenew's separate sanitary interceptors are designed to carry 2.5 × dry weather flow per Virginia SCAT regulations.



Separate Sanitary Interceptors



Storm Sewers

Governance

State Water Control Board through Virginia Department of Environmental Quality

City of Alexandria, Virginia

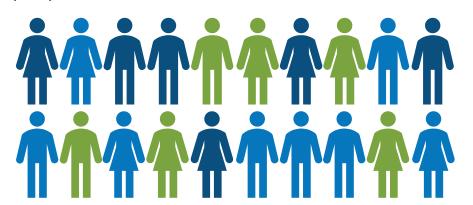
Regulation

Virginia Code (9VAC25-790) Sewage Collection and Treatment Regulations

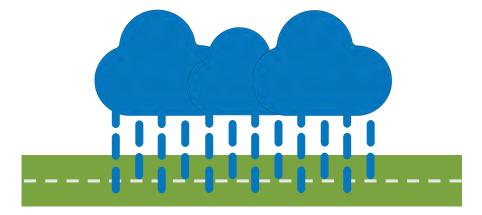
Design and Construction Standards

Design Requirements

People: 250% of the average daily sewage flow per person



Precipitation: 10-year, 24-hour storm



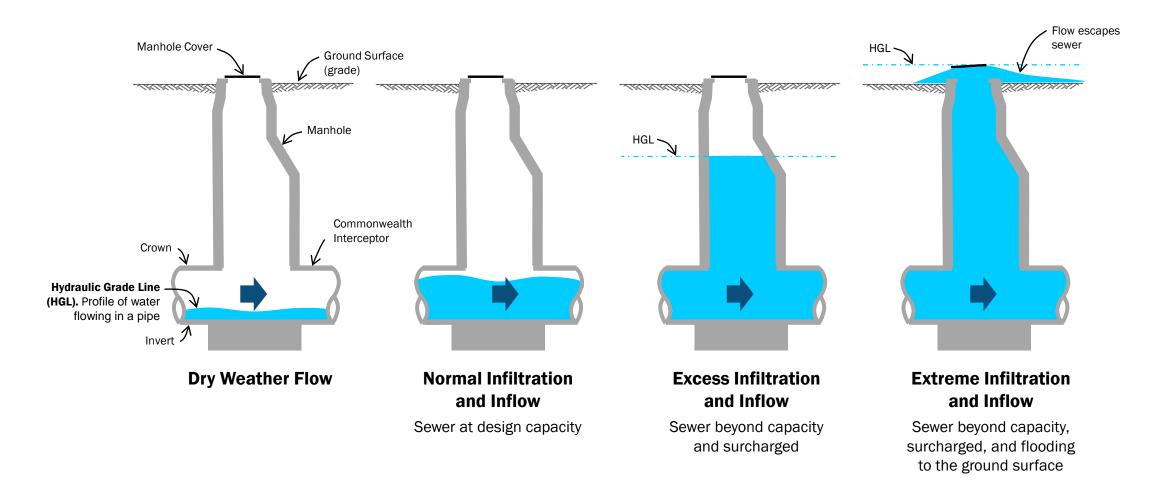


The Commonwealth Separate Sanitary Sewer System is affected by excess infiltration and inflow during periods of intense rainfall.

Inflow. Stormwater enters through rain leaders and manhole covers Home Infiltration. Groundwater leaks into pipe joints and cracks Rain Leader Inflow Inflow **Illicit Connection** Intiltration Manhole **Sewer Lateral Sanitary Sewer To Commonwealth** (City of Alexandria) Interceptor **Pipe Joint**



Excess infiltration and inflow from Commonwealth Separate Sanitary Sewer System causes a surcharged condition in the Commonwealth Interceptor.





Excess infiltration and inflow from the Commonwealth Separate Sanitary Sewer System overwhelms the Commonwealth Interceptor and can lead to basement backups.



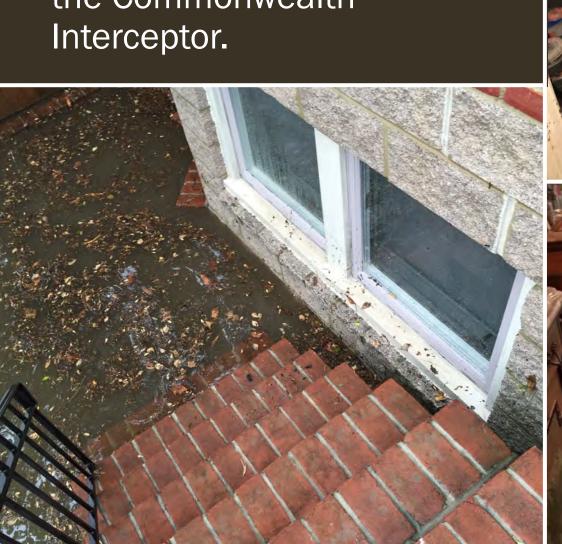


Alexandria has seen a series of intense rainfall events since 2017.





Intense rainfall events have exacerbated basement backups along the Commonwealth Interceptor.









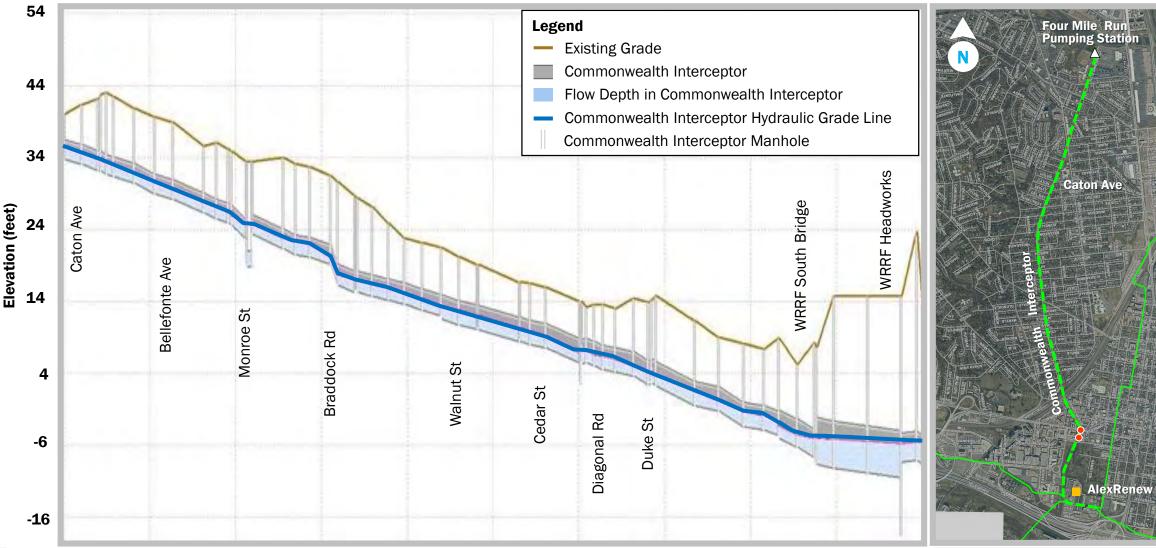


Impacts of excess infiltration and inflow on AlexRenew's Commonwealth Interceptor





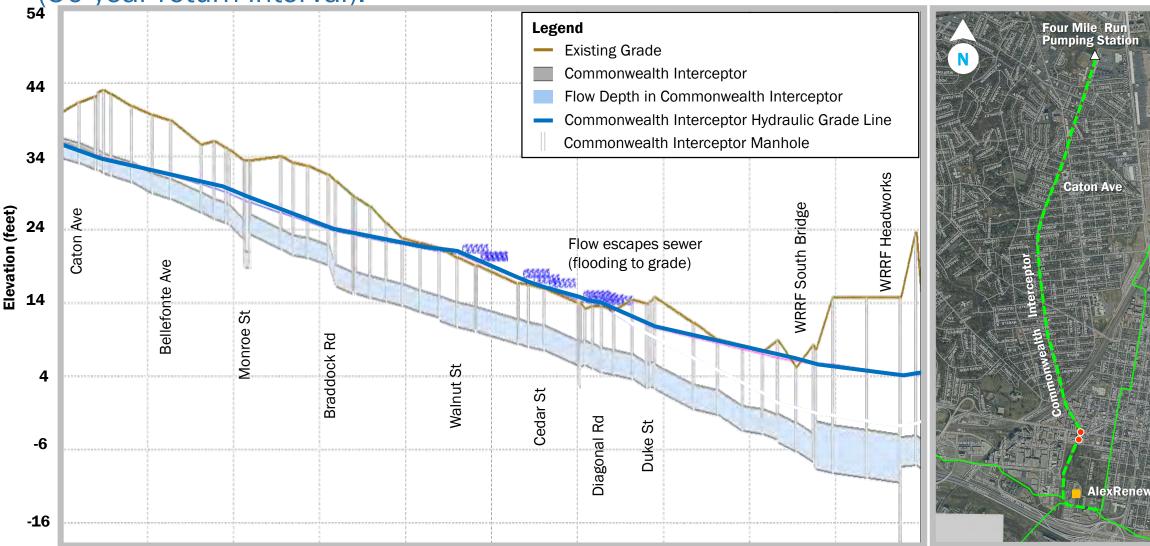
The Commonwealth Interceptor, as designed, has sufficient capacity to deliver 2.5 × dry weather flow to AlexRenew.*







Excess infiltration and inflow from the Commonwealth Separate Sanitary Sewer System caused surcharging in the Commonwealth Interceptor during the July 8, 2019 storm (50-year return interval).

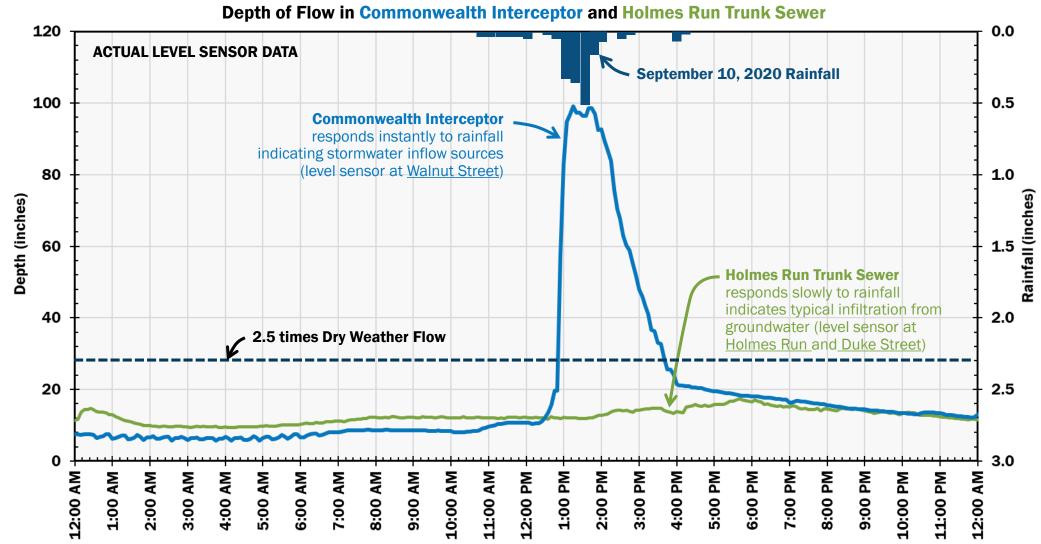






During storm events, the Commonwealth Interceptor responds like a combined sewer, not a separate sanitary sewer due to excess infiltration and inflow from the Commonwealth Separate Sanitary Sewer System.

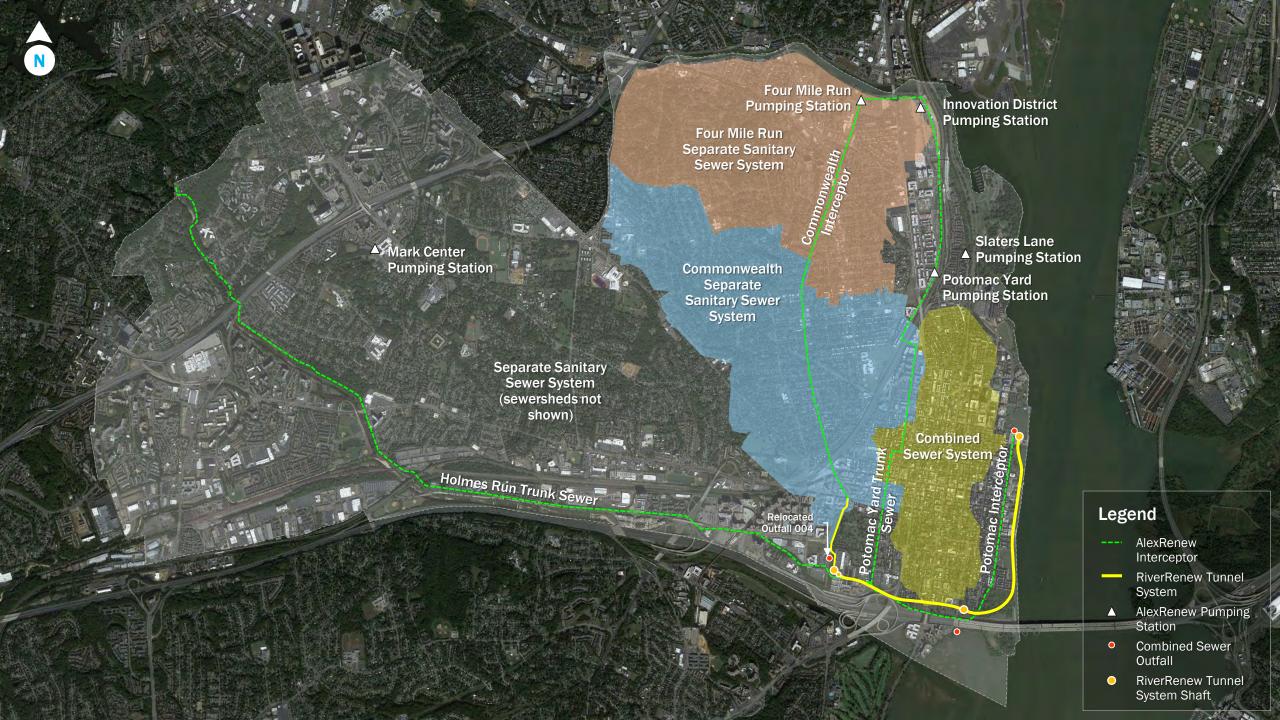




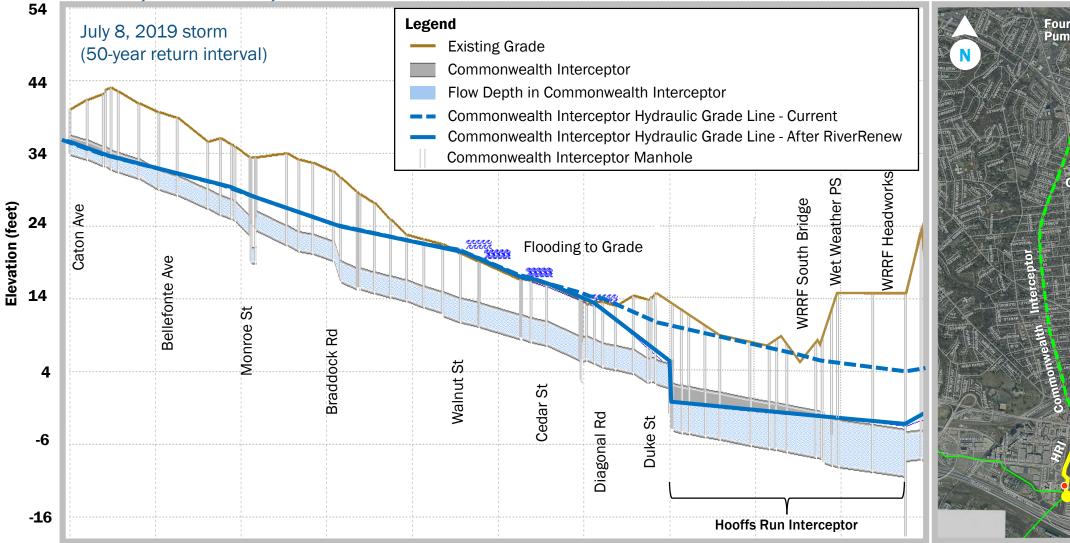


Does RiverRenew address excess infiltration and inflow into the Commonwealth Interceptor?





RiverRenew is a water quality project and not designed to relieve the Commonwealth Interceptor due to excess infiltration and inflow from the Commonwealth Separate Sanitary Sewer System.







Mitigating Commonwealth Interceptor Risks Associated with Excess Infiltration and Inflow



Major risks due to ongoing excess infiltration and inflow from the Commonwealth Separate Sanitary Sewer System:



AlexRenew Permit noncompliance



Damage to Commonwealth Interceptor



Human health impacts



Property damage



Approaches to minimize the risk of surcharging the Commonwealth Interceptor due to excess infiltration and inflow from the Commonwealth Separate Sanitary Sewer System:

Inflow

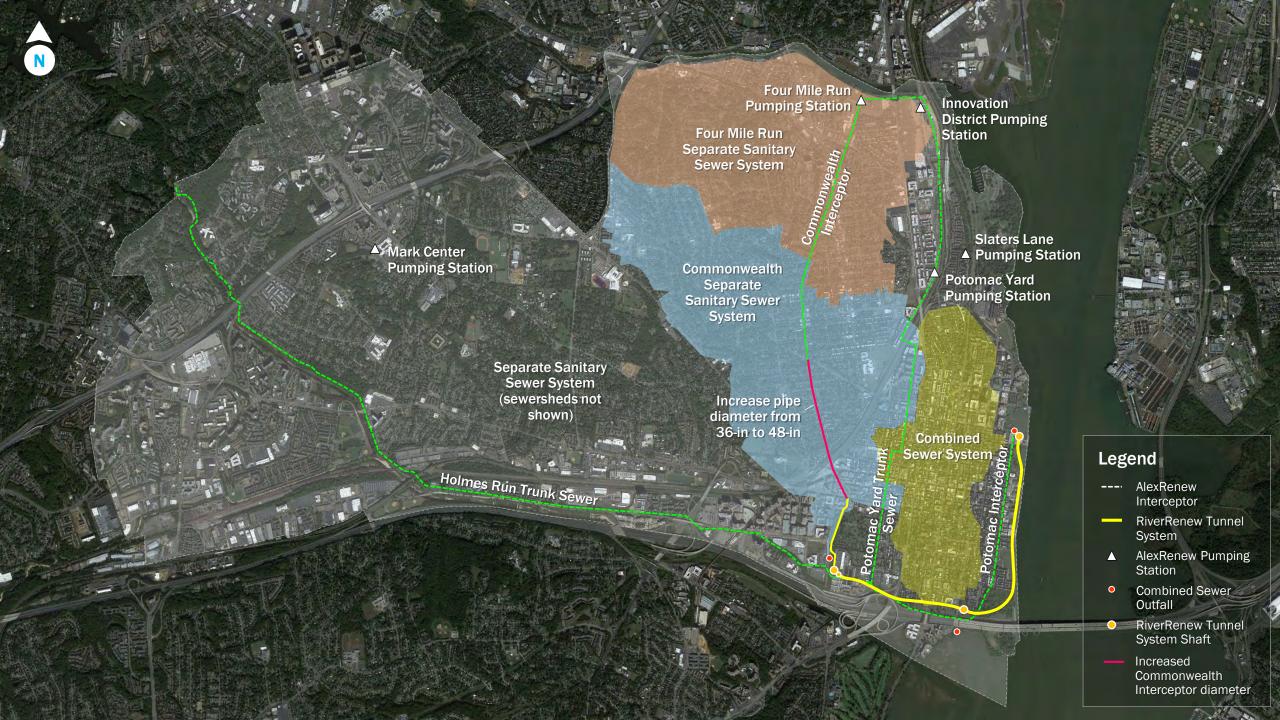
- Improve existing stormwater system capacity to minimize flooding (City)
- Disconnect rain leaders from separate sanitary sewer system (City/homeowner)
- Eliminate discharges from foundation drains and sump pumps into the separate sanitary sewer system (City)
- Remove cross-connections (City)
- **Seal manhole covers** on separate sanitary sewers in low-lying areas (City)
- Increase capacity of Commonwealth Interceptor (AlexRenew)*

Infiltration

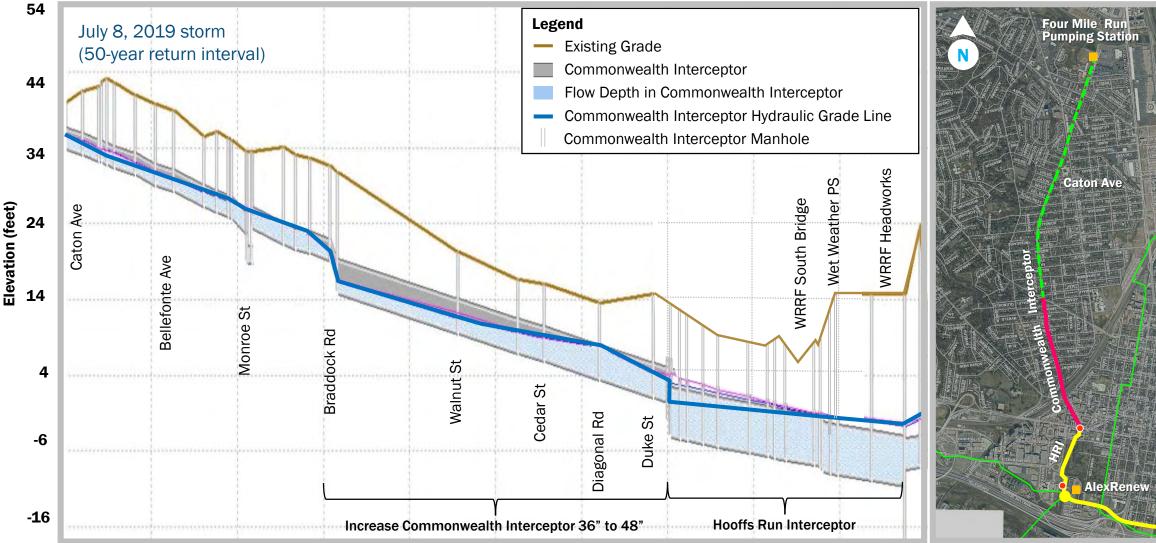
 Rehabilitate existing separate sanitary sewers, manholes, and laterals (City)

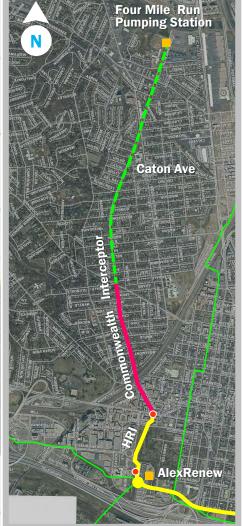
*The Commonwealth Interceptor is a **separate sanitary sewer** that meets design requirements per Virginia's Sewage Collection and Treatment Regulations to convey dry weather flow and 2.5 × dry weather flow to AlexRenew for treatment.





Increasing the diameter of the Commonwealth Interceptor has the potential to lower the hydraulic profile.







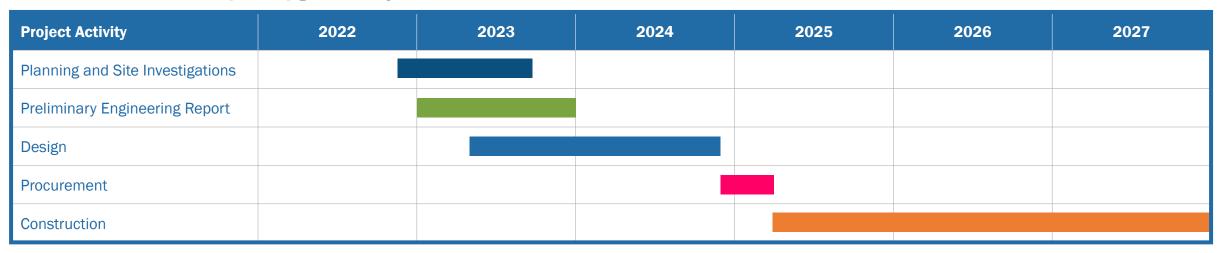
Benefits associated with increasing the capacity of the Commonwealth Interceptor.

- Reduces AlexRenew risk of permit non-compliance
- Protects AlexRenew infrastructure
- Helps address human health issue associated with basement backups
- Helps address damage associated with basement backups
- Synergistic with City's Flood Action Alexandria Program



The Commonwealth Interceptor Upgrade Project capital cost is estimated at \$70 million with a proposed schedule of late 2022 through 2027.

Commonwealth Interceptor Upgrade Project Schedule



Note: Schedule is generalized and subject to change





Annual Comprehensive Financial Report

Fiscal Years Ended June 30, 2022 and 2021 Alexandria, VA



ALEXANDRIA RENEW ENTERPRISES ALEXANDRIA, VA ANNUAL COMPREHENSIVE FINANCIAL REPORT FISCAL YEARS ENDED JUNE 30, 2022 and 2021

Prepared by the Finance Department



ALEXANDRIA RENEW ENTERPRISES ANNUAL COMPREHENSIVE FINANCIAL REPORT FISCAL YEAR ENDED JUNE 30, 2022

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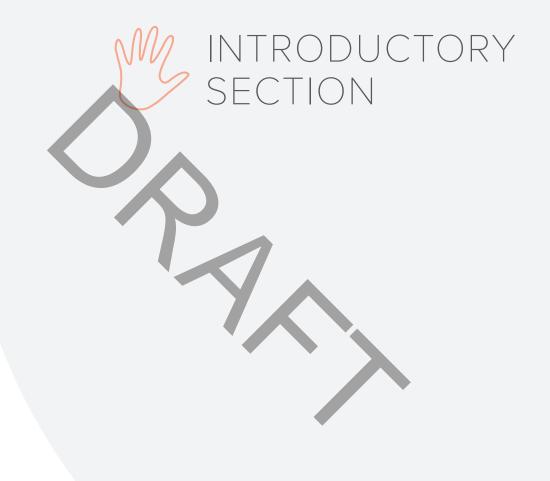
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BOARD OF DIRECTORS

John Hill Chair

James Beall Vice Chair

William Dickinson Sec'y-Treas

Adriana Caldarelli

Vacant

CHIEF EXECUTIVE OFFICER

Karen L. Pallansch P.E., BCEE, WEF Fellow

GENERAL COUNSEL

McGuire Woods, LLP

ALEXANDRIA RENEW ENTERPRISES TRANSMITTAL LETTER

October 17, 2022

To the Board of Directors of Alexandria Renew Enterprises and Our Customers and Interested Parties:

The Annual Comprehensive Financial Report (ACFR) for Alexandria Renew Enterprises (AlexRenew) for the fiscal year ended June 30, 2022 is submitted herewith. This report has been prepared in accordance with generally accepted accounting principles (GAAP) as recommended by the Governmental Accounting Standards Board (GASB) and audited by a firm of independent certified public accountants.

This report presents the financial position of AlexRenew; demonstrates compliance with applicable finance-related legal and contractual provisions; and reflects the principle of full disclosure, allowing readers to gain maximum understanding of AlexRenew's financial position. The accuracy of the data represented, as well as the completeness and fairness of the presentation, including all disclosures, is the responsibility of AlexRenew. To the best of our knowledge and belief, this report is accurate in all material respects and presents fairly the financial position and results of operations of AlexRenew.

Yount, Hyde & Barbour, P.C., an independent registered public accounting firm have audited AlexRenew's financial statements for the year ended June 30, 2022. The independent auditor's report is presented in the financial section of the ACFR.

Management's Discussion and Analysis (MD&A) immediately follows the independent auditors' report and provides a general overview and analysis of the accompanying financial statements. This letter of transmittal is prepared to complement the MD&A and should be read in conjunction with it.

PROFILE OF ALEXRENEW

Established in 1952 by the Alexandria City Council, the City of Alexandria, Virginia Sanitation Authority (Authority) doing business as (DBA) Alexandria Renew Enterprises (AlexRenew) is a public regional wastewater treatment provider whose chartered mission is to clean wastewater and protect public health and the environment. AlexRenew cleans approximately 38 million gallons of wastewater per day and employs approximately 100 environmental stewards that serve more than 300,000 customers in the City of Alexandria (City) and parts of Fairfax County. AlexRenew owns approximately \$1 billion in total assets, including three pump stations, two service chambers, four intercepting sewers, four combined sewer outfalls, and a Water Resource Recovery Facility (WRRF) located adjacent to the City's historic district, Old Town.

AlexRenew is governed by a City appointed five-member citizen Board of Directors (Board) and is a political subdivision of the Commonwealth of Virginia created under the Virginia Water and Waste Authorities Act. AlexRenew is an independent, special-purpose government unit with administrative and financial independence from the City. The Board appoints the Chief Executive Officer and General Manager, who is responsible for the daily management of AlexRenew.

LOCAL ECONOMY

The City and surrounding region have proven resilient during the year. The community has continued to adapt as the COVID-19 pandemic has somewhat subsided but also produced significant lingering impacts to economic conditions. As an inner suburb to Washington, DC, the City continues to see steady population indicators, strong demand for housing, and a number of major development and redevelopment projects continue to progress. The City's unemployment rate briefly peaked at 10% in April 2020 as a result of the pandemic, but had declined to 2.4% by August 2022.

The largest sectors of employment by total wages in the City continue to be professional, scientific, and technical services, as well as public administration. The U.S. Patent and Trademark Office, National Science Foundation and a number of non-profits and associations maintain headquarters in the City. The historic district Old Town is home to many small businesses and a vibrant waterfront. The Virginia Tech Innovation Campus – being built in the City in conjunction with Amazon's HQ2 complex – has broken ground and construction is wrapping up on a co-located Potomac Yard Metrorail Station and the Innovation District Pumping Station, which will be conveyed to AlexRenew for ownership and operation upon its completion.

City real estate values increased for a twelfth consecutive year with the overall value of Alexandria's taxable property increasing 6.2% from January 2021 to March 2022. Year-over-year, average residential values increase 6.9% while commercial property values increased 5.3%. The increase in the tax base was attributable to both appreciation of existing properties as well as new development. The growth in the commercial market was driven largely by increases in the multi-family rental sector, along with industrial and self-storage properties, while the pandemic continued to impact the hospitality and office sectors, which decreased by 12.1% and 6.4%, respectively, year-over-year. The housing market continued to experience strong demand after a brief lull attributable to the pandemic as the City continues to be a desirable place to live and work.

MAJOR INITIATIVES

Construction continued in FY22 on RiverRenew, AlexRenew's multi-year construction program to address combined sewer pollution from four outfalls in the older parts of the City. The program began in 2018 and is under a legislative deadline to be complete by July 1, 2025. The RiverRenew team met several major milestones during FY22 including the completion of the final design to support construction activities, the delivery of the state-of the-art tunnel boring machine, and the sinking of two deep shafts at the water resource recovery facility to house a future pumping station. As of the end of FY22, the tunnel project was 26% complete and on schedule to meet the legislative deadline.

Funding for RiverRenew is expected to come from a combination of grants, low interest loans, and contributions from AlexRenew and Fairfax County. During FY22, AlexRenew finalized a second \$25

million grant from the Commonwealth and drew \$21.7 million to reimburse for construction expenses incurred on the tunnel project. AlexRenew was also awarded \$90 million in American Rescue Plan grants to fund RiverRenew, which it expects to use in the upcoming FY23 to offset a portion of the debt it is assuming through the Virginia Clean Water Revolving Loan Fund and Water Infrastructure Finance and Innovation Act loan programs to fund RiverRenew. Two major loans were closed through these agencies in the prior FY21 and are expected to be repaid through annual rate increases, including those implemented FY20, FY21, FY22 and FY23.

LONG-TERM FINANCIAL PLANNING

For more than a decade, AlexRenew has employed rate modeling to analyze, evaluate and implement an annual and long-term fee structure to support the financial obligations of the enterprise. The rate model incorporates historical financial results along with the projected needs of the organization, based on the annual operating budget, expected contributions from Fairfax County, and the annual update to the ten-year Capital Improvement Program (CIP) budgeted projections. The CIP is a key element in planning for and managing to future regulatory compliance through large-scale capital investment. AlexRenew's long-term financial planning process ensures adherence to AlexRenew's Indenture and financial policies while appropriately considering future needs of the Alexandria community in setting rates and managing fiscal position.

INTERNAL CONTROL STRUCTURE AND BUDGETARY CONTROLS

The AlexRenew Board approves an annual operating and capital budget each June for the fiscal year period July 1 of the current year through June 30 of the following year. AlexRenew's annual operating and capital budget is a modified accrual basis document with revenues established based upon available resources. AlexRenew bills customers monthly for wastewater treatment based on water consumption at rates approved by the Board and receives monthly contributions from Fairfax County for operating and capital costs based on the service agreement between the County and AlexRenew.

AlexRenew's management establishes and maintains an internal accounting control structure that ensures the utility's assets are safeguarded against loss, theft or misuse, and maintains accurate and reliable financial records for the preparation of financial statements and representations made by AlexRenew. AlexRenew's internal accounting control structure provides reasonable, but not absolute, assurance that objectives are met. The concept of reasonable assurance recognizes that the cost of internal controls should not exceed the benefits derived from the controls. The evaluation of costs and benefits rests with AlexRenew.

FINANCIAL DISCUSSION

Financial Condition and Overview

AlexRenew's financial condition remained strong at year-end. AlexRenew achieved all legal requirements, as prescribed by the master trust indenture and service agreements, and exceeded its policy targets while maintaining strong liquidity and a responsible unrestricted net position. AlexRenew's Board-adopted financial policies include requirements to maintain debt service coverage of 1.50x on senior parity debt and at least 120 days of the current years budgeted amount

for operating and maintenance expenses in reserves. At fiscal year-end, debt service coverage was in excess of 2.4x and cash on hand sufficient to meet policy targets and maintain liquidity as construction spending for RiverRenew continues.

AlexRenew maintained appropriate fiscal and business discipline as it implemented the FY22 operating and maintenance budget, resulting in a moderate operating budget excess and strengthening the organization's overall financial position. Capital spend increased significantly year-over-year to almost \$114 million, as construction continued on active capital projects including RiverRenew. Capital projects funded in FY22 included upgrades to the Process Air Compressors, planning for improvements to the Preliminary/Primary system, award of a long-term contract for Solids Master Planning, and ongoing upgrades to digital assets such as Programmable Logic Controller (PLC) equipment, the Human Machine Interface (HMI) System, and the campus Fiber Optic Backbone (FOB).

AlexRenew has two primary sources of revenue – wastewater treatment charges assessed to City customers and contributions from Fairfax County based on the service agreements. AlexRenew's Board approved and implemented a rate increase for City customers at the beginning of FY22 that resulted in increased revenue to help fund the multiple capital projects that are ongoing at AlexRenew.

AlexRenew received funding from a second \$25 million grant in FY22, which was secured from the Commonwealth to offset the cost of the RiverRenew program. AlexRenew received the first \$25 million grant in FY20; the second \$25 million grant closed in late FY21 and is being used to offset Tunnel System construction expenses in FY22 and FY23. AlexRenew also continues to maintain a \$30 million Line of Credit facility with a commercial bank to provide interim financing for RiverRenew construction as needed.

Looking forward, AlexRenew will continue to emphasize best practices and fiscal discipline to ensure its financial resiliency and that it sustains its fiscal strength as it navigates the next few years of major construction.

Investment Policy

AlexRenew manages the investment of its cash and other financial instruments in strict accordance with the Code of Virginia, other applicable laws and regulations, and the Board-adopted investment policy. AlexRenew focuses on maintaining capital preservation and liquidity while achieving a market return on financial resources.

Capital Assets

AlexRenew's capital assets are currently valued at nearly \$1 billion. This is reflective of a significant capital program in recent years that will continue as the RiverRenew program is implemented, which includes a meaningful capital investment. In building and managing the long-term capital improvement plan, AlexRenew will be particularly conscious of the implications for its customers and its overall financial stability.

AWARDS AND ACKNOWLEDGMENTS

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to AlexRenew for its Annual Comprehensive Financial Report for the fiscal period ended June 30, 2021. This was the 13th year that AlexRenew has received this prestigious award. The GFOA awards a Certificate of Achievement to financial reports that clearly convey the financial position and results of operations of the governmental entity. The report must be easy to read, thorough, and efficiently organized, in addition to satisfying GAAP and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current ACFR continues to meet the Certificate of Achievement Program requirements and standards.

The independent auditors have rendered their unmodified opinion on AlexRenew's financial statements for the fiscal year ended June 30, 2022. The independent auditors' report is presented as the first component of the financial section of this report. Management's Discussion and Analysis (MD&A) follows the independent auditors' report, and provides a general overview and analysis of the accompanying financial statements.

Thank you to the AlexRenew staff, and in particular its small and talented finance team, and the professionals at MSL, P.A., an independent accounting and consulting firm that contributed to preparation of this report, whose hard work and dedication has made possible the preparation of this ACFR. Thank you to the AlexRenew Board of Directors as well, for their vision, leadership and passion for the mission and the important work done by every employee at AlexRenew.

Regards,

Karen Pallansch, P.E., BCEE, WEF Fellow

Chief Executive Officer

Alexandria Renew Enterprises

Christine McIntyre
Chief Financial Officer
Alexandria Renew Enterprises

DIRECTORY OF PRINCIPAL OFFICIALS

June 30, 2022

BOARD OF DIRECTORS

John Hill - Chair

James Beall - Vice Chair

William Dickinson - Secretary/Treasurer

Adriana Caldarelli

Kerry Donley*

Shahram Mohsenin, Fairfax County Representative

CHIEF EXECUTIVE OFFICER (CEO)

Karen L. Pallansch, P.E., BCEE

CHIEF FINANCIAL OFFICER (CFO)

Christine McIntyre

CHIEF INFORMATION TECHNOLOGY OFFICER (CITO)

David Roberts

INDEPENDENT AUDITORS

Yount, Hyde & Barbour, P.C.

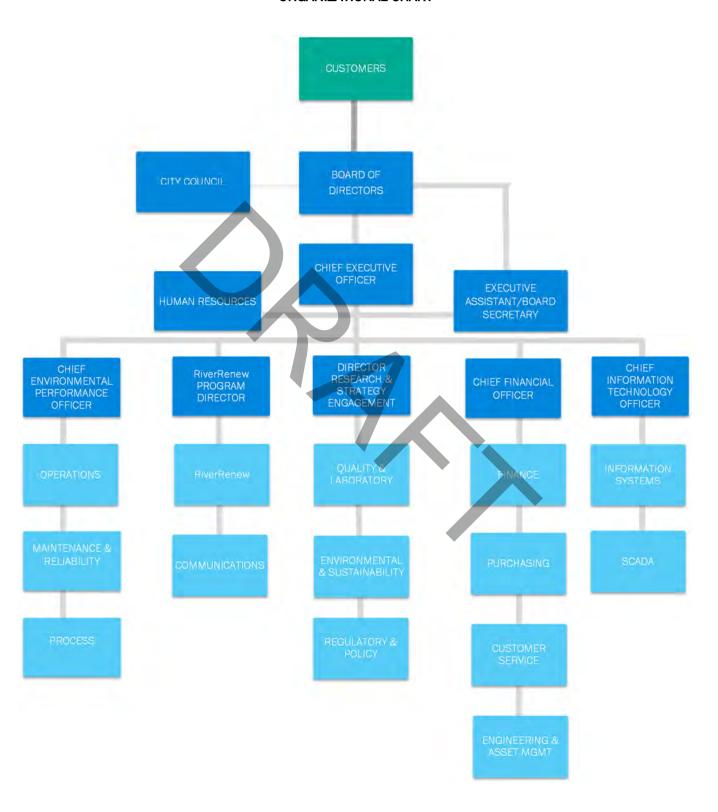
BOARD OF DIRECTORS

June 30, 2022



Pictured from top left to right: Chair John Hill, Vice Chair James Beall Bottom row from left to right: Mr. William Dickinson (Secretary/Treasurer), Mr. Kerry Donley*, and Ms. Adrianna Caldarelli

ORGANIZATIONAL CHART





Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Alexandria Renew Enterprises Virginia

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

June 30, 2021

Christopher P. Morrill

Executive Director/CEO





INDEPENDENT AUDITOR'S REPORT

To the Board of Directors Alexandria Renew Enterprises Alexandria, Virginia

Report on the Audit of the Financial Statements

Opinions

We have audited the accompanying financial statements of the business-type activities and the fiduciary activity of Alexandria Renew Enterprises (AlexRenew), as of and for the years ended June 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise Alexandria Renew Enterprises' basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the fiduciary activity of Alexandria Renew Enterprises, as of June 30, 2022 and 2021, and the respective changes in its financial position, and, where applicable, cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS), Specifications for Audits of Authorities, Boards and Commissions issued by the Auditor of Public Accounts of the Commonwealth of Virginia, 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 Alexandria Renew Enterprises and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about AlexRenew's ability to continue as a going concern for 12 months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

To the Board of Directors Alexandria Renew Enterprises Page 2

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 opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS 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 GAAS 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 AlexRenew'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.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about AlexRenew's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the 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 Other Required Supplementary Information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with 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 basic financial statements, and other knowledge we obtained during our audit of the basic 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.

To the Board of Directors Alexandria Renew Enterprises Page 3

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the Introductory and Statistical Sections, as listed in the table of contents, but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do 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 basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 17, 2022 on our consideration of Alexandria Renew Enterprises' 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 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 Authority'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 Alexandria Renew Enterprises' internal control over financial reporting and compliance.

Winchester, Virginia October, 2022 MANAGEMENT'S DISCUSSION AND ANALYSIS

Alexandria Renew Enterprises Management's Discussion and Analysis

Alexandria Renew Enterprises presents the following review of its financial activities for the fiscal years ended June 30, 2022 (FY22) and 2021 (FY21). Readers of these financial statements are encouraged to consider this information together with the accompanying financial statement notes to obtain a comprehensive view of the Authority's financial position and operating results for FY22.

Summary of Organization and Business

On May 15, 2012, the Board of Directors of the Alexandria Sanitation Authority approved an amendment to its bylaws to permit the use of "Alexandria Renew Enterprises" (AlexRenew) as the trade name of the organization. Throughout this document, the term "Authority" will be used in reference to the Alexandria Sanitation Authority, Alexandria Renew Enterprises or AlexRenew.

The Authority is a public body organized and created under the Virginia Water and Waste Authorities Act of the Code of Virginia of 1950, as amended. The Authority was created by the City Council of the City of Alexandria (City Council) in 1952 to construct, operate and maintain a sewage disposal system to provide wastewater treatment services to the public.

Five citizen members appointed by City Council to four-year staggered terms govern the Authority as its Board of Directors (Board).

In 1953, the Authority and neighboring Fairfax County (County) executed a service agreement by which the Authority would build a sewage treatment plant in which the County would purchase a reserved treatment capacity (Service Agreement). The Service Agreement further provides that the County will share in the cost of capital improvements to the sewage treatment system based on its reserved capacity and will also share in annual operating and maintenance expenses in proportion to the County's actual use as measured by the volume of sewage it contributes to the sewage treatment system. The Service Agreement was last amended and restated in October 1998. The major provisions relating to the County's reserved capacity (60%), payment of capital and upgrade costs, and calculation of its share of the payment of operating costs remained unchanged, though the County and the Authority have negotiated more recent agreements pertaining to the cost share of certain capital projects such as the RiverRenew program.

The Authority receives no financial support from the City of Alexandria (City) and has no taxing power. The revenues of the Authority are derived from wastewater treatment charges based on metered water consumption and meter size for Alexandria users, and payments from the County for its proportional share of operating expenses, replacement and renewal expense, and capital costs.

Audit Assurance

The unmodified (clean) opinion of our independent external auditors, Yount, Hyde & Barbour, P.C., is included in this report.

The financial section presents Management's Discussion and Analysis of the Authority's financial condition and activities for FY22. This financial section information should be read in conjunction with the financial statements.

Financial Highlights

The following are key financial highlights for FY22:

- The Authority treated 13.1 billion gallons of wastewater during FY22. This represents an 8% decrease in wastewater treated as compared to the prior FY21 but is consistent with longer-term trends. At an average of 35 million gallons per day (MGD) in FY22, the 54 MGD design capacity at the facility remains sufficient.
- The County contributed 6.2 billion gallons of wastewater flow to the Authority in FY22, which accounted for approximately 47.4% of the wastewater treated at the Authority's facilities. This is slightly higher than the 45.8% in the prior FY21 and is within the County's allocation per the Service Agreement.

Financial Highlights (Continued)

- The Authority experienced a marginal increase of 0.7% to 26,767 in number of accounts in FY22 relative to the prior FY21.
- The Authority continued to experience economic impacts related to the COVID-19 pandemic including supply chain disruptions and inflationary pressures in critical areas including chemicals, construction materials, labor, transportation, parts and equipment.
- Billed water consumption and flows to the facility remained strong and revenues exceeded the original budgetary estimate by 6%.
- Wastewater treatment fee revenues are derived from two primary charges: a base charge and a volumetric charge. The base charge is a fixed rate that varies by customer served and the volumetric charge is a usage charge based on metered water sales. The volumetric charge approved by the Board for FY22 was \$8.69 per 1,000 gallons of water and represents a 6.9% increase as compared with the prior FY21. The Base charge approved by the Board for FY22 was \$12.34 per month for residential customers and varies based on meter size for commercial customers, again representing a 6.9% increase as compared to the prior FY21.
- Wastewater treatment charge revenues of \$50.7 million were 10.1% higher in FY22 compared to the prior FY21. This increase is the result of the rate increase described in the paragraph above and strong usage and billed flows.
- Total operating expenses for FY22, excluding depreciation and amortization, increased 2.9% compared to FY21. The Authority's Board elected to defer any operating budget increase from FY21 to FY22 and staff was successful in managing to budget, even as it faced significant cost increases in core expense categories such as chemicals used for wastewater treatment.
- The FY22 operating budget included workforce investments and enhancements to employee benefits as AlexRenew continues to work to retain top talent in a competitive labor market.
- Senior debt service coverage, on an accrual basis, was 2.4x for FY22. This exceeded the 1.1x required by the Authority's Master Indenture of Trust (Indenture) and 1.5x established by the Board's Financial Policies. The Authority issued two debt facilities in the prior FY21 to fund construction a loan of up to \$185 million from the Virginia Clean Water Revolving Loan Fund (CWRLF) and a loan of up to \$321 million from the Water Infrastructure Finance and Innovation Act (WIFIA) loan program. Included in the coverage calculation above is \$104.8 million in proceeds the Authority drew from the Series 2021 CWRLF bonds during FY21 and FY22 (See Note 6).
- The Authority has also partially drawn its \$30 million Line of Credit, which is secured at the subordinate lien and will be eventually repaid from cash or from proceeds of a grant or loan (See Note 5).
- Total assets and deferred outflows of resources for FY22 were \$1,047.9 million. Total assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources (Net Position) in the amount of \$813.7 million for FY22. Of the total Net Position, \$50.0 million were unrestricted and available to support operations for FY22. The increase in total assets is a result of the multiple improvement, replacement and construction projects ongoing for plant infrastructure and equipment.
- Capital assets net of depreciation and amortization increased \$90.3 million in FY22. The increase is primarily due to increased capital expenditures associated with the RiverRenew program and other ongoing capital projects.

Financial Highlights (Continued)

- Payments from the County of \$10.9 million in FY22 represented the County's share of operating costs based upon their proportional contribution to total plant flow. County payments were \$10.4 million in the prior FY21. This payment increase is the result of an increase in the percentage of flow contributed by the County and in the total jointly shared operating expense in FY22.
- The Authority received federal grant monies in FY21 and FY22 through the Commonwealth of Virginia's Municipal Utility Relief Program that allowed utilities to apply Coronavirus Relief Funds to forgive unpaid bills for customers attesting to a pandemic hardship. The Authority awarded over \$280,000 of this funding to 497 City customers with unpaid sewer bills during FY21 and over \$150,000 to 360 customers during FY22. The program was administered by the Commonwealth's Department of Housing and Community Development with the City acting as fiscal agent for the Authority.
- The Authority also received federal grant monies in FY22 from the State and Local Fiscal Recovery Funds (SLFRF) through the American Recovery Plan Act (ARPA) to relieve unpaid sewer bills for AlexRenew customers with arrearages as of August 2021. Over \$125,000 in these funds were awarded to 362 City customers during FY22 in accordance with program guidelines. The program was administered by the Commonwealth's Department of Housing and Community Development with the City acting as fiscal agent for the Authority.

Required Financial Statements

The Authority's financial statements are prepared using generally accepted accounting principles for governmental units operated as a proprietary fund. As a result, the financial statements of the Authority report financial information using the flow of economic resources measurement focus, which is similar to those used by private sector companies. These statements offer current and long-term financial information about its activities.

The statement of net position includes all of the Authority's assets, deferred outflows of resources, liabilities and deferred inflows of resources, and provides summary information about the nature and amounts of investments in resources (assets) and obligations to Authority creditors (liabilities). The assets and liabilities are presented in a classified format, which lists current and other balances.

The statement of revenue, expenses, and changes in net position measures whether the Authority has successfully recovered its operating and non-operating costs through its wastewater treatment rates and other fees. The Authority's rates are determined via a rate modeling process that incorporates an array of factors focused on the cost of capture, conveyance, treatment and discharge of wastewater. The rate model is updated and evaluated annually, or as circumstances warrant, to ensure the Authority recovers its full cost of service.

The statement of cash flows provides information about the Authority's cash receipts and cash payments during the fiscal year. The statement reports cash receipts, cash payments, and net changes in cash resulting from operating, investing, and financing activities, and the total change in cash during the reporting period.

In 2014, the Authority established an Other Post-Employment Benefits (OPEB) Trust Fund to fund its OPEB. It was established within the Virginia Pooled OPEB Trust Fund (Trust Fund), sponsored by the Virginia Municipal League and the Virginia Association of Counties. The Trust Fund is an investment permitted for participating municipal employers to accumulate assets to pay future OPEB benefits to retirees and their beneficiaries. The financial statements include the Statements of Fiduciary Net Position and the statements of changes in fiduciary net position for FY22 and FY21.

The Notes to the financial statements provide required disclosures and other information that are essential to a full understanding of material data provided in the statements. The Notes present information about the Authority's accounting policies, significant account balances and activities, material risks, obligations, commitments, contingencies and subsequent events, if any.

Financial Analysis:

The following comparative condensed financial statements and other selected information provide key financial data and indicators for management, evaluation and comparison.

The following table reflects the Authority's net position at June 30, 2022, June 30, 2021 and June 30, 2020:

Condensed Statements of Net Position (in Millions of Dollars)

	2022	2021	\$ Change	% Change	2020
Current unrestricted assets	\$ 71.28	\$ 49.11	\$ 22.17	45.14 %	\$ 56.91
Current restricted assets	23.68	31.21	(7.53)	(24.13) %	29.80
Other non-current assets	0.43	-	0.43	100.00 %	-
Capital assets, net	949.68	859.43	90.25	10.50 %	803.16
Total Assets	1,045.07	939.75	105.32	11.21 %	889.87
Deferred Outflows	2.81	3.08	(0.27)	(8.77) %	2.48
Current liabilities	46.58	59.76	(13.18)	(22.05) %	40.07
Long-term liabilities	180.32	110.23	70.09	63.59 %	98.97
Total Liabilities	226.90	169.99	56.91	33.48 %	139.04
Deferred Inflows	7.24	1.46	5.78	395.89 %	1.51
Net Investment in capital assets	748.22	720.25	27.97	3.88 %	696.49
Restricted	15.49	27.46	(11.97)	(43.59) %	25.58
Unrestricted	50.03	23.67	26.36	111.36 %	29.73
Total Net Position	\$ 813.74	\$ 771.38	\$ 42.36	5.49 %	\$ 751.80

Financial Analysis (Continued)

The following table reflects the Authority's comparative revenues, expenses, and changes in net position for the fiscal year ending June 30, 2022, June 30, 2021 and June 30, 2020:

Condensed Statements of Revenues, Expenses and Changes in Net Position (in Millions of Dollars)

	2022		2021	\$ Change	% Change	:	2020
,						,	
\$	50.73	\$	46.08	4.65	10.10 %	\$	43.79
	10.92		10.43	0.49	4.70 %		10.76
	0.28		0.33	(0.05)	(15.20) %		
	(0.72)		0.13	(0.85)	(653.80) %		1.33
	61.21		56.97	4.24	7.40 %		55.88
	20.57		20.66	(0.09)	(0.40) %		19.98
	27.62		26.84	0.78	2.90 %		26.88
	4.96		11.09	(6.13)	(55.30) %		4.88
	53.15	_	58.59	(5.44)	(9.30) %		51.74
	8.06		(1.62)	9.68	(597.50) %		4.14
	34.30	4	21.20	13.10	61.80 %		39.58
	42.36		19.58	22.78	116.30 %		43.72
	771.38		751.80	19.58	2.60 %		708.08
\$	813.74	\$	771.38	\$ 42.36	5.49 %	\$	751.80
	\$	\$ 50.73 10.92 0.28 (0.72) 61.21 20.57 27.62 4.96 53.15 8.06 34.30 42.36	\$ 50.73 \$ 10.92 0.28	\$ 50.73 \$ 46.08 10.92 10.43 0.28 0.33 (0.72) 0.13 61.21 56.97 20.57 20.66 27.62 26.84 4.96 11.09 53.15 58.59 8.06 (1.62) 34.30 21.20 42.36 19.58	\$ 50.73 \$ 46.08 4.65 10.92 10.43 0.49 0.28 0.33 (0.05) (0.72) 0.13 (0.85) 61.21 56.97 4.24 20.57 20.66 (0.09) 27.62 26.84 0.78 4.96 11.09 (6.13) 53.15 58.59 (5.44) 8.06 (1.62) 9.68 34.30 21.20 13.10 42.36 19.58 22.78	\$ 50.73 \$ 46.08	\$ 50.73 \$ 46.08

Financial Analysis (Continued)

The following table summarizes other selected information of the Authority at June 30, 2022, 2021 and 2020.

Other Selected Information

		2022			2021		Diffe	erence	%	Change	<u> </u>		2020
Selected data:													
Employees at year end		104			99			5		5	%		104
Alexandria accounts		26,767			26,589			178		1	%		26,671
Wastewater treated (millions of gallons		13,090			14,266		((1,176)		(8) %		12,961
Portion contributed by													
Fairfax County (millions of gallons)		6,204			6,535			(331)		(5) %		6,008
Percentage contributed by													
Fairfax County		47.39	%		45.81	%		1.58	%	3.45	%		46.35 %
Rates, Residential Customers:		7 4											
Charge per 1000 gallons of			٦.										
water consumption	\$	8.69		\$	8.13		\$	0.56		6.89	%	\$	7.63
Base Charge		12.34			11.54			0.80		6.93	8 %		10.83
Average residential customer bill (based	on 4	4 000 galle	on r	ner r	nonth wat	eri	บรลด	e).					
Per year	\$	565.20		\$	528.72		_	36.48		6.9	%	\$	496.20
Per quarter	*	141.30			132.18	4		9.12) %	*	124.05
Per month		47.10			44.06			3.04			%		41.35
						•							
Rates, Commercial Customers:													
Charge per 1000 gallons of													
water consumption	\$	8.69		\$	8.13		\$	0.56		6.89	%	\$	7.63
Base Charge													
Water Meter Size													
5/8"	\$	37.02		\$	34.63			2.39		6.9	%	\$	32.49
3/4"		37.02			34.63			2.39		6.9	%		32.49
1"		92.55			86.59			5.96		6.9	%		81.22
1-1/2"		185.10			173.17			11.93		6.9	%		162.43
2"		296.16			277.08			19.08		6.9	%		259.88
3"		555.30			519.52			35.78		6.9	%		487.28
4"		925.50			865.87			59.63		6.9	%		812.13
6"	:	1,851.00		_	1,731.74		1	19.26		6.9	%	1	L,624.26
8"	:	2,961.60		2	2,770.79		1	.90.81		6.9	%	2	2,598.81

General Trends and Significant Events

The Authority's service area within the City can be referred to as mature. The City is over 250 years old and for the most part is built-out. While there is some undeveloped land and a number of areas under redevelopment, these activities are expected to have a limited impact on the Authority's flows and wastewater treatment charge revenue over the intermediate term. This is particularly true given the trend for water conservation and sustainability efforts within the community.

The Authority has continued to progress in implementing the RiverRenew program to remediate the combined sewer system that serves the oldest parts of the City (See Note 12). Work progressed throughout FY22 and included completion of a shaft and delivery of the state-of-the-art tunnel boring machine that will soon begin constructing the RiverRenew tunnel. During FY22, AlexRenew began to draw on its second \$25 million grant from the Commonwealth to fund RiverRenew construction expenses. The first \$25 million grant from the Commonwealth was received in FY20 and also used to fund RiverRenew program expenses.

The number of City accounts increased marginally by 178 accounts or 0.7% in FY22 when compared to FY21. In the prior fiscal year, the number of the accounts decreased by 82. The current number of accounts of 26,767 represents a 1.5% increase over the last 10-years and has been very stable, even though the City's population increased 14% over this same timeframe. This is likely driven by the significant number of Alexandrians who reside in single-metered multi-family housing units.

Financial Condition

The Authority's financial condition remained strong at fiscal year-end with adequate liquid assets and a reasonable level of unrestricted net position. The current financial condition, as well as operating and capital plans to meet future water quality requirements, are well balanced and under control.

Total assets and deferred outflows of resources grew \$105.0 million or 11.1% during FY22. Net Position increased by \$42.4 million in FY22, with a substantial portion of the change resulting in an increase in capital assets and unrestricted net position.

Results of Operations

Revenues: The Authority's revenues from operations fall into two main categories: 1) wastewater treatment charges (including base charge and volumetric charge) to customers in the City, which are based on metered water consumption and 2) County operating expense charges for wastewater treatment for its share of operating expenses based upon metered flow to the plant. Operating revenues increased by \$5.1 million or 9.1% over last year, the net impact of the rate increase of approximately 6.9% that took effect July 1, 2021 for City customers and the slight increase year-over-year in the Fairfax operating contribution.

<u>Capital contributions:</u> Total capital contributions were \$34.3 million in FY22, a \$13.1 million increase over the prior FY21. This increase is primarily attributable to the fact that \$21.7 million in grant funding for RiverRenew was recognized as a capital contribution in FY22 whereas no grant revenue was recognized in FY21.

The County pays 60% of the cost of joint capital improvements to the water resource recovery facility based upon the Service Agreement with the Authority. The RiverRenew program is subject to a separately negotiated cost share agreement between the County and the Authority, based on the unique service characteristics of the facilities being constructed.

The County's capital contributions are recorded as non-operating revenues in the statements of revenues, expenses and changes in net position. The County's capital contributions decreased by approximately \$8.6 million year-over-year, primarily because AlexRenew's capital spending was more heavily concentrated in the RiverRenew program, which carries lower cost share percentages than other capital projects.

Results of Operations (Continued)

Expenses:

FY22-FY21 comparison: Total operating expenses for FY22, excluding depreciation and amortization, increased by \$0.78 million or 2.9% relative to FY21. Core areas associated with operating the water resource recovery facility increased year-over-year including chemicals, operations maintenance, repairs and replacements and general and administrative expenses. These increases were offset by savings in areas such as personnel costs, utilities, sewage disposal and sludge disposal. Certain areas such as custodial services and communications and IT equipment increased due to the pandemic-related impacts. Overall, the Authority was successful in meeting its FY22 operating budget and limiting the year-over-year increase in spend to less than the current rate of inflation.

FY21-FY20 comparison: Total operating expenses for FY21, excluding depreciation and amortization, decreased by \$0.04 million or 0.1% relative to FY20. Core areas associated with operating the water resource recovery facility increased year-over-year including utilities, chemicals, and sludge disposal. These increases were offset by savings in areas such as operations maintenance, general and administrative expenses, repairs and replacements, and personnel and employee benefits costs. Certain areas such as custodial services and communications and IT equipment increased due to the pandemic response. Overall, the Authority was successful in meeting its FY21 operating budget and decreasing its spend relative to the year prior by seeking savings and efficiencies across the business to help balance many of the core components of wastewater treatment that increased year-over-year.

Capital Assets

The Authority maintains investments in a broad range of capital assets including land, buildings, sanitary sewer intercepting lines and force mains, pumping stations, a water resource recovery facility, four combined sewer outfalls, machinery and equipment, computers and vehicles. The Authority also owns capacity rights at the Arlington County Water Pollution Control Facility (Arlington). Pursuant to a Service Agreement between the City of Alexandria, the Authority and Arlington County, the Authority pays approximately 8% of the cost of capital improvements at the Arlington facility based on its 3 MGD reserved capacity. Additional information on the Authority's capital assets can be found in Notes 1 and 4 of the Notes to financial statements.

The Authority maintains its equipment annually on a prioritized basis through a committed improvements, renewals and replacements fund. The County and the Authority invest a percentage of total facility assets into this fund under the Service Agreement, to support adequate reinvestment and continuing compliance with environmental regulations.

The Authority finances its capital assets through rates and charges, the County capital contributions, interim financing instruments, long term debt and, when available, capital grants.

Debt Administration:

The Authority had \$188.4 million in long-term debt outstanding at June 30, 2022, including \$9.4 million considered short-term. Principal payments totaled \$11.1 million during FY22. During FY21, the Authority issued the Series 2021 Clean Water Revolving Loan Fund (CWRLF) Bonds in an amount of up to \$185 million and the Series 2021 Water Infrastructure Finance and Innovation Act (WIFIA) Bonds in an amount of up to \$321 million to provide capital funding for RiverRenew. The Authority has not yet drawn on the WIFIA Bonds but is actively drawing on the Series 2021 CWRLF Bonds to fund Tunnel construction, as well as the Series 2019 CWRLF Bonds to fund the Process Air Compressor project. No new debt facilities were issued during FY22.

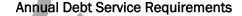
Annual debt service payments decreased only 0.5% in FY22 as compared to FY21, despite the Authority issuing new debt. This is the result of the Authority repaying a significant amount of prior debt during FY21 and because the repayment of the new debt associated with the RiverRenew program is being phased in gradually over the course of program implementation.

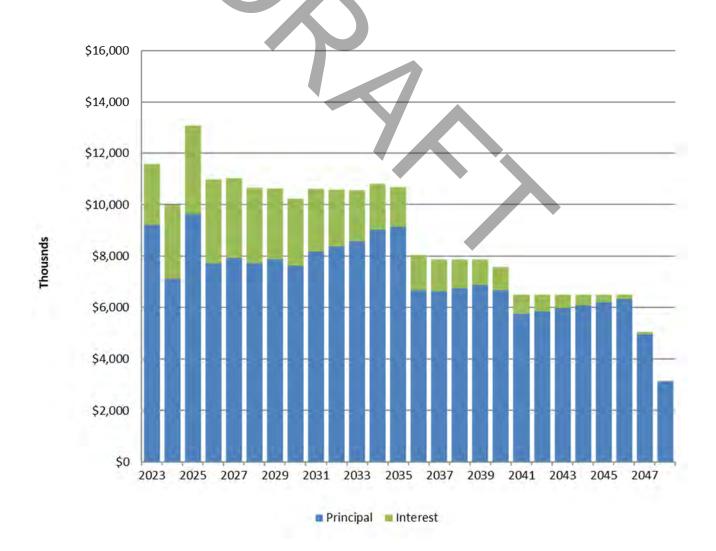
The Authority also continued to utilize the Line of Credit issued during FY22 in FY21 and had \$13.9 million outstanding as of fiscal year end to provide interim funding for Tunnel construction (See Note 5). The Line of Credit is expected to be repaid from cash or from grant or debt proceeds at a later time.

Results of Operations (Continued)

The Authority's financial strength, ability to pay current debt service (principal and interest), and future borrowing capacity is demonstrated, in part, by its senior debt service coverage which is currently a strong 2.4x. The Indenture requires the Authority to establish, fix, charge and collect rates, fees and other charges for operating and maintenance so that in each fiscal year net revenues are not less than 1.1x total debt service for the fiscal year. The Board's financial policies require the Authority to maintain a minimum debt service coverage of 1.5x total debt service for the fiscal year.

The graph below presents principal and interest payments for the Authority's outstanding revenue bonds as of June 30, 2022. This graph includes the debt service associated with draws the Authority had made on the Series 2019 and Series 2021 CWRLF Bonds as of the end of FY22 and does not include draws associated with the Line of Credit (See Note 5) or draws the Authority may make in the future under the CWRLF or WIFIA Bonds. The Authority's current revenue bonds mature in 2048 and future debt issued to fund the RiverRenew program or other capital projects is expected to be repaid largely after the decline in existing debt service that occurs after FY23 as shown below.





Results of Operations (Continued)

The following table calculates the performance relative to the Rate Covenant for FY22, FY21 and FY20. (in millions)

	2022		2021		% Change		2020	
Unrestricted Operating Revenue	\$	61.65	\$	56.51	9.10	%	\$	54.55
Total Operating Expenses								
(Less Depreciation and Replacements)		27.62		26.84	2.91	%		26.88
Net Revenue	\$	34.03	\$	29.67	14.69	%	\$	27.67
Annual Debt Service	\$	13.98	\$	14.05	(0.52)	%	\$	14.02
Revenue Covenant ¹		2.43		2.11	15.30	%		1.97

 $^{^{1} \}ge 1.10x$ per Indenture and 1.50x per Board Policy

Additional information on the Authority's debt can be found in Note 6 to the Financial Statements.

Budget Information

The Authority's budget is a modified accrual basis document with revenues established based upon available resources. The Authority bills customers monthly for wastewater treatment based on the class of customer served and the corresponding amount of water consumption metered at the customer's premise at rates approved by its Board.

The Authority's budget includes sources/revenues for new debt issues that for accounting purposes are not shown as revenues but are included on the statement of net position to comply with GAAP. Likewise, capital project spending and debt service principal payments are treated as capital outlays (expenditures) for budget purposes but are included as assets and liabilities in the statement of net position for GAAP compliance purposes. The Authority's budget expense classifications are in several cases different than the financial statement presentation as is the case for personnel services and general and administrative expenses.

The Authority's operating budget is categorized according to the strategic outcomes that form the Board's 2040 Vision:

<u>Operational Excellence</u>: Comply with 100% of all federal, state and local requirements through continuous improvement efforts. This category includes expenses such as chemicals, utilities and biosolids land application and disposal.

<u>Public Trust</u>: Strengthen accountability by maintaining transparency in all public interactions. This category includes budget items such as community outreach and customer service.

<u>Watershed Stewardship</u>: Integrate sustainability and resiliency into our activities and throughout the water sector through effective partnerships. This category includes expenses such as the Authority's capacity in the Arlington plant.

<u>Adaptive Culture</u>: All employees continue to be accomplished water professionals. This is the "people" budget and includes salaries, benefits, and professional development.

<u>Financial Resilience</u>: Provide water resource recovery services in a cost effective and efficient manner. This category includes items such as insurance, facility maintenance and financial software.

Budget Information, (Continued)

Capital spending is budgeted according to whether the project benefits the City only or is shared with Fairfax County. RiverRenew expenses are broken out from the other general capital projects due to the negotiated cost share percentages unique to that program. Certain expenditures for construction have been estimated net of contractual retainage not paid by contract terms until projects are complete. During FY22, the Authority made draws from the Series 2021 and Series 2019 CWRLF Bonds, and the Line of Credit, to fund its share of construction costs (net of County share) on capital projects.

The following Statement of Consolidated Enterprise Budget is presented to compare FY22 operations to budget estimate.

STATEMENT OF CONDENSED ENTERPRISE BUDGET - FISCAL YEAR 2022

		BUDGET		ACTUAL		Variance (\$)	Variance (%)
Revenues and Other Sources:							
Wastewater Treatment Charges	\$	47,814,540	\$	50,689,442	\$	2,874,902	6.0%
Fairfax County:							
Operating		10,785,305		10,918,297		132,992	1.2%
IR&R		3,346,197		3,346,197	_	0	0.0%
	\$	61,946,042	\$	64,953,936	\$_	3,007,894	4.9%
Expenditures							
Operational Excellence	\$	7,168,460	\$	7,581,548	\$	413,088	5.8%
Public Engagement and Trust	Φ	2,385,686	D ^D	1,999,849	Φ	(385,837)	-16.2%
Watershed Stewardship		2,758,250	7	2,355,616		(402,634)	-16.2%
Effective Financial Stewardship		2,001,514		1,847,448		(154,066)	-14.0%
Adaptive Culture		14,073,082		12,022,176		(2,050,906)	-14.6%
Operating Fund Sub-Total	\$	28,386,991	\$	25,806,637	\$	(2,580,354)	-9.1%
oporating rana day rotar		23,000,001		20,000,001		(2,000,001)	0.170
Alex-only Improvement, Renewal & Replacement	\$	124,400	\$	261,259	\$	136,859	110.0%
Joint Improvement, Renewal & Replacement		5,667,100		13,305,222	·	7,638,122	134.8%
Alex-only Capital Projects		4,532,005		615,630		(3,916,375)	-86.4%
Alex-only RiverRenew		67,857,050		42,174,668		(25,682,383)	-37.8%
Joint Capital - RiverRenew		93,320,649		54,891,356		(38,429,293)	-41.2%
Joint Capital - General CIP		14,169,213		2,785,389		(11,383,824)	-80.3%
CIP/IRR Sub-Total	\$	185,670,417	\$	114,033,523	\$	(71,636,894)	-1.0%
	\$	214,057,408	\$	139,840,160	\$	(74,217,248)	-34.7%
Name and the Community of Commu							
Nonoperating Revenues (Expenditures) Investment Income	ф	115 000	\$	(702.051)	\$	(030 OE1)	-728.7%
Debt Principal Payments	\$	115,000 (11,080,547)	Ф	(723,051) (11,080,547)	Ф	(838,051)	-128.1% 0.0%
. ,		, , , ,		, , ,		(0) (720,301)	25.4%
Debt Interest Expense Proceeds from Debt		(2,839,073) 134,395,696		(3,559,374) 85,895,854		(48,499,842)	-36.1%
Proceeds from CSO Grant		134,393,090		21,743,376		21,743,376	-30.1%
Fairfax County Capital Contributions		19,851,158		9,211,057		(10,640,102)	-53.6%
ramax county capital contributions	\$	140,442,234	\$	101,487,315		(38,954,919)	-27.7%
		_ 10, 112,20 -		101, 101,010		(00,001,010)	21.170

Alexandria Renew Enterprises Management's Discussion and Analysis (Continued)

Final Comments

FY22 marked another year of strong financial performance by the Authority. Revenues were bolstered by a strong local economy, an increase in percentage of Fairfax County flows, and the rate increases adopted over the past several years to fund RiverRenew construction. The Authority has continued to identify efficient funding sources, including state and federal grants, to help offset these costs, and used significant grant funding in FY22 towards construction expenses, allowing for debt to be used more slowly and sparingly as construction continues. The Authority was in compliance with all of its financial policies and targets and affirmed its ability to meet its capital spending requirements while maintaining strong liquidity and financial flexibility. Operating expenditures increased modestly, by 2.9%, year-over-year but remained within the budget estimate and far below prevailing inflation indices. Debt service coverage was a strong 2.4x indicating that revenue growth is keeping pace with debt service expense, even as issuance of debt increases while the Authority implements RiverRenew and other needed initiatives to meet its mission.

Contacting the Authority's Financial Management:

This financial report is designed to provide citizens, customers, and other interested parties with a general overview of the Authority's financial position and to demonstrate the Authority's accountability for the funds it receives. If you have any questions about this report or need additional financial information, please contact Alexandria Renew Enterprises, 1800 Limerick St. Alexandria, Virginia 22314, call 703-721-3500, or visit us on the web at www.alexrenew.com.



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ALEXANDRIA RENEW ENTERPRISES STATEMENTS OF NET POSITION June 30, 2022 and 2021

	2022	2021
ASSETS Current appets		
Current assets Cash and cash equivalents (Note 2):		
Unrestricted	\$ 45,687,371	\$ 27,671,115
Restricted	13,841,190	21,639,827
Accounts receivable, net (Note 3) Due from other governments (Note 3)	6,122,435 854,719	6,034,874 17,561
Prepaid expenses	724,855	170,929
Inventory	317,539	290,110
Investments (Note 2):		
Unrestricted Restricted	17,577,646 9,836,238	14,914,201 9,570,255
Total current assets	<u>-</u>	
	94,961,993	80,308,872
Non-current assets Other post employment benefits (Note 8)	427,036	_
Capital assets, net of depreciation and amortization (Note 4)	949,684,821	859,431,502
Total non-current assets	950,111,857	859,431,502
DEFERRED OUTFLOWS OF RESOURCES		
Pension related deferred outflows (Note 7)	1,921,235	2,175,732
Other post employment benefits related deferred outflows (Note 8)	63,125	31,630
Deferred charge on refunding	828,597	876,632
Total deferred outflows of resources	2,812,957	3,083,994
Total assets and deferred outflows of resources	\$ 1,047,886,807	\$ 942,824,368
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION Current liabilities Accounts payable and accrued expenses (Note 3) Due to City of Alexandria Accrued paid time off	\$ 13,552,161 869,735 743,692	\$ 13,131,147 838,550 819,162
Line of credit (Note 5) Current maturities of long-term debt (Note 6) Payable from restricted assets Accounts payable and accrued expenses (Note 3)	13,874,852 9,352,473 6,628,452	30,000,000 11,217,564 2,935,414
Accrued interest payable Total current liabilities	1,563,430 46,584,795	816,080 59,757,917
Long-term liabilities		
Accrued paid time off, less current portion	247,897	273,054
Other post employment benefits (Note 8)	-	81,588
Net pension liability (Note 7)	1,006,934	7,290,959
Long-term debt (Note 6)	179,066,607	102,583,228
Total long-term liabilities	180,321,438	110,228,829
Total liabilities	226,906,233	169,986,746
DEFERRED INFLOWS OF RESOURCES		
Pension related deferred inflows (Note 7) Other past employment hangits related deferred inflows (Note 8)	6,147,475	728,444
Other post employment benefits related deferred inflows (Note 8)	1,091,112	734,055
Total deferred inflows of resources	7,238,587	1,462,499
Total liabilities and deferred inflows of resources	\$ 234,144,820	\$ 171,449,245
NET POSITION Net investment in capital assets Restricted:	748,219,486	720,251,070
Operating	2,262,985	2,668,783
Parity debt service	3,397,597	3,663,969
Improvement, renewal & replacement	9,824,964	17,382,108
Capital projects Unrestricted	- 50,036,954	3,743,728 23,665,465
		
Total net position	813,741,986	771,375,123
Total liabilities, deferred inflows of resources, and net position	\$ 1,047,886,806	\$ 942,824,368

ALEXANDRIA RENEW ENTERPRISES STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION For The Years Ended June 30, 2022 and 2021

	2022	2021
OPERATING REVENUES		
Wastewater treatment fees	\$ 50,689,442	\$ 46,043,455
Fairfax County wastewater fees	10,918,297	10,432,818
Miscellaneous	42,397	35,838
Total operating revenues	61,650,136	56,512,111
OPERATING EXPENSES		
Personnel services	12,022,176	12,808,339
Utilities	3,092,003	3,658,871
Chemicals	2,277,528	1,986,275
Operations maintenance	1,196,034	1,051,184
Arlington sewage disposal	1,292,445	1,349,252
Sludge disposal	1,015,983	1,113,835
Depreciation and amortization (Note 4)	20,571,731	20,660,590
Repairs and replacements, sewage disposal systems	1,566,169	190,571
General, administrative, customer service, and other	5,141,279	4,683,009
Total operating expenses	48,175,348	47,501,926
Operating income	13,474,788	9,010,185
NONOPERATING REVENUES (EXPENSES)		
Investment income (loss)	(723,051)	131,110
Federal grants	280,617	329,269
Interest on debt	(3,554,625)	(3,248,744)
Loss on disposed capital assets	(1,411,496)	(7,839,035)
Total non-operating revenues (expenses)	(5,408,555)	(10,627,400)
Change in net position before capital contributions	8,066,233	(1,617,215)
CAPITAL CONTRIBUTIONS	34,300,630	21,196,644
Change in net position	42,366,863	19,579,429
NET POSITION, BEGINNING	771,375,123	751,795,694
NET POSITION, ENDING	\$ 813,741,986	\$ 771,375,123

ALEXANDRIA RENEW ENTERPRISES STATEMENTS OF CASH FLOWS

For The Years Ended June 30, 2022 and 2021

	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from customers	\$ 50,638,316	\$ 44,273,482
Cash received from Fairfax County for operations	9,945,852	10,378,489
Cash received from other sources	42,397	35,838
Payments to suppliers for goods and services	(15,642,446)	(14,376,495)
Payments to employees for services	(12,880,796)	(12,660,321)
Net cash provided by operations	32,103,323	27,650,993
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition/construction of capital assets	(108,533,541)	(86,358,488)
Capital contributions from Fairfax County	12,692,541	21,324,429
Proceeds from grants	21,873,875	479,387
Net proceeds from debt issuance	85,835,854	21,533,102
Proceeds from line of credit	-	21,634,873
Payments on line of credit	(16,125,148)	-
Principal payments on debt	(11,080,547)	(10,602,745)
Interest paid on borrowing	(2,896,259)	(3,446,402)
Net cash used in capital and related financing activities	(18,233,225)	(35,435,844)
CASH FLOWS FROM INVESTING ACTIVITES Proceeds from sales and maturities of investments Purchase of investments Interest received on investments	5,023,695 (8,777,575) 101,401	5,838,398 (647,937) 131,110
Net cash provided by (used in) investing activities	(3,652,479)	5,321,571
Net increase (decrease) in cash and cash equivalents	10,217,619	(2,463,280)
CASH AND CASH EQUIVALENTS	40.040.040	E4 774 000
Beginning	49,310,942	51,774,222
Ending	\$ 59,528,561	\$ 49,310,942
RECONCILIATION TO STATEMENT OF NET POSITION Cash and cash equivalents - unrestricted	\$ 45,687,371	\$ 27,671,115
Cash and cash equivalents - restricted	13,841,190	21,639,827
Total cash and cash equivalents	\$ 59,528,561	\$ 49,310,942

ALEXANDRIA RENEW ENTERPRISES STATEMENTS OF CASH FLOWS (continued) For The Years Ended June 30, 2022 and 2021

	2022	2021
RECONCILIATION OF OPERATING INCOME TO NET CASH		
PROVIDED BY OPERATING ACTIVITIES		
Operating income	\$ 13,474,788	\$ 9,010,185
Adjustments to reconcile operating income to net cash		
provided by operating activities:		
Depreciation and amortization	20,571,731	20,660,590
Pension expense, net of of employer contributions	(610,497)	441,227
Changes in assets and liabilities		
(Increase) decrease in:		
Accounts receivable	(87,561)	(1,798,325)
Due from other governments	(972,445)	(54,329)
Prepaid expenses	(553,926)	499,874
Inventory	(27,429)	(31,032)
(Decrease) increase in:		
Accounts payable and accrued expenses	561,166	(801,177)
Due to City of Alexandria	31,185	29,852
Accrued paid time off	(100,627)	(148,446)
Other post employment benefits	(183,062)	(157,426)
Net cash provided by operating activities	\$ 32,103,323	\$ 27,650,993
NONCASH CAPITAL AND RELATED FINANCING ACTIVITIES		
Carrying value of disposed capital assets	\$ 1,411,496	\$ 7,839,036
Capital asset purchases included in accounts payable at year end	\$ 17,702,989	\$ 13,999,984

ALEXANDRIA RENEW ENTERPRISES STATEMENTS OF FIDUCIARY NET POSITION Other Post-Employment Benefit Trust Fund June 30, 2022 and 2021

	2022	2021
ASSETS		
Assets held in trust, at fair value Investment in pooled funds	\$ 1,032,992	\$ 1,139,810
NET POSITION Net position restricted for OPEB	\$ 1,032,992	\$ 1,139,810

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION Other Post-Employment Benefit Trust Fund For The Fiscal Years Ended June 30, 2022 and 2021

ADDITIONS Contributions from employer 56,733 76,165 **Investment Earnings:** Net increase (decrease) in fair value of investments (105,094)263,714 Less investment costs (1,724)(1,494)262,220 Net investment earnings (106,818)Total additions (50,085)338,385 **DEDUCTIONS** Benefits paid to participants 76,165 56,733 **Total deductions** 56,733 76,165 Change in net position (106,818)262,220 Total net position - beginning 1,139,810 877,590 Total net position - ending \$ 1,032,992 \$ 1,139,810

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 1. Description of Entity and Summary of Significant Accounting Policies

Description of Entity

On May 15, 2012, the Board amended its bylaws to adopt the name of "Alexandria Renew Enterprises" as the official trade name of the Alexandria Sanitation Authority (Authority).

The Authority is a special governmental unit created by the Alexandria City Council (City Council) in 1952 for the purpose of constructing, operating, and maintaining a wastewater treatment system for the City. The Authority is chartered by the State Corporation Commission and is an independent public body. The Authority is governed by a five-member Board who serve staggered terms and are appointed by the City Council.

Although the Board is appointed by the City Council, the Authority is not a part of the City's reporting entity and is not considered a component unit under Governmental Accounting Standards Board (GASB) Statement No. 61.

No component units are included in the Authority's financial statements.

The following is a summary of the Authority's significant accounting policies:

Basis of Presentation and Accounting

The Authority's financial statements are presented on the accrual basis in accordance with accounting principles generally accepted in the United States of America as applicable to the enterprise fund of governmental units.

The accounting and financial reporting treatment applied to the Authority is determined by its measurement focus. The transactions of the Authority are accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operations are included on the statement of net position. Net position (i.e., total assets plus deferred outflows, net of total liabilities plus deferred inflows) is segregated into net investment in capital assets, restricted, and unrestricted components.

The Authority also has a fiduciary fund for assets held by the Authority in a trustee capacity for its employees. The Authority's Other Post-Employment Benefit (OPEB) trust fund accounts for the receipt and disbursement of assets held in trust for the Authority's OPEB plan.

Revenues and Expenses

Operating revenues and expenses consist of those revenues and expenses that result from the ongoing principal operations of the Authority. Operating revenues primarily consist of charges for services. Non-operating revenues and expenses consist of those revenues and expenses that are related to financing and investing types of activities and result from non-exchange transactions or ancillary activities. Contributions from Fairfax County (County) under the Service Agreement discussed in Note 4 are recorded as capital contributions.

In accordance with the Service Agreement with the County, the Authority recognizes as revenue the County's proportionate share of current operating expenses.

(Continued) 33

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 1. Description of Entity and Summary of Significant Accounting Policies (Continued)

Cash and Cash Equivalents

The Authority considers all highly liquid investments with maturities of three months or less from date of purchase to be cash equivalents.

Inventory

Inventory, consisting of items held for consumption, are valued at cost using the first-in, first-out method.

Financial Policy

The Board revised its financial policy to increase its restricted cash reserves. The Bond Master Trust Indenture requires the Authority keep 60 days of operating expenses in reserve and the Authority has appropriately restricted these amounts. The Authority's internal policy requires its restricted cash reserves to be maintained at 120 days of operating expenses at year-end; however, only the amount required by the Indenture is shown as restricted in the financial statements.

Investments

Investments are stated at fair value, except for investments in the Local Government Investment Pool (LGIP) and State Non-Arbitrage Program (SNAP), which are external 2a7-like investment pools stated at share price. All fair market valuations are based on quoted market prices.

In accordance with the *Code of Virginia* and other applicable laws, including regulations, the Authority's investment policy (Policy) permits investments in U.S. Treasury Securities, U.S. agency securities, municipal obligations, prime quality commercial paper, banker's acceptances with domestic banks, corporate notes, negotiable certificates of deposit of domestic banks, money market funds registered under the Federal Investment Act of 1940, repurchase agreements collateralized by U.S. Treasury and Federal Agency obligations, and the State Treasurer's Local Government Investment Pool (the Virginia LGIP).

Pursuant to Sec. 2.1-234.7 of the *Code of Virginia*, the Treasury Board of the Commonwealth sponsors the LGIP and has delegated certain functions to the State Treasurer. The LGIP reports to the Treasury Board of the Commonwealth at their regularly scheduled monthly meetings and the fair value of the position in LGIP is the same as the value of the pool shares (i.e., the LGIP maintains a stable net asset value of \$1 per share).

(Continued) 34

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 1. Description of Entity and Summary of Significant Accounting Policies (Continued)

Investments (Continued)

The Policy limits investment maturities to a maximum of five years for any investment, unless the Board approves an exception in writing. The investment policy establishes the maximum percentage of the portfolio permitted in each of the following instruments:

U.S. Treasury Obligations	100%, no limitation
Federal Agency Obligations	100%, 35% issuer limit
Municipal Obligations	10%, 3% issuer limit
Commercial Paper	25%, 3% issuer limit
Bankers' Acceptance	25%, 3% issuer limit
Corporate Notes	10%, 3% issuer limit
Negotiable Certificates of Deposit	10%, 50% issuer limit
Money Market Mutual Funds	100%, 50% issuer limit
Repurchase Agreements	35%, 35% issuer limit
LGIP	100%, no limitation

Accounts Receivable

Operating revenues are generally recognized on the basis of cycle billings rendered monthly. Unbilled revenues for services delivered during the last month of the fiscal year are accrued based on meter readings for June consumption. Receivables are recorded as current assets, net of an allowance for doubtful accounts of \$680,000 at June 30, 2022 and 2021. The allowance is based upon historical collections.

Capital Assets

Purchased or constructed property, plant and equipment with a cost greater than \$5,000 and an estimated useful life of 3 years or more is capitalized and recorded at historical cost. Interest related to costs and major improvements, renewals, and replacements is capitalized as a cost of the project. Depreciation is computed on the straight-line basis over the estimated useful life. The estimated useful lives are as follows:

Plant and related infrastructure	67 years
Buildings and improvements	10-30 years
Furniture and equipment	3-15 years
Vehicles	5 years
Computers	3 years

Capital assets also include intangible assets, such as purchased capacity rights for the Arlington sewer treatment plant upgrade and expansion. Intangible assets are amortized over 40 years.

Accrued Paid Time-Off Benefit

The Authority's paid time-off benefit (PTO) policy permits employees to accumulate a limited amount of earned but unused PTO benefits, which will be paid to employees upon separation from service. The accrued PTO benefit is included in the statement of net position as a liability.

(Continued) 35

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 1. Description of Entity and Summary of Significant Accounting Policies (Continued)

Allocation of Expenses

For purposes of the statement of revenues, expenses, and changes in net position, payroll taxes and fringe benefits were allocated to operations and administration based on direct salaries.

Net Position

Net position is the difference between assets, deferred outflows of resources, liabilities, and deferred inflows of resources. Net investment in capital assets represents capital assets, less accumulated depreciation, less any outstanding debt related to the acquisition, construction, or improvement of those assets. Net investment in capital assets excludes unspent debt proceeds. Net position is reported as restricted when there are limitations imposed on its use either through the enabling legislation adopted by the Authority or through external restrictions imposed by creditors, grantors, or laws or regulations of other governments. Unrestricted net position represents the remaining net position not included in the previous two categories.

When both restricted and unrestricted net position are available for use, it is the Authority's policy to use restricted net position first, then unrestricted as needed.

Estimates

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Fair Value Measurement

The Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs.

Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Authority's Retirement Plan and the additions to/deductions from the Authority's Retirement Plan's net fiduciary position have been determined on the same basis as they were reported by the Virginia Retirement System (VRS). For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 1. Description of Entity and Summary of Significant Accounting Policies (Continued)

Deferred Outflows/Inflows of Resources

Deferred Outflows

In addition to assets, the statements which present financial position report a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net assets that applies to future periods and so will not be recognized as an outflow of resources (expense/expenditure) until then. The Authority has four items that qualify for reporting in this category. The first item consists of contributions subsequent to the measurement date for pensions; this will be applied to the net pension liability in the next fiscal year. The second item is the net difference between projected and actual earnings on pension plan investments. This difference will be recognized in pension expense over a closed five-year period. The third item is the deferred loss on refunding, which results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. The forth item is for the changes in assumptions related to OPEB. The difference will be recognized in OPEB expense over a closed four-year period.

Deferred Inflows

In addition to liabilities, the statements which present financial position report a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net assets that applies to future periods and so will not be recognized as an inflow of resources (revenue) until that time. The Authority has two types of items that qualify for reporting under this category. This first item represents differences between expected and actual experience in the pension plan. These differences will be recognized in pension expense over a closed five-year period. The second item is the differences between expected and actual experience and the net difference between projected and actual earnings related to OPEB. This difference will be recognized in OPEB expense over a closed four-year period.

Note 2. Deposits and Investments

Deposits

Deposits with banks are covered by the Federal Deposit Insurance Corporation (FDIC) and collateralized in accordance with the Virginia Security for Public Deposits Act (the Act) Section 2.2-4400 et. seq. of the *Code of Virginia*. Under the Act, banks and savings institutions holding public deposits in excess of the amount insured by the FDIC must pledge collateral to the Commonwealth of Virginia Treasury Board. Financial institutions may choose between two collateralization methodologies and depending upon that choice, will pledge collateral that ranges in the amounts from 50% to 130% of all excess deposits. Accordingly, all deposits are considered fully collateralized.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 2. Deposits and Investments (Continued)

Investments

Statutes authorize the Authority to invest in obligations of the United States or agencies thereof; obligations of the Commonwealth of Virginia or political subdivisions thereof; obligations of the International Bank for Reconstruction and Development (World Bank), the Asian Development Bank, the African Development Bank, "prime quality" commercial paper and certain corporate notes, banker's acceptances, repurchase agreements, the State Treasurer's LGIP, a 2a-7 like pool, and the Commonwealth of Virginia SNAP, a pooled investment fund. Both the LGIP and SNAP are overseen by the Treasurer of Virginia and the State Treasury Board. The fair value of the Authority's position in the pools is the same as the value of the pool shares, which are reported at amortized cost.

The Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. As of June 30, 2022 and 2021, the Authority's investments in federal agency bonds and notes, U.S. Treasury bonds and notes, Supra-National agency notes, and corporate bonds and notes were valued using a matrix pricing model, Level 2 inputs.

Custodial Credit Risk

Custodial credit risk is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. At June 30, 2022 and 2021, none of the Authority's investments are exposed to custodial credit risk.

Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. The Authority's portfolio management approach is active, allowing for periodic restructuring of the investment portfolio to take advantage of current and anticipated interest rate moves. The Authority minimizes its exposure to interest rate risk by having an average investment period of 2.5 years and a limit of less than 5 years.

The Authority's investments as of June 30, 2022 consisted of the following:

Investment Type		Fair Value	S&P Credit Rating	Weighted Average Maturity *
Federal agency bonds and notes	\$	6,078,936 13,379,215	AA+ AA+	1.73 2.18
U.S. Treasury bonds and notes Supra-National agency notes		3,302,083	AAA	0.87
Corporate bonds and notes LGIP	_	773,477 125,664	AA+-AAA AAAm	0.74 N/A
Total investments	\$ <u>_</u>	23,659,375		

^{*}Average maturity in years

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 2. Deposits and Investments (Continued)

Interest Rate Risk (Continued)

The Authority's investments as of June 30, 2021 consisted of the following:

Investment Type		Fair Value	S&P Credit Rating	Weighted Average Maturity
Federal agency bonds and notes	\$	10,406,619	AA+	1.38
U.S. Treasury bonds and notes		8,618,420	AA+	2.54
Supra-National agency notes		4,275,341	AAA	1.58
Corporate bonds and notes		485,767	AA+	1.00
LGIP	_	125,339	AAAm	N/A
Total investments	\$ _	23,911,486		

Reconciliation of deposits and investments at June 30, 2022:

Amounts per disclosures:			Amounts per Statemer	t of N	et Position:
Cash and cash equivalents	\$	60,168,353	Cash and cash equivalents	\$	59,528,561
Long-term certificates of deposit	·	3,114,717	Investments		27,413,884
Total deposits		63,283,070	Total	\$	86,942,445
Total investments		23,659,375			
Total	\$	86,942,445			

Restricted Assets

Certain resources of the Authority are classified as restricted assets on the statement of net position. These funds are maintained in separate accounts and their use is limited by applicable bond covenants and agreements.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 3. Accounts Receivable, Due to/from Other Governments, and Payables

Receivables, due to/from other governments and payables were composed of the following:

	2022	2021
Accounts receivable:		
Billed customer services	\$ 4,458,116	\$ 4,329,897
Unbilled customer services	2,329,864	2,362,443
Other	14,454	22,534
Less: Allowance for uncollectible	 (680,000)	 (680,000)
Total accounts receivable	\$ 6,122,435	\$ 6,034,874
Due from other governments:		
County of Fairfax, Virginia	\$ 854,719	\$ 17,561
Accounts payable and accrued expenses:		
Accounts payable - vendors	\$ 13,830,313	\$ 12,728,528
Retainage payable	6,011,544	3,040,092
Other	9,445	4,195
Accrued expenses – payroll, payroll taxes, and other	329,312	293,746
Total accounts payable and accrued expenses	\$ 20,180,614	\$ 16,066,561

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 4. Capital Assets

Changes in capital assets for FY22 were as follows:

	6/30/2021	Additions	Reductions	6/30/2022
Capital assets, not being depreciated:				
Land and improvements	\$ 40,172,404	\$ -	\$ -	\$ 40,172,404
Construction in progress	185,892,313	102,167,957	(716,417)	287,343,853
Total capital assets, not				
being depreciated	226,064,717	102,167,957	(716,417)	327,516,257
Capital assets, being depreciated				
Plant and infrastructure	833,213,277	2,594,249	(1,845,922)	833,961,604
Plant equipment and office equipment	29,244,644	7,876,592	(1,154,926)	35,966,310
Traine equipment and embe equipment	25,277,077	1,010,002	(1,104,020)	33,300,310
Total capital assets, being depreciated	862,457,921	10,470,841	(3,000,848)	869,927,914
			(0,000,000)	
Less accumulated depreciation for:				
Plant and infrastructure	(237,031,408)	(16,400,010)	547,167	(252,884,251
Plant equipment and office equipment	(21,412,761)	(3,128,131)	1,042,186	(23,498,706)
Total accumulated depreciation	(258,444,169)	(19,528,141)	1,589,353	(276,382,957)
Total capital assets, being depreciated, ne	t 604,013,752	(9,057,300)	(1,411,495)	593,544,957
Capital assets, being amortized				
Capacity rights	41,201,598	314,164	-	41,515,762
Less accumulated amortization for:				
Capacity rights	(11,848,565)	(1,043,590)	-	(12,892,155)
Total capital assets, being amortized, net	29,353,033	(729,426)		28,623,607
		▼		
Total capital assets	\$ 859,431,502	\$ 92,381,231	\$ (2,127,912)	\$ 949,684,821

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NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 4. Capital Assets (Continued)

Changes in capital assets for FY21 were as follows:

	6/30/2020	Additions	Reductions	6/30/2021
Capital assets, not being depreciated:				
Land and improvements	\$ 40,172,404	\$ -	\$ -	\$ 40,172,404
Construction in progress	110,604,426	83,265,863	(7,977,976)	185,892,313
Total capital assets, not				
being depreciated	150,776,830	83,265,863	(7,977,976)	226,064,717
Capital assets, being depreciated				
Plant and infrastructure	836,317,504	6,552,271	(9,656,498)	833,213,277
Plant equipment and office equipment	27,640,307	2,613,754	(1,009,417)	29,244,644
Total capital assets, being depreciated	863,957,811	9,166,025	(10,665,915)	862,457,921
Less accumulated depreciation for:				
Plant and infrastructure	(223,141,920)	(16,536,711)	2,647,223	(237,031,408)
Plant equipment and office equipment	(18,503,607)	(3,088,812)	179,658	(21,412,761)
Total accumulated depreciation	(241,645,527)	(19,625,523)	2,826,881	(258,444,169)
Total capital assets, being depreciated, ne	t 622,312,284	(10,459,498)	(7,839,034)	604,013,752
Capital assets, being amortized				
Capacity rights	40,884,229	317,369	-	41,201,598
Less accumulated amortization for:				
Capacity rights	(10,813,498)	(1,035,067)	-	(11,848,565)
Total capital assets, being amortized, net	30,070,731	(717,698)		29,353,033
Total capital assets	\$ 803,159,845	\$ 72,088,667	\$ (15,817,010)	\$ 859,431,502
		,,	. (, ,-=-)	

County of Arlington, Virginia Purchased Capacity Rights

The Authority has entered into a service agreement with the County of Arlington, Virginia (Arlington), in which the Authority purchases capacity rights to use Arlington's wastewater treatment plant. These costs are capitalized as an intangible asset. Arlington holds title to the plant.

County of Fairfax, Virginia Capacity Rights

Under the terms of the Service Agreement with the County, the County reimburses the Authority for its share of capital costs related to joint-use facilities, which varies up to 60%. In exchange for these capital contributions as presented on the statement of revenues, expenses, and changes in net position, the Authority is required to recognize and preserve an equivalent share of the capacity rights of the related facilities for the County's use.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 4. Capital Assets (Continued)

County of Fairfax, Virginia Capacity Rights (Continued)

Currently, the County has a capacity entitlement of 32.4 MGD, which varies up to 60% of the facility's total capacity of 54 MGD. The County is required to share in operation and maintenance costs related to the joint-use facilities.

Note 5. Line of Credit

On February 25, 2020, the Authority entered into a new revolving credit agreement with Bank of America to provide the Authority with a \$30 million line of credit, which is used as interim financing for capital projects. The line is secured by a pledge of the Authority's net revenues. The Authority's obligation to repay advances under the line constitutes subordinated debt, pursuant to the Authority's Master Trust Indenture. Under the initial agreement, the variable interest rate on the line of credit was equal to the SIFMA Index plus 58 basis points. On April 3, 2020, the credit agreement was amended to change the variable interest rate calculation to be 80% of the one-month LIBOR (minimum of 0.50%) plus 30 basis points. On June 29, 2021, the credit agreement was amended to change the variable interest rate to either: 1) 80% of the one-month LIBOR (no minimum) plus 35 basis points or in the event of a taxable draw 2) 100% of the one-month LIBOR (no minimum) plus 45 basis points. On June 29, 2022, the credit agreement was amended and restated to change the variable interest rate to either: 1) 80% of the one-month Term SOFR (no minimum) plus 42 basis points or in the event of a taxable draw, 2) 100% of the one-month Term SOFR plus 53 basis points. The agreement also requires the Authority to pay an unused fee of 0.15% per annum for any day on which less than 50% of the authorized \$30 million is outstanding. The rate was 1.19% and 0.43% at June 30, 2022 and 2021, respectively. The initial term of the line of credit was one year, with an expiration date of June 30, 2021. The Authority extended the line of credit to June 30, 2022 and then again to June 30, 2024, with the same terms but for the revised interest rate methodologies and fees described above. As of June 30, 2022 and 2021, respectively. the Authority has drawn \$13,874,852 and \$30,000,000. As of June 30, 2022 and 2021, respectively, the unused portion of the line credit was \$16,125,148 and \$0.

Note 6. Long-Term Debt

On March 15, 1999, the Authority executed a new Master Indenture of Trust for the purpose of issuing sewer revenue bonds from time-to-time. These bonds will provide funds to pay the cost, or any part of the cost, of the Sewage Disposal System additions or improvements or to refund indebtedness and obligations previously incurred for such purposes. The Authority has issued and sold sewer revenue bonds to the Virginia Clean Water Revolving Loan Fund and the Virginia Pooled Financing Program, acting by and through the Virginia Resources Authority (VRA). The Master Indenture of Trust constitutes a contract among the Authority, the Trustee and VRA governing bond issuance.

During FY21, the Authority entered into a loan agreement with the United States Environmental Protection Agency to borrow up to \$320,992,641 through the Water Infrastructure Finance and Innovation Act (WIFIA) loan program, secured by a supplement to the Master Indenture. As of June 30, 2022, no WIFIA Bonds had been drawn or issued under the loan agreement.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 6. Long-Term Debt (Continued)

Sewer bonds consist of the following:

	 2022	 2021
Sewer revenue bond, Series 2000B, \$60,400,000; secured equally and ratably with other bond issues by pledge of revenues of the Authority; interest only payments due March 2002 and March 2005; semi-annual installments of approximately \$3,466,961, including principal and interest at 3.85% due through September 2022.	\$ 4,024,113	\$ 10,613,840
Sewer revenue bond, Series 2004, \$22,000,000; secured equally and ratably with other bond issues by pledge of revenues of the Authority; semi-annual installments of \$712,206, including principal and interest beginning March 2006 at 3.10% due through September 2024.	3,508,232	4,887,211
Sewer revenue bond, Series 2006A, \$3,000,000; secured equally and ratably with other bond issues by pledge of revenues of the Authority; semi-annual installments of \$100,824, including principal and interest beginning in March 2006 at 3.10% due through September 2024.	496,646	691,863
Sewer revenue bond, Series 2006B, \$12,000,000; secured equally and ratably with other bond issues by pledge of revenues of the Authority; semi-annual installments of \$375,079 at 3.10% due through March 2027.	3,649,677	4,358,021
Sewer revenue bond, Series 2009, \$15,000,000; secured equally and ratably with other bond issues by pledge of revenues of the Authority; semi-annual installments of \$502,939, including principal and interest, beginning March 2011 at 3.55% due through September 2030.	6,651,069	7,459,509
Sewer revenue bond, Series 2011, \$8,115,767; secured equally and ratably with other bond issues by pledge of revenues of the Authority; semi-annual installments of \$260,604, including principal and interest, beginning March 2014 at 2.35% due through September 2033.	5,220,164	5,611,784
ochremner 2000.	5,220,104	3,011,704

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NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 6. Long-Term Debt (Continued)

	2022	2021
Sewer revenue bond, Series 2014A, \$12,500,000; secured equally and ratably with other bond issues by pledge of revenues of the Authority; semi-annual installments of \$389,136, including principal and interest, beginning March 2016 at 2.10% due through September 2035.	\$ 9,144,888	\$ 9,763,046
Sewer revenue bond, Series 2014B, \$2,500,000; secured equally and ratably with other bond issues by pledge of revenues of the Authority; semi-annual installments of \$73,712, including principal and interest, beginning March 2016 at 2.10% due through September 2035.	1,769,598	1,894,660
Sewer revenue bond, Series 2014C, \$19,515,000; secured equally and ratably with other bond issues by pledge of revenues of the Authority; semi-annual installments of \$399,833 to \$3,203,294, including principal and interest, beginning April 2015 at 3.63%, due through April 2039.	18,700,000	18,960,000
Sewer revenue bond, Series 2017A, \$23,000,000; secured equally and ratably with other bond issues by pledge of revenues of the Authority; semi-annual installments of \$395,774 to \$1,468,613, including principal and interest, beginning October 2017 at 3.60%, due through October 2045.	23,000,000	23,000,000
Sewer revenue bond, Series 2019, up to \$10,400,000; secured equally and ratably with other bond issues by pledge of revenues of the Authority; semi-annual installments of \$79,399 to \$1,121,530, including principal and interest, beginning March 2022 at 1.10%, due through March 2040. Balance represents draws to date.	4,881,504	4,886,504
Virginia water facilities revolving fund loan Series 2021, up to \$185,650,000; secured equally and ratably with other bond issues by pledge of revenues of the Authority; semi-annual installments of \$4,568,195, including principal and interest, beginning March 2023 at 1.35%, due through March 2048. Balance represents draws to date.	104,808,976	18,973,122
Plus unamortized premiums and discounts, net	2,564,213	2,701,232
	\$ 188,419,080	\$ 113,800,792

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 6. Long-Term Debt (Continued)

The annual requirements to amortize bond principal and related interest are as follows:

Fiscal Year	 Principal	Interest		Total
2023	\$ 9,215,454	\$ 2,365,092	\$	11,580,546
2024	7,107,885	2,885,023		9,992,908
2025	9,629,508	3,442,273		13,071,781
2026	7,708,423	3,268,925		10,977,348
2027	7,921,905	3,109,915		11,031,820
2028-2032	39,749,304	12,978,601		52,727,905
2033-2037	40,009,031	7,964,230		47,973,261
2038-2042	31,871,048	4,433,194		36,304,242
2043-2047	29,503,188	1,556,929		31,060,117
2048	3,139,121	25,516		3,164,637
Total	\$ 185,854,867	\$ 42,029,698	\$	227,884,565

The change in debt for the years ended June 30, 2022 and 2021 are as follows:

	6/30/2021	Additions	Reductions	6/30/2022	Due Within One Year
Sewer revenue bonds Plus deferred amounts:	\$111,099,560	\$85,835,854	\$ (11,080,547)	\$185,854,867	\$ 9,215,454
Net premium	2,701,232		(137,019)	2,564,213	137,019
Total	\$113,800,792	\$85,835,854	\$ (11,217,566)	\$188,419,080	\$ 9,352,473
					Due Within
	6/30/2020	Additions	Reductions	6/30/2021	One Year
Sewer revenue bonds Plus deferred amounts:	\$100,169,201	Additions \$21,533,103	Reductions \$ (10,602,744)		
	· ·				One Year

During FY2022 and FY2021, the Authority was in compliance with the covenants associated with the outstanding bond indentures.

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NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 7. Defined Benefit Pension Plan

Plan Description

The VRS Authority Retirement Plan is a multi-employer, agent plan. All full-time, salaried, permanent employees of the Authority are automatically covered by a VRS Retirement Plan upon employment. This plan is administered by the VRS along with plans for other employer groups in the Commonwealth of Virginia. Members earn one month of service credit for each month they are employed and for which they and their employer pay contributions to VRS. Members are eligible to purchase prior service, based on specific criteria as defined in the *Code of Virginia*, as amended. Eligible prior service that may be purchased includes prior public service, active military service, certain periods of leave, and previously refunded service.

The System administers three different benefit structures for covered employees – Plan 1, Plan 2, and Hybrid. Each of these benefit structures has a different eligibility criteria. The specific information for each plan is as follows:

<u>Plan 1</u> – Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, service credit, and average final compensation at retirement using a formula. Employees are eligible for Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013, and they have not taken a refund.

- Hybrid Opt-In Election Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014. The Hybrid Retirement Plan's effective date for eligible Plan 1 members who opted in was July 1, 2014. If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan. Members who were eligible for an optional retirement plan (ORP) and had prior service under Plan 1 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 1 or ORP.
- Retirement Contributions Employees contribute 5.00% of their compensation each
 month to their member contribution account through a pre-tax salary reduction.
 Member contributions are tax-deferred until they are withdrawn as part of a
 retirement benefit or as a refund. The employer makes a separate actuarially
 determined contribution to VRS for all covered employees. VRS invests both member
 and employer contributions to provide funding for the future benefit payments.
- Service Credit Service credit includes active service. Members earn service credit
 for each month they are employed in a covered position. It also may include credit
 for prior service the member has purchased or additional service credit the member
 was granted. A member's total service credit is one of the factors used to determine
 their eligibility for retirement and to calculate their retirement benefit. It also may
 count toward eligibility for the health insurance credit in retirement, if the employer
 offers the health insurance credit.
- Vesting Vesting is the minimum length of service a member needs to qualify for a
 future retirement benefit. Members become vested when they have at least five
 years (60 months) of service credit. Vesting means members are eligible to qualify
 for retirement if they meet the age and service requirements for their plan. Members
 also must be vested to receive a full refund of the employer's contribution account
 balance if they leave employment and request a refund. Members are always 100%
 vested in the contributions that they make.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 7. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Plan 1 (Continued)

- Calculating the Benefit The Basic Benefit is calculated based on a formula using the member's average final compensation, a retirement multiplier, and total service credit at retirement. An early retirement reduction factor is applied to the Basic Benefit if the member retires with a reduced retirement benefit. In cases where the member has elected an optional form of retirement payment, an option factor specific to the option chosen is then applied.
- Average Final Compensation A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.
- Service Retirement Multiplier The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.70%.
- Normal Retirement Age Age 65.
- Earliest Unreduced Retirement Eligibility Age 65 with at least five years (60 months) of service credit or at age 50 with at least 30 years of service credit.
- Earliest Reduced Retirement Eligibility Age 55 with at least five years (60 months) of service credit or age 50 with at least 10 years of service credit.
- Cost-of-Living Adjustment (COLA) in Retirement The Cost-of-Living Adjustment (COLA) matches the first 3.00% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4.00%) up to a maximum COLA of 5.00%.
 - Eligibility For members who retire with an unreduced benefit or with a reduced benefit and who have less than 20 years of service credit, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date. For members who retire with a reduced benefit and who have less than 20 years of service credit, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.
 - Exceptions to COLA Effective Dates The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances:
 - The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013.
 - The member retires on disability.
 - The member retires directly from short-term or long-term disability.
 - The member is involuntarily separated from employment for causes other than job performance or misconduct and is eligible to retire under the Workforce Transition Act or the Transitional Benefits Program.
 - The member dies in service and the member's survivor or beneficiary is eligible for a monthly death-in-service benefit.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 7. Defined Benefit Pension Plan (Continued)

<u>Plan Description</u> (Continued)

Plan 1 (Continued)

- **Disability Coverage** For members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.70% on all service, regardless of when it was earned, purchased, or granted.
- Purchase of Prior Service Members may be eligible to purchase service from
 previous public employment, active duty military service, an eligible period of leave
 or VRS refunded service as service credit in their plan. Prior service credit counts
 towards vesting, eligibility for retirement and the health insurance credit. Only active
 members are eligible to purchase prior service. Members also may be eligible to
 purchase periods of leave without pay.

<u>Plan 2</u> – Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, service credit, and average final compensation at retirement using a formula. Employees are eligible for Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.

- Hybrid Opt-In Election Eligible Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014. The Hybrid Retirement Plan's effective date for eligible Plan 2 members who opted in was July 1, 2014. If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan. Members who were eligible for an ORP and have prior service under Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 2 or ORP.
- Retirement Contributions Same as Plan 1.
- Service Credit Same as Plan 1.
- Vesting Same as Plan 1.
- Calculating the Benefit See definition under Plan 1.
- Average Final Compensation A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.
- Service Retirement Multiplier Same as Plan 1 for service earned, purchased, or granted prior to January 1, 2013. The retirement multiplier is 1.65% for service credit earned, purchased, or granted on or after January 1, 2013.
- Normal Retirement Age Normal Social Security retirement age.
- Earliest Unreduced Retirement Eligibility Normal Social Security retirement age
 with at least five years (60 months) of service credit or when their age and service
 equal 90.
- Earliest Reduced Retirement Eligibility Age 60 with at least five years (60 months)
 of service credit.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 7. Defined Benefit Pension Plan (Continued)

<u>Plan Description</u> (Continued)

Plan 2 (Continued)

- **COLA in Retirement** The COLA matches the first 2.00% increase in the CPI-U and half of any additional increase (up to 2.00%), for a maximum COLA of 3.00%.
 - o Eligibility Same as Plan 1.
 - o Exceptions to COLA Effective Dates Same as Plan 1.
- Purchase of Prior Service Same as Plan 1.
- Disability Coverage Same as Plan 1 except that the retirement multiplier is 1.65%.

Hybrid Retirement Plan – The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. Most members hired on or after January 1, 2014 are in this plan, as well as Plan 1 and Plan 2 members who were eligible and opted into the plan during a special election window. The defined benefit is based on a member's age, service credit, and average final compensation at retirement using a formula. The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions. In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.

- Eligible Members Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes Political Subdivision employees; members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1 through April 30, 2014; the plan's effective date for opt-in members was July 1, 2014.
- Non-Eligible Members Some employees are not eligible to participate in the Hybrid Retirement Plan. They include Political Subdivision employees who are covered by enhanced benefits for hazardous duty employees. Those employees eligible for an ORP must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable), or ORP.
- **Retirement Contributions** A member's retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan.
- Mandatory contributions are based on a percentage of the employee's creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 7. Defined Benefit Pension Plan (Continued)

<u>Plan Description</u> (Continued)

<u>Hybrid Retirement Plan</u> (Continued)

Service Credit –

- Defined Benefit Component: Under the defined benefit component of the plan, service credit includes active service. Members earn service credit for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional service credit the member was granted. A member's total service credit is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It may also count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.
- Defined Contributions Component: Under the defined contribution component, service credit is used to determine vesting for the employer contribution portion of the plan.

Vesting –

- Defined Benefit Component: Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of service credit. Plan 1 or Plan 2 members with at least five years (60 months) of service credit who opted into the Hybrid Retirement Plan remain vested in the defined benefit component.
- Defined Contribution Component: Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan. Members are always 100% vested in the contributions that they make. Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service. After two years, a member is 50% vested and may withdraw 50% of employer contributions. After three years, a member is 75% vested and may withdraw 75% of employer contributions. After four or more years, a member is 100% vested and may withdraw 100% of employer contributions. Distribution is not required, except as governed by law.

Calculating the Benefit –

- o **Defined Benefit Component:** See definition under Plan 1.
- Defined Contribution Component: The benefit is based on contributions made by the member and any matching contributions made by the employer, plus net investment earnings on those contributions.
- Average Final Compensation Same as Plan 2 for the defined benefit component of the plan.
- Service Retirement Multiplier The retirement multiplier for the defined benefit component is 1.00%. For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 7. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Hybrid Retirement Plan (Continued)

- Normal Retirement Age
 - o **Defined Benefit Component:** Same as Plan 2.
 - o **Defined Contribution Component:** Members are eligible to receive distributions upon leaving employment, subject to restrictions.
- Earliest Unreduced Retirement Eligibility -
 - Defined Benefit Component: Normal Social Security retirement age and have at least five years (60 months) of service credit or when their age and service equal 90.
 - o **Defined Contribution Component:** Members are eligible to receive distributions upon leaving, subject to restrictions.
- Earliest Reduced Retirement Eligibility
 - o **Defined Benefit Component:** Members may retire with a reduced benefit as early as age 60 with at least five years (60 months) of service credit.
 - Defined Contribution Component: Members are eligible to receive distributions upon leaving employment, subject to restrictions.
- COLA in Retirement
 - Defined Benefit Component: Same as Plan 2.
 - o **Defined Contribution Component:** Not applicable.
 - Eligibility: Same as Plan 1 and 2.
 - Exceptions to COLA Effective Dates: Same as Plan 1 and 2.
- Disability Coverage Employees of Political Subdivisions (including Plan 1 and Plan 2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides an employer-paid comparable program for its members. Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VLDP are subject to a one-year waiting period before becoming eligible for nonwork-related disability benefits.
- Purchase of Prior Service
 - Defined Benefit Component Same as Plan 1, with the following exceptions:
 - Hybrid Retirement Plan members are ineligible for ported service.
 - Defined Contribution Component Not applicable.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 7. Defined Benefit Pension Plan (Continued)

Employees Covered by Benefit Terms

As of the June 30, 2020 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	95
Inactive members: Vested inactive members Non-vested inactive members Inactive members active elsewhere in VRS	19 57 10
Total inactive members	86
Active members	103
Total covered employees	284

Contributions

The contribution requirement for active employees is governed by §51.1-145 of the *Code of Virginia*, as amended, but may be impacted as a result of funding options provided to Political Subdivisions by the Virginia General Assembly. Employees are required to contribute 5.00% of their compensation toward their retirement.

The Authority's contractually required contribution rate for the years ended June 30, 2022 and 2021 was 6.44% of covered employee compensation, respectively. This rate was based on actuarially determined rates from actuarial valuations as of June 30, 2020 and 2019.

This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Authority were \$526,440 and \$515,855 for the years ended June 30, 2022 and 2021, respectively.

Net Pension Liability

The Authority's net pension liability was measured as of June 30, 2021. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2020, rolled forward to the measurement date of June 30, 2021.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 7. Defined Benefit Pension Plan (Continued)

Actuarial Assumptions

The total pension liability for General Employees in the Authority's Retirement Plan was based on an actuarial valuation as of June 30, 2020, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2021.

Inflation 2.50%

General Employees - Salary increases, including inflation

Investment rate of return 6.75%, net of pension plan investment expense, including inflation

3.50 - 5.35%

Mortality rates: General Employees - 15% of deaths are assumed to be service related. Mortality is projected using the applicable PUB2010 Mortality Table Projected to 2020 with various setbacks or setforwards for both males and females.

The actuarial assumptions used in the June 30, 2020 valuation were based on the results of an actuarial experience study for the period from July 1, 2016 through June 30, 2020, except the change in the discount rate which was changed on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as, a result of the experience study, are as follows:

General Employees - Others (Non-10 Largest): Updated mortality tables. Adjusted retirement rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; change final retirement age. Adjusted withdrawal rates to better fit experience.

Long-Term Expected Rate of Return

The long-term expected rate of return on pension System investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension System investment expense and inflation) are developed for each major asset class.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 7. Defined Benefit Pension Plan (Continued)

Long-Term Expected Rate of Return (Continued)

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. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return
Public Equity	34.00 %	5.00 %	1.70 %
Fixed Income	15.00 %	0.57 %	0.09 %
Credit Strategies	14.00 %	4.49 %	0.63 %
Real Assets	14.00 %	4.76 %	0.67 %
Private Equity	14.00 %	9.94 %	1.39 %
MAPS - Multi-Asset Public Strategies	6.00 %	3.29 %	0.20 %
PIP - Private Investment Partnership	3.00 %	6.84 %	0.21 %
Total	100.00 %		4.89 %
	7 ^		
	Inflation		2.50 %
* Expected arithmetic	c nominal return		7.39 %

^{*} The above allocation provides a one-year return of 7.39%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the System, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.94%, including expected inflation of 2.50%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 7. Defined Benefit Pension Plan (Continued)

Discount Rate

The discount rate used to measure the total pension liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Consistent with the phased-in funding provided by the General Assembly for state and teacher employer contributions, political subdivisions were also provided with an opportunity to use an alternate employer contribution rate. For the year ended June 30, 2021, the alternate rate was the employer contribution rate used in FY 2012 or 100% of the actuarially determined employer contribution rate from the June 30, 2017, actuarial valuations, whichever was greater. From July 1, 2021, on, participating employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. 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 active and inactive employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

Changes in Net Pension Liability as of June 30, 2022

			Increase (Decrease)	
	Y	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
		(a)	(b)	 (a) - (b)
Balances at June 30, 2021	\$	52,107,776	\$ 44,816,817	\$ 7,290,959
Changes for the year:				
Service cost		617,494	-	617,494
Interest		3,399,852	-	3,399,852
Change of assumptions		2,178,055	-	2,178,055
Differences between expected				
and actual experience		289,659	-	289,659
Contributions - employer		-	440,276	(440,276)
Contributions - employee		-	391,153	(391,153)
Net investment income		-	11,968,102	(11,968,102)
Benefit payments, including refunds				
of employee contributions		(3,479,188)	(3,479,188)	-
Administrative expenses		-	(31,556)	31,556
Other changes		-	1,110	 (1,110)
Net changes	,	3,005,872	9,289,897	 (6,284,025)
Balances at June 30, 2022	\$	55,113,648	\$ 54,106,714	\$ 1,006,934

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 7. Defined Benefit Pension Plan (Continued)

Changes in Net Pension Liability as of June 30, 2021

			Incre	ase (Decrease)	
		Total Pension Liability (a)		Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balances at June 30, 2020	\$	52,044,552	\$	45,965,030	\$ 6,079,522
Changes for the year:					
Service cost		615,974		-	615,974
Interest		3,412,612		-	3,412,612
Differences between expected					
and actual experience		(990,689)		-	(990,689)
Contributions - employer		-		554,765	(554,765)
Contributions - employee		-		432,353	(432,353)
Net investment income		-		871,091	(871,091)
Benefit payments, including refunds					
of employee contributions		(2,974,673)		(2,974,673)	-
Administrative expenses		-		(30,738)	30,738
Other changes		_		(1,011)	 1,011
Net changes	X	63,224	_	(1,148,213)	 1,211,437
Balances at June 30, 2021	\$	52,107,776	\$	44,816,817	\$ 7,290,959

Sensitivity of the Discount Rate

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

	 1.00% Decrease (5.75%)	Current Discount Rate (6.75%)		1.00% Increase (7.75%)	
Authority's net pension Liability (Asset) at 6/30/2022	\$ 7,474,261	\$	1,006,934	\$	(4,417,760)
Authority's net pension liability at 6/30/2021	\$ 13,234,532	\$	7,290,959	\$	2,270,105

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NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 7. Defined Benefit Pension Plan (Continued)

<u>Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions</u>

For the year ended June 30, 2022, the Authority recognized negative pension expense of \$159,636. At June 30, 2022, the Authority 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	\$ 163,750	\$ 240,167
Change in assumptions	1,231,075	-
Net difference between projected and actual earnings on pension plan investments	-	5,907,308
Employer contributions subsequent to the measurement date	526,440	
Total	\$ 1,921,235	\$ 6,147,475

For the year ended June 30, 2021, the Authority recognized pension expense of \$882,561. At June 30, 2021, the Authority 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	\$ -	\$ 728,444
Change in assumptions	327,749	-
Net difference between projected and actual earnings on pension plan investments	1,332,128	-
Employer contributions subsequent to the measurement date	515,855	
Total	\$ 2,175,732	\$ 728,444

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 7. Defined Benefit Pension Plan (Continued)

<u>Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions</u> (Continued)

The \$526,440 reported as deferred outflows of resources related to pensions resulting from the Authority's contributions after the measurement date will be recognized as a reduction of the Net Pension Liability in the year ending June 30, 2023. Other amounts reported as deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ending June 30	Addition/ (Reduction) to Pension Expense				
2023	\$ (550,287)				
2024	\$ (1,021,731)				
2025	\$ (1,373,990)				
2026	\$ (1,806,672)				

Pension Plan Data

Information about the VRS Political Subdivision Retirement Plan is also available in the separately issued VRS 2021 Annual Comprehensive Financial Report (ACFR). A copy of the 2021 VRS ACFR may be downloaded from the VRS website at varetire.org/pdf/publications/2020-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA 23218-2500.

Payables to the Pension Plan

At June 30, 2022 and 2021, approximately \$72,000 and \$67,000 was payable to the System for the legally required contributions related to the June 2022 and 2021 payroll, respectively.

Note 8. Other Post-Employment Benefits

The Authority provides limited post-retirement benefits, such as health, dental and vision insurance to retirees who have five or more years of service with the Authority through an agent multiple-employer defined benefit plan. The Authority pays 25% of medical insurance costs of retirees with five or more years of service. The remaining amounts of insurance premiums are paid by the retiree. Prior to fiscal 2014, the Authority also provided a post-retirement life insurance benefit to retirees. The Authority has discontinued its post-retirement life insurance coverage for retirees.

The plan does not issue separate financial statements.

As of January 1, 2021, the following employees were covered by the benefit terms:

Inactive members and dependent spouses currently receiving benefits
Active members

25
99
124

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 8. Other Post-Employment Benefits (Continued)

Actuarial Methods and Assumptions

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members at that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the actuarial valuation, the entry age normal actuarial cost method was used. The valuation results are based on a discount rate of 6.5%, an annual payroll growth rate of 3.0%, and an annual healthcare cost trend rate of 5.0% initially, decreasing annually to a rate of 3.9%. An inflation rate of 2.5% is used in the assumptions. The unfunded liability is amortized over a closed period of 24 years at a level percentage of pay.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revisions as actual results are compared with past expectations and new estimates are made for the future. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Net OPEB Liability/(Asset)

The components of the net OPEB liability at June 30, 2022 were as follows.

Total OPEB Liability \$ 605,956

Plan fiduciary net position (1,032,992)

Net OPEB asset <u>\$ (427,036)</u>

Plan fiduciary net position as a Percentage of the total OPEB

Asset 170.47%

The components of the net OPEB liability at June 30, 2021 were as follows.

93.32%

Total OPEB Liability \$ 1,221,398

Plan fiduciary net position (1,139,810)

Net OPEB liability \$ 81,588

Plan fiduciary net position as a

Percentage of the total OPEB
Liability

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 8. Other Post-Employment Benefits (Continued)

Changes in Net OPEB Liability/(Asset) at June 30, 2022

Increase (Decrease)					
	Total OPEB Liability (a)		Plan Fiduciary Net Position (b)		Net OPEB Liability/(Asset) (a) - (b)
\$	1,221,398	\$	1,139,810	\$	81,588
	41,500		-		41,500
	80,274		-		80,274
	(489,333)		-		(489,333)
	(191,150)		-		(191,150)
	(56,733)		(56,733)		-
	-		56,733		(56,733)
	-		(105,094)		105,094
	-		(1,724)		1,724
\$	605,956	\$	1,032,992	\$	(427,036)
	\$	\$ 1,221,398 \$ 1,221,398 \$ 41,500 80,274 (489,333) (191,150) (56,733)	Total OPEB Liability (a) \$ 1,221,398 \$ 41,500 80,274 (489,333) (191,150) (56,733)	Total OPEB Fiduciary Net Position (a) (b) \$ 1,221,398 \$ 1,139,810 41,500	Total OPEB Fiduciary Liability Net Position (a) (b) \$ 1,221,398 \$ 1,139,810 \$ 41,500

Changes in Net OPEB Liability at June 30, 2021

		Increase (Decrease)	
	Total	Plan	Net
	OPEB	Fiduciary	OPEB
	Liability	Net Position	Liability
	 (a)	(b)	 (a) - (b)
Balances at June 30, 2020	\$ 1,185,668	\$ 877,590	\$ 308,078
Changes for the year:			
Service cost	34,988	-	34,988
Interest	76,907	-	76,907
Benefit payments	(76,165)	(76,165)	-
Employer contributions	-	76,165	(76,165)
Net investment income	-	263,714	(263,714)
Administrative expenses	 <u> </u>	(1,494)	 1,494
Balances as of June 30, 2021	\$ 1,221,398	\$ 1,139,810	\$ 81,588

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 8. Other Post-Employment Benefits (Continued)

Sensitivity of the Net OPEB Liability (Asset)

The following presents the Net OPEB Liability of the Authority, calculated using the discount rate of 6.50%, as well as what the Authority's Net OPEB Liability would be if it were calculated using a discount rate that is 1 percentage point lower (5.50%) or 1 percentage point higher (7.50%) than the current rate.

_		1.00% Decrease (5.50%)	Current Discount Rate (6.50%)		1.00% Increase (7.50%)	
June 30, 2022	\$	(383,265)	\$	(427,036)	\$	(466,073)
June 30, 2021	\$	174,210	\$	81,588	\$	(1,217)

The following presents the Net OPEB Liability of the Authority, calculated using the current healthcare cost trend rates, as well as what the Authority's Net OPEB Liability would be if it were calculated using healthcare cost trend rates that are 1 percentage point lower or 1 percentage point higher than the current rate.

	1.00% Decrease	 Current Trend	1.00% Increase
June 30, 2022	\$ (478,228)	\$ (427,036)	\$ (367,318)
June 30, 2021	(32,508)	\$ 81,588	\$ 213,667

OPEB Expense and Deferred Outflows/Inflows of Resources Related to OPEB

For the year ended June 30, 2022 and 2021, the Authority recognized OPEB Expense of (\$126,329) and (\$81,261), respectively. As of June 30, 2022, the Authority reported Deferred Inflows of Resources related to OPEB from the following sources:

	C	Deferred Outflows of Resources	Deferred Inflows of Resources		
Differences between expected and actual experience Changes in assumptions Net difference between projected and actual earnings	\$	- 24,358 38,767	\$	774,918 316,194 -	
Total	\$	63,125	\$	1,091,112	

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 8. Other Post-Employment Benefits (Continued)

As of June 30, 2021, the Authority reported 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 Changes in assumptions	\$	31,630	\$	424,198 172,825	
Net difference between projected and actual earnings		-		137,032	
Total	\$	31,630	\$	734,055	

Amounts currently reported as deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows.

Year Ending June 30	Addition/ (Reduction) to OPEB Expense			
	2			
2023	\$	(172,766)		
2024	\$	(177,032)		
2025	\$	(184,639)		
2026	\$	(105,283)		
2027	\$	(129,406)		
Thereafter	\$	(258,861)		

OPEB Trust

During 2014, the Authority established a trust fund to fund the cost of OPEB. The trust fund was established by the Authority with the Virginia Pooled OPEB Trust Fund (Trust), sponsored by the Virginia Municipal League and the Virginia Association of Counties, and overseen by a Board of Trustees. The Trust is established as an investment vehicle for participating employers to accumulate assets to fund OPEB Plan assets for purposes of GASB Statement No. 75 that are segregated and restricted in a trust, in which (a) contributions to the plan are irrevocable, (b) assets are dedicated to providing benefits to retirees and their beneficiaries, and (c) assets are legally protected from creditors of the employer or plan administrator, for the payment of benefits in accordance with terms of the plan.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 8. Other Post-Employment Benefits (Continued)

Trust Fund Investments

Investment decisions for the fund's assets are made by the Board of Trustees. The Board of Trustees established investment objectives, risk tolerance, and asset allocation policies in light of the investment policy, market and economic conditions, and generally prevailing prudent investment practices. The Board of Trustees also monitors the investments to ensure adherence to the adopted policies and guidelines. In addition, the Trustees review, monitor, and evaluate the performance of the investments and its investment advisors in light of available investment opportunities, market conditions, and publicly available indices for the generally accepted evaluation and measurement of such performance.

The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

		Long-Term Expected Arithmetic	
	Target	Real Rate of	
Asset Class	Allocation	Return	
US Core Fixed Income	21%	1.39%	
US Large Caps	26%	4.94%	
US Small Caps	10%	6.73%	
Foreign Developed Equity	13%	6.27%	
Emerging Markets Equity	5%	8.82%	
Private Real Estate Property	7%	4.61%	
Private Equity	5%	10.36%	
Commodities	3%	1.99%	
Hedge FOF Strategic	10%	3.58%	
Long-Term Expected Rate of Return		6.50%	

Concentrations – There are no investments in any one organization that represents 5% or more of the OPEB Trust's fiduciary net position.

Rate of Return – For the years ended June 30, 2022 and 2021, the annual money-weighted rate of return on investments, net of investment expense, was -9.23% and 30.08%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts invested.

Additional investment information for the Trust can be obtained by writing to VML/VACo Finance Program, 8 East Canal Street, Richmond, Virginia 23219.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 9. Risk Management

The Authority is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. These risks are covered by commercial insurance purchased from independent third parties. There have been no significant reductions in insurance coverage from the prior year. Settled claims have not exceeded insurance coverage in the past three years.

Note 10. Commitments and Contingencies

From time to time, the Authority is involved in various legal actions arising in the normal course of business. In the opinion of management, such matters will not have a material effect upon the financial position of the Authority.

Note 11. New Accounting Standards

The GASB has issued the following Statements which are not yet effective.

GASB Statement No. 91, Conduit Debt Obligations, provides a single method of reporting conduit debt obligations by issuers and eliminates diversity in practice. An issuer should not recognize a conduit debt obligation as a liability, however, an issuer should recognize a liability associated with an additional commitment or a voluntary commitment to support debt service if certain criteria are met. This Statement will be effective for the year ending June 30, 2023.

GASB Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*, improve financial reporting by addressing issues related to public-private and public-public partnership arrangements (PPPs). This Statement also provides guidance for accounting and financial reporting for availability payment arrangements (APAs). The requirements of this Statement will improve financial reporting by establishing the definitions of PPPs and APAs and providing uniform guidance on accounting and financial reporting for transactions that meet those definitions. This Statement will be effective for the year ending June 30, 2023.

GASB Statement No. 96, Subscription-Based Information Technology Arrangements, provides guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) for government end users (governments). This Statement (1) defines a SBITA; (2) establishes that a SBITA results in a right-to-use subscription asset—an intangible asset—and a corresponding subscription liability; (3) provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and (4) requires note disclosures regarding a SBITA. To the extent relevant, the standards for SBITAs are based on the standards established in Statement No. 87, Leases, as amended. This Statement will be effective for the year ending June 30, 2023.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 11. New Accounting Standards (Continued)

GASB Statement No. 97, Certain Component Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans, increase consistency and comparability related to the reporting of fiduciary component units in circumstances in which a potential component unit does not have a governing board and the primary government performs the duties that a governing board typically would perform; (2) mitigate costs associated with the reporting of certain defined contribution pension plans, defined contribution OPEB plans, and employee benefit plans other than pension plans or OPEB plans as fiduciary component units in fiduciary fund financial statements; and (3) enhance the relevance, consistency, and comparability of the accounting and financial reporting for Internal Revenue Code (IRC) Section 457 deferred compensation plans (Section 457 plans) that meet the definition of a pension plan and for benefits provided through those plans. This Statement will be effective for the year ending June 30, 2023.

GASB Statement No. 100, Accounting Changes and Error Corrections – An Amendment of GASB Statement No. 62, This Statement defines accounting changes as changes in accounting principles, changes in accounting estimates, and changes to or within the financial reporting entity and describes the transactions or other events that constitute those changes. As part of those descriptions, for (1) certain changes in accounting principles and (2) certain changes in accounting estimates that result from a change in measurement methodology, a new principle or methodology should be justified on the basis that it is preferable to the principle or methodology used before the change. That preferability should be based on the qualitative characteristics of financial reporting—understandability, reliability, relevance, timeliness, consistency, and comparability. This Statement also addresses corrections of errors in previously issued financial statements. The statement will become effective for the fiscal year ending June 30, 2024.

GASB Statement No. 101, Compensated Absences. This Statement requires that liabilities for compensated absences be recognized for (1) leave that has not been used and (2) leave that has been used but not yet paid in cash or settled through noncash means. A liability should be recognized for leave that has not been used if (a) the leave is attributable to services already rendered, (b) the leave accumulates, and (c) the leave is more likely than not to be used for time off or otherwise paid in cash or settled through noncash means. Leave is attributable to services already rendered when an employee has performed the services required to earn the leave. Leave that accumulates is carried forward from the reporting period in which it is earned to a future reporting period during which it may be used for time off or otherwise paid or settled. In estimating the leave that is more likely than not to be used or otherwise paid or settled, a government should consider relevant factors such as employment policies related to compensated absences and historical information about the use or payment of compensated absences. However, leave that is more likely than not to be settled through conversion to defined benefit postemployment benefits should not be included in a liability for compensated absences. The statement will become effective for the fiscal year ending June 30, 2025.

Management has not yet evaluated the effects, if any, of adopting these standards.

NOTES TO FINANCIAL STATEMENTS June 30, 2022

Note 12. RiverRenew Program

The Authority is managing a large, multi-year construction program called RiverRenew to address combined sewer pollution from four outfalls in the City. The program began in 2018 and is under a legislative deadline to be complete by July 1, 2025. The program is projected at a total capital cost of \$615 million, of which approximately \$224 million had been spent as of June 30, 2022. During FY22, the Authority significantly advanced the design and construction of program's largest component, the Tunnel Project. At the end of FY22, the Tunnel Project was 26 percent complete and on-schedule to meet the legislative deadline. Major milestones in FY22 included the completion of the final design to support construction activities, the delivery of the state-of-the-art tunnel boring machine to construct a new tunnel, and the sinking of two deep shafts at the Authority's wastewater plant to house a future pumping station.

In FY22, the Authority was awarded \$90 million in American Rescue Plan grants to fund RiverRenew. These funds will be used to offset the debt the Authority is assuming through its Virginia Clean Water Revolving Loan Fund and Water Infrastructure Finance and Innovation Act loans. The debt service associated with the program is anticipated to be repaid over an extended 38-year period and supported by rate increases, subject to periodic approval by the Authority's Board over the course of the program implementation.

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REQUIRED SUPPLEMENTARY INFORMATION

REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Plan Year Ended June 30,

	Plan Tear Ended Julie 30,							
Total Pension Liability	2021	2020	2019*	2018	2017	2016	2015	2014
Service cost	\$ 617,494	\$ 615,974	\$ 604,713	\$ 592,542	\$ 643,808	\$ 682,527	\$ 771,341	\$ 757,878
Interest on total pension liability	3,399,852	3,412,612	3,395,405	3,340,976	3,299,804	3,236,592	3,206,163	3,092,779
Difference between expected and actual experience	289,659	(990,689)	(471,796)	(414,228)	(207,089)	(598,619)	(1,127,638)	-
Change in assumptions	2,178,055	-	1,368,221	-	(485,329)	-	-	-
Benefit payments, including refunds of employee contributions	(3,479,188)	(2,974,673)	(2,715,552)	(2,767,926)	(2,558,116)	(2,276,811)	(2,553,525)	(1,908,245)
Net change in total pension liability	3,005,872	63,224	2,180,991	751,364	693,078	1,043,689	296,341	1,942,412
Total pension liability - beginning	52,107,776	52,044,552	49,863,561	49,112,197	48,419,119	47,375,430	47,079,089	45,136,677
Total pension liability - ending	55,113,648	52,107,776	52,044,552	49,863,561	49,112,197	48,419,119	47,375,430	47,079,089
Plan Fiduciary Net Position								
Contributions - employer	440,276	554,765	518,600	711,111	697,581	893,151	915,790	852,928
Contributions - employee	391,153	432,353	361,031	460,389	428,499	397,795	413,212	583,295
Net investment income	11,968,102	871,091	2,926,176	3,175,320	4,804,505	681,557	1,789,373	5,462,840
Benefit payments, including refunds of employee contributions	(3,479,188)	(2,974,673)	(2,715,552)	(2,767,926)	(2,558,116)	(2,276,811)	(2,553,525)	(1,908,245)
Administrative expenses	(31,556)	(30,738)	(30,275)	(28,184)	(28,599)	(25,420)	(25,361)	(29,559)
Other	1,110	(1,011)	(1,835)	(2,787)	(4,237)	(294)	(375)	288
Net change in plan fiduciary net position	9,289,897	(1,148,213)	1,058,145	1,547,923	3,339,633	(330,022)	539,114	4,961,547
Plan fiduciary net position - beginning	44,816,817	45,965,030	44,906,885	43,358,962	40,019,329	40,349,351	39,810,237	34,848,690
Plan fiduciary net position - ending	54,106,714	44,816,817	45,965,030	44,906,885	43,358,962	40,019,329	40,349,351	39,810,237
Net pension liability - ending	\$ 1,006,934	\$ 7,290,959	\$ 6,079,522	\$ 4,956,676	\$ 5,753,235	\$ 8,399,790	\$ 7,026,079	\$ 7,268,852
Plan fiduciary net position as a percentage of total pension liability	98%	86%	88%	90%	88%	83%	85%	85%
Covered payroll	\$ 8,691,744	\$ 8,641,869	\$ 8,504,134	\$ 9,260,472	\$ 8,185,472	\$ 7,802,611	\$ 7,746,889	\$ 8,434,533
Net pension liability as a percentage of covered payroll	12%	84%	71%	54%	70%	108%	91%	86%

^{*}The Authority changed their fiscal year end in 2019, therefore only 9 months of contributions are included.

The plan years above are reported in the entity's financial statements in the fiscal year following the plan year - e.g., plan year 2014 was presented in the entity's fiscal year 2015 financial report.

This schedule is intended to show information for 10 years. Additional years will be included as they become available.

REQUIRED SUPPLEMENTARY INFORMATION RETIREMENT PLAN SCHEDULE OF EMPLOYER CONTRIBUTIONS

Contributions in

Entity Year Ended	Relation to Contractually Required Contractually Required Contribution Contribution				Contribution Deficiency (Excess)		Employer's Covered Payroll		Contributions as a Percentage of Covered Payroll	
6/30/2022	\$	526,440	\$	526,440	\$	-	\$	9,379,647	5.61%	
6/30/2021		515,855		515,855		-		8,691,744	5.93%	
6/30/2020		629,286		629,286		-		8,641,869	7.28%	
6/30/2019*		429,141		429,141		-		5,956,482	7.20%	
9/30/2018		723,851		723,851		-		8,455,472	8.56%	
9/30/2017		740,517		740,517		-		8,273,941	8.95%	
9/30/2016		844,141		844,141		-		8,216,533	10.27%	
9/30/2015		858,355		956,177		(97,822)		7,746,889	12.34%	

^{*}The Authority changed their fiscal year end in 2019, therefore only 9 months of contributions are included.

Schedule is intended to show information for 10 years. Additional years will be included as they become available.

ALEXANDRIA RENEW ENTERPRISES

REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN NET OBEB LIABILITY AND RELATED RATIOS

Total OPEB Liability	6/30/2022	6/30/2021	6/30/2020	6/30/2019	9/30/2018	9/30/2017
Service cost	\$ 41,500	\$ 34,988	\$ 41,295	\$ 29,417	\$ 36,657	\$ 53,055
Interest on total OPEB liability	80,274	76,907	88,689	78,720	102,653	129,354
Effect of Economic/Demographic Gains or Losses	(489,333)	-	(238,874)	-	(455,903)	-
Effect of Assumptions Changes or Inputs	(191,150)	-	(226,833)	51,628	-	-
Benefit payments	(56,733)	(76, 165)	(79,996)	(81,481)	(90,513)	(92,542)
Net change in total OPEB liability	(615,442)	35,730	(415,719)	78,284	(407,106)	89,867
Total OPEB liability - beginning	1,221,398	1,185,668	1,601,387	1,523,103	1,930,209	1,840,342
Total OPEB liability - ending	605,956	1,221,398	1,185,668	1,601,387	1,523,103	1,930,209
Plan Fiduciary Net Position						
Contributions - employer	56,733	76,165	79,996	81,481	90,513	156,091
Net investment income (loss)	(105,094)	263,714	26,068	8,884	74,315	80,776
Benefit payments, including refunds of employee contributions	(56,733)	(76,165)	(79,996)	(81,481)	(90,513)	(123,090)
Administrative expenses	(1,724)	(1,494)	(1,448)	(1,541)	(2,279)	(2,059)
Net change in plan fiduciary net position	(106,818)	262,220	24,620	7,343	72,036	111,718
Plan fiduciary net position - beginning	1,139,810	877,590	852,970	845,627	773,591	661,873
Plan fiduciary net position - ending	1,032,992	1,139,810	877,590	852,970	845,627	773,591
Plan Inductory flet position - ending	1,032,992	1,139,610	677,590	652,970	645,627	773,391
Net OPEB liability (asset) - ending	\$ (427,036)	\$ 81,588	\$ 308,078	\$ 748,417	\$ 677,476	\$ 1,156,618
Plan fiduciary net position as a percentage of total OPEB liability	170%	93%	74%	53%	56%	40%
Covered-employee payroll	\$ 8,671,723	\$ 9,799,917	\$ 9,157,997	\$ 6,524,150	\$ 9,055,713	\$ 8,480,330
Net OPEB liability (asset) as a percentage of covered employee payroll	-5%	1%	3%	11%	7%	14%

This schedule is intended to show information for 10 years. Additional years will be included as they become available.

ALEXANDRIA RENEW ENTERPRISES

REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF INVESTMENT RETURNS - OPEB TRUST

Annual money-weighted rate of return, net of investment expense:

6/30/2022	-9.23%
6/30/2021	30.08%
6/30/2020	3.06%
6/30/2019	1.40%
9/30/2018	9.62%
9/30/2017	12.37%

This schedule is intended to show information for 10 years. Additional years will be included as they become available.

ALEXANDRIA RENEW ENTERPRISES

REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF OPEB CONTRIBUTIONS

Entity Year Ended	Actuarially Determined Contribution	Contributions in Relation to Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
6/30/2022	\$ 53,996	\$ 56,733	\$ (2,737)	\$ 8,671,723	0.65%
6/30/2021	52,424	76,165	(23,741)	9,799,917	0.78%
6/30/2020	87,452	79,996	7,456	9,157,997	0.87%
6/30/2019	61,997	81,481	(19,484)	6,524,150	1.25%
9/30/2018	80,163	90,513	(10,350)	9,055,713	1.00%
9/30/2017	125,355	125,542	(187)	8,480,330	1.48%
9/30/2016	121,704	122,528	(824)	8,480,330	1.44%

This schedule is intended to show information for 10 years. Additional years will be included as they become available.

ALEXANDRIA RENEW ENTERPRISES

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION June 30, 2022

Note 1. Changes of Benefit Terms

There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

Note 2. Changes of Assumptions (Pension)

The following changes in actuarial assumptions were made effective June 30, 2020 based on the most recent experience study of the System for the four-year period ending June 30, 2020:

All Others (Non 10 Largest) - Non-Hazardous Duty:

Mortality Rates	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020.
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

Note 3. Changes of Assumptions (OPEB)

The following changes in actuarial assumptions were made effective January 1, 2022:

- Age-related claims costs assumptions were updated
- The healthcare trend assumptions were updated
- The retiree election assumption was decreased from 60% to 40%

STATISTICAL SECTION (UNAUDITED)

Alexandria Renew Enterprises Statistical Section

Financial Trends

Financial trend information is intended to assist users in understanding how the Authority's net position has changed over time. The tables below disclose comparative financial data.

TABLE 1

Condensed Schedules of Net Position Last Ten Fiscal Years

	6	3/30/2022	6/30/2021	6/30/2020	6/30/2019	9/30/2018	9/30/2017	9/30/2016	9/30/2015	9/30/2014 (2)	9/30/2013 ⁽¹⁾
Assets											
Current Assets	\$	94,961,993	\$ 80,308,872	\$ 86,706,586	\$ 75,272,570	\$ 77,481,606	\$ 71,992,329	\$ 58,517,536	\$ 74,456,170	\$ 86,428,544	\$ 71,873,061
Non-current Assets		950,111,857	859,431,502	803,159,845	759,842,445	753,725,875	747,728,427	751,420,427	716,656,368	651,084,163	578,892,676
Deferred Outflows		2,812,957	3,083,994	2,478,029	1,623,327	1,924,167	3,009,750	2,193,183	2,332,861		
Total Assets and Deferred Outflows	\$ 1	L,047,886,807	\$ 942,824,368	\$892,344,460	\$836,738,342	\$833,131,648	\$822,730,506	\$ 812,131,146	\$ 793,445,399	\$ 737,512,707	\$ 650,765,737
Liabilities											
Current Liabilities	\$	46,584,796	\$ 59,757,917	\$ 40,073,665	\$ 20,797,672	\$ 19,854,654	\$ 18,400,831	\$ 34,860,034	\$ 41,395,712	\$ 41,743,756	\$ 24,535,900
Long-term Liabilities		180,321,438	110,228,829	98,965,456	106,654,528	112,799,800	127,027,777	111,329,090	121,578,497	106,414,204	100,476,050
Deferred Inflows		7,238,587	1,462,499	1,509,645	1,209,421	1,828,634	881,910	1,862,505	2,432,782		
Total Liabilities and Deferred Inflows	\$	234,144,821	\$ 171,449,245	\$ 140,548,766	\$ 128,661,621	\$ 134,483,088	\$ 146,310,518	\$ 148,051,629	\$ 165,406,991	\$ 148,157,960	\$ 125,011,950
Net Position											
Net Investment in Capital Assets	\$	748.219.486	\$ 720,251,070	\$ 696,448,748	\$ 649,676,473	\$ 638,348,836	\$ 622,454,674	\$ 630,741,541	\$ 586,995,330	\$ 537,784,921	\$ 471,881,818
Restricted Net Position	Ψ	15,485,546	27,458,588	25,615,612	26,355,198	21,357,370	29,705,073	13,652,933	11,629,933	16,799,469	16,486,146
Unrestricted Net Position		50,036,954	23,665,465	29,731,334	32,045,050	38,942,354	24,260,241	19,685,043	29,413,145	34,770,357	37,385,823
Total Net Position	\$	813,741,986	\$ 771,375,123	\$ 751,795,694	\$ 708,076,721	\$ 698,648,560	\$ 676,419,988	\$ 664,079,517	\$ 628,038,408	\$ 589,354,747	\$ 525,753,787
Total Liabilities, Deferred Inflows		1 0 4 7 0 0 0 0 7	* • • • • • • • • • • • • • • • • • • •	* 000 044 400	A 000 700 040	2002 404 040	A 000 700 500		A 700 445 000	* 707 540 707	A 050 705 707
and Net Position	\$ 1	1,047,886,807	\$ 942,824,368	\$ 892,344,460	\$ 836,738,342	\$833,131,648	\$ 822,730,506	\$ 812,131,146	\$ 793,445,399	\$ 737,512,707	\$ 650,765,737

Source: Alexandria Renew Enterprises

Notes: (1)These totals are as previously reported. A prior period adjustment was required in 2013 which modified these amounts.

 $^{^{(2)}}$ GASB statement No. 68 was adopted in fiscal year 2015.

Alexandria Renew Enterprises Statistical Section

Financial Trends, continued

TABLE 2

Condensed Schedules of Revenues, Expenses and Changes in Net Position

Last Ten Fiscal Years

	6/30/2022	6/30/2021	6/30/2020	6/30/2019(2)	9/30/2018	9/30/2017(1)	9/30/2016	9/30/2015	9/30/2014(1)	9/30/2013(1)
Operating Revenues										
Waste Water Treatment										
Service Charges	\$ 61,607,739	\$ 56,476,273	\$ 54,508,401	\$ 36,227,274	\$ 49,974,184	\$ 48,971,156	\$ 47,139,072	\$ 47,773,073	\$ 48,560,009	\$ 48,807,164
Other	42,397	35,838	39,459	23,423	16,630	127,186	81,727	26,008	6,044	3,480
Total Operating Revenues	\$ 61,650,136	\$ 56,512,111	\$ 54,547,860	\$ 36,250,697	\$ 49,990,814	\$ 49,098,342	\$ 47,220,799	\$ 47,799,081	\$ 48,566,053	\$ 48,810,644
Non-operating Revenues										
Investment Income (loss)	\$ (723,051)	\$ 131,110	\$ 1,327,691	\$ 1,235,709	\$ 300,954	\$ 296,581	\$ 453,508	\$ 483,340	\$ 283,273	\$ 58,128
Federal grants	280,617	329,269	-/	-	-	-	-	-	-	-
Sale Of Property	-		- /	-	-	-	-	-	1,000,000	15,203,750
Capital Contribution	34,300,630	21,196,644	39,576,761	7,848,140	18,636,519	9,119,146	26,671,809	38,870,682	52,160,997	24,882,239
Total Non-operating										
Revenues	\$ 33,858,196	\$ 21,657,023	\$ 40,904,452	\$ 9,083,849	\$ 18,937,473	\$ 9,415,727	\$ 27,125,317	\$ 39,354,022	\$ 53,444,270	\$ 40,144,117
Total Revenues	\$ 95,508,332	\$ 78,169,134	\$ 95,452,312	\$ 45,334,546	\$ 68,928,287	\$ 58,514,069	\$ 74,346,116	\$ 87,153,103	\$ 102,010,323	\$ 88,954,761
Operating Expenses										
Personnel Services	\$ 12,022,176	\$ 12,808,339	\$ 12,934,864	\$ 7,584,511	\$ 10,599,487	\$ 11,607,302	\$ 10,885,117	\$ 11,915,152	\$ 12,464,250	\$ 12,038,490
Utilities	3,092,003	3,658,871	3,452,848	2,682,315	3,415,322	2,775,506	2,621,156	2,937,466	3,224,653	3,118,336
General and Administration	5,141,279	4,683,009	4,668,318	2,767,358	3,954,272	4,416,947	4,803,327	5,023,878	4,594,881	3,836,600
Other	7,348,159	5,691,117	5,820,485	4,184,151	5,489,505	3,868,705	4,459,109	5,245,885	5,303,574	5,475,709
Total Operating										
Expenses	\$ 27,603,617	\$ 26,841,336	\$ 26,876,515	\$ 17,218,335	\$ 23,458,586	\$ 22,668,460	\$ 22,768,709	\$ 25,122,381	\$ 25,587,358	\$ 24,469,135
Non-operating Expenses										
Depreciation/Amortization	\$ 20,571,731	\$ 20,660,590	\$ 19,981,614	\$ 14,909,317	\$ 19,468,132	\$ 18,608,157	\$ 11,737,374	\$ 10,238,996	\$ 9,549,807	\$ 10,158,793
Interest/Other Expenses	4,966,121	11,087,779	4,875,210	3,778,733	4,566,892	4,896,981	3,798,924	3,896,859	3,272,198	3,232,231
Total Non-operating										
Expenses	\$ 25,537,852	\$ 31,748,369	\$ 24,856,824	\$ 18,688,050	\$ 24,035,024	\$ 23,505,138	\$ 15,536,298	\$ 14,135,855	\$ 12,822,005	\$ 13,391,024
Total Expenses	¢ =2.141.460	\$ 58.589,705	\$ 51,733,339	\$ 35,906,385	\$ 47,493,610	\$ 46,173,598	¢ 28 20E 007	¢ 20.050.036	¢ 28 400 262	¢ 27.860.150
Total Expenses	\$ 53,141,469	\$ 58,589,705	\$ 51,733,339	\$ 35,906,385	\$ 47,493,610	\$ 46,173,598	\$ 38,305,007	\$ 39,258,236	\$ 38,409,363	\$ 37,860,159
Change in Net Position	\$ 42,366,863	\$ 19,579,429	\$ 43,718,973	\$ 9,428,161	\$ 21,434,677	\$ 12,340,471	\$ 36,041,109	\$ 47,894,867	\$ 63,600,960	\$ 51,094,602
Total Net Position,										
Beginning of Year	\$ 771,375,123	\$ 751,795,694	\$ 708,076,721	\$ 698,648,560	\$ 677,213,883	\$ 664,079,517	\$ 628,038,408	\$ 580,143,541	\$ 525,753,787	\$ 474,813,518
Total Net Position, End of Year	\$813,741,986	\$ 771,375,123	\$ 751,795,694	\$ 708,076,721	\$ 698,648,560	\$ 676,419,988	\$ 664,079,517	\$ 628,038,408	\$ 589,354,747	\$ 525,908,120

Source: Alexandria Renew Enterprises

Notes: (1)These totals are as previously reported. Prior period adjustments were required in 2013, 2014 and 2017 which modified these amounts.

⁽²⁾ The Authority changed their fiscal year end in 2019, therefore, only 9 months of revenues and expenses are included.

Revenue Capacity Information

Revenue capacity information is provided to assist users in understanding the factors affecting the Authority's ability to generate sources of revenue. The Authority strives to cover operating and capital costs with user fees. User fees are set by the Board and are based upon the recommendation of a third-party rates analysis designed to recover the Authority's cost of service and capital cost. Rates modeling and analysis is conducted at least annually, and more frequently as required, to set new rates and charges or affirm the efficacious nature of existing rates. Rate modeling and analysis was completed in 2015 to establish new base charges effective on October 1, 2016 and October 1, 2017. These rates were in place through FP19, at which point AlexRenew began implementing gradual, annual rate adjustments, based on Board planning and guidance and on updated rates modeling that included the RiverRenew program and other projected capital needs at the facility. Rate adjustments were adopted by the Board to become effective July 1, 2019, July 1, 2020, July 1, 2021, and July 1, 2022. User fees are comprised of two components including a wastewater treatment charge and a fixed base charge.

The wastewater treatment charge is assessed to all customers based upon metered per gallon water usage, except that residential customers are assessed based upon a winter quarter average usage (per 1,000 gallons units). A residential customer, therefore, is billed at the greater of its winter quarter per gallon average usage or 4,000 gallons per month. Commercial customers are billed based on the actual amount of per gallon water usage. The base charge was assessed for the first time beginning on October 1, 2010, and is assessed as a fixed fee per month according to water meter size. The following table represents comparative user rate charges.

TABLE 3	Historical User Charges (in dollars)					
	(iii doi	idioj		ewater tment		
	Fiscal	Year		Charge*		
	20	22	\$	8.69		
	20			8.13		
	20	20		7.63		
	20	19		6.77		
		18		6.77		
	20			6.77		
	20			6.77		
	20			6.64		
	20			6.51		
	20	13		6.36		
	FY 20)22	FY 2	2021		
	Mont	hly	Mo	nthly		
Base Charge		_				
Residential Customers	\$	12.34	\$	11.54		
	Wa	ter				
	Mete	r Size		FY2022	FY2021	
Commercial Customers	5/		\$	37.02 \$		
	3/			37.02	34.63	
	1			92.55	86.59	
	1-1			185.10	173.17	
	2	"		296.16	277.08	
	3	"		555.30	519.52	
	3 4	"		555.30 925.50	519.52 865.87	
	3	"		555.30	519.52	

^{*} Based on 1,000 gallons of consumption

Source: Alexandria Renew Enterprises

Alexandria Renew Enterprises Statistical Section

TABLE 4

Ten Principal Customers by Year Shown as Percentage of Revenue

Name	Туре	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
4921 SEMINARY RD(VA) OWNWER LLC	Apartments	1.45%									
SOUTHERN TOWERS	Apartments		1.26%	1.19%	1.38%	1.02%	1.06%	0.92%	1.18%	0.88%	1.13%
BROOKDALE APTS MARK CTR	Apartments	0.92%	0.80%	0.94%	1.09%						
FOXCHASE	Apartments	0.60%	0.54%	0.57%	0.64%						
STONERIDGE APTS MARK CTR	Apartments	0.55%	0.49%	0.53%	0.60%						
PARKFAIRFAX	Apartments	0.50%	0.48%	0.48%	0.51%						
ARHA	Public	0.47%	0.44%	0.39%	0.44%						
140 S VAN DORN ST	Apartments	0.48%	0.43%	0.46%	0.53%						
WATERGATE AT LANDMARK	Condos	0.42%	0.41%	0.49%	0.47%	0.38%	0.44%	0.49%	0.46%	0.52%	0.57%
UDR NEWPORT VILLAGE LLC	Condos	-	0.34%								
FPACP4 BLVE 2801 LLC	Apartments	0.37%	,								
ERP	Apartments	0.40%	0.37%	0.37%							
	MG Usage	806,333	792,082	740,307	684,798	396,772	394,269	397,833	427,024	462,735	428,893
	Other Customer Usage	12,284,368	13,474,228	12,221,683	10,796,005	12,452,798	11,374,736	11,936,490	11,607,551	12,750,383	12,383,798
	Total Usage	13,090,701	14,266,310	12,961,990	11,480,803	12,849,570	11,769,005	12,334,323	12,034,575	13,213,118	12,812,691

Source: Alexandria Renew Enterprises

Debt Capacity Information

Debt capacity information is intended to assist users in understanding the Authority's debt burden and the ability to issue new debt. The ultimate guarantors of the Authority's debt are its customers.

Outstanding Debt Per Customer

June 30, 2022

Ou	tstan	ding	Debt	per

Fiscal Year	Fiscal Year Outstanding Debt		# of Customers	Customer	
2022	\$	202,293,932	26,767	\$	7,558
2021		143,800,792	26,589		5,408
2020		111,372,579	26,671		4,176
2019		111,138,673	26,594		4,179
2018		116,385,765	26,681		4,362
2017		126,330,515	26,611		4,747
2016		121,783,683	26,440		4,606
2015		130,813,869	26,333		4,968
2014		113,299,242	26,848		4,220
2013		107.010.858	26.330		4.064

Source: Alexandria Renew Enterprises

TABLE 6

Pledged Revenue Coverage*

	6/30/2022	6/30/2021	6/30/2020	6/30/2019	9/30/2018
Pledged revenue	\$ 61,650,136	\$ 56,512,111	\$ 54,547,860	\$ 36,250,697	\$ 49,990,814
Operating expenses	(27,603,617)	(26,841,336)	(26,876,515)	(17,218,335)	(23,458,587)
Net revenues	34,046,519	29,670,775	27,671,345	19,032,362	26,532,227
Principal and Interest					
Requirements	13,976,806	14,049,147	14,015,828	7,996,654	13,913,446
Debt coverage	2.44	2.11	1.97	2.38	1.91
	9/30/2017	9/30/2016	9/30/2015	9/30/2014	9/30/2013
Pledged revenue	9/30/2017 \$ 49,098,342	9/30/2016 \$ 47,220,799	9/30/2015 \$ 47,799,081	9/30/2014 \$ 48,566,053	9/30/2013 \$ 48,810,644
Pledged revenue Operating expenses					
Operating expenses Net revenues	\$ 49,098,342	\$ 47,220,799	\$ 47,799,081	\$ 48,566,053	\$ 48,810,644
Operating expenses	\$ 49,098,342 (22,570,403)	\$ 47,220,799 (22,697,959)	\$ 47,799,081 (25,104,967)	\$ 48,566,053 (25,587,358)	\$ 48,810,644 (24,469,135)

^{*}AlexRenew's Master Indenture of Trust requires 1.1x coverage and its board adopted Financial Policy requires 1.5x coverage Source: Alexandria Renew Enterprises

Demographic and Economic Information

Demographic and economic information is intended to assist users in understanding the socio-economic environment in which the Authority operates.

TABLE 7

Demographic Statistics

June 30, 2022

Population

Calendar Year	Population	Calendar Year	Population
2000	128,283	2016	150,500
2010	139,966	2017	156,100
2011	140,100	2018	159,571
2012	140,800	2019	160,530
2013	142,000	2020	165,748
2014	144,000	2021	160,146
2015	147,650	2022	160,505

Source: Alexandria Department of Planning and Zonning, "General Population Characteristics"

TABLE 8

Population Indicators June 30, 2022

	Personal	
	Income	Per Capita
Fiscal Year	(\$1000)	Income
2022	\$ 16,407,945	\$ 93,835
2021	16,429,218	91,990
2020	14,127,927	88,008
2019	13,455,505	87,319
2018	12,935,231	84,079
2017	12,692,748	82,683
2016	12,556,000	81,734
2015	12,183,000	79,480
2014	11,615,589	77,142
2013	11,220,201	75,146

The BEA has revised these numbers.

Source: Federal Reserve Economic Data (FRED)

Demographic and Economic Information, continued

TABLE 9

City of Alexandria Principal Employers Current Year (as of June 30, 2022 and Nine Years Ago)

		Percentage of Total City			Percentage of Total City
Current Year	Employees ⁽¹⁾	Employment ⁽²⁾	Nine Years Ago	Employees ⁽¹⁾	Employment ⁽²⁾
LARGEST PUBLIC EMPLOYERS			LARGEST PUBLIC EMPLOYERS		
U.S. Department of Homeland Defense	1,000 & over	3.82%	U.S Department of Defense	1,000 & over	8.38%
United States Patent and Trademark Office	1,000 & over	3.36%	U.S. Patent and Trademark Office	1,000 & over	7.10%
City of Alexandria	1,000 & over	0.78%	City of Alexandria	1,000 & over	2.30%
Alexandria City Public Schools	1,000 & over	0.70%	Alexandria Public Schools	1,000 & over	1.90%
National Science Foundation	1,000 & over	0.64%	WMATA	500-999	1.30%
WMATA	1,000 & over	0.46%	Northern Virginia Community College	500-999	0.70%
USDA Food and Nutrition Service	500-999	0.24%	U.S. Postal Service	500-999	0.60%
		10.00%			22.28%
LARGEST PRIVATE EMPLOYERS			LARGEST PRIVATE EMPLOYERS		
INOVA Health System	1,000 & over	3.93%	INOVA Alexandria Hospital	1,000 & over	1.80%
Institute for Defense Analysis	500 - 999	1.50%	American Building Maintenance Com	1,000 & over	1.20%
Woodbine Health Center	250-499	0.98%	Institute of Defense Analysis	500-999	0.80%
Society for Human Resource Management	250 - 499	0.97%	United Postal Service (UPS)	500-999	0.70%
Oblon	250 - 499	0.89%	Center for Naveal Analysis	500-999	0.60%
Kearney & Company	250 - 499	0.88%	Military Professional Resources	500-999	0.50%
Systems Planning & Analysis	250 - 499	0.87%	Grant Thornton LLP	500-999	0.50%
		10.02%			6.10%
Source: Virginia Employment Commission					

⁽¹⁾ Employment ranges are given to ensure confidentiality.

TABLE 10

City of	Alexandria Unemployment Rate
	Last Ten Years
2022	2.4%
2021	3.8%
2020	8.3%
2019	1.9%
2018	2.1%
2017	2.9%
2016	2.9%
2015	3.5%
2014	4.6%
2013	4.7%

Source: U.S.Bureau of Labor Statistics.

⁽²⁾ Percentages are based on the midpoint of employment range.

Operating Information

Operating information is intended to provide information about the Authority's operations.

TABLE 11

Number of FTEs Employees by Activity Fiscal Year Ended June 30, 2022

	2022	2021	2020	2019	2018	2017	2016
Process							
Chief, Deputy GMOM, Chief Oper, Process							
Analyst, O&M Specialist	4	6	5	6	2	6	3
Administrative/Executive Assistant	1	1	1	1	1	1	1
Interceptors/Pump Stations/Chem Feed	6	8	8	8	8	9	9
Operating Shift D	0	0	0	5	5	6	4
Operating Shift B/BluRenew	4	6	6	4	5	6	5
Maintenance Manager, Supervisor & Facilities	2	2	2	2	2	1	1
Thickening/Dewater/Prepast/Digestion	6	8	8	8	8	9	9
BRB's/Blowers/UV	6	6	5	6	6	6	7
Operating Shift C/BioRenew	7	6	6	5	5	5	4
Operating Shift A/Erenew	7	6	6	5	6	6	5
Reliability, Analyst, Planners/Schedulers	3	2	3	3	3	3	3
Operating Shift E	0	0	0	0	0	0	5
Apprentices	13	12	15	10	3	10	10
при							
Engineering							
Director Engr Planning	1	1	1	1	1	1	1
Engineering	3	4	6	7	2	5	3
Program Manager	0	0	0	0	0	1	1
. rogiam managor				ŭ	ŭ	_	_
Strategy & Policy							
Director	1	0	1	1	0	0	1
Quality Assurance	1	1	1	1	1	1	1
Laboratory	6	5	5	5	4	4	5
Sustainability/Regulatory	2	1	2	1	1	0	1
Administrative Assistant	1	0	0	0	0	0	0
Administrative Assistant		O	9	U		Ů	O
Finance							
Chief Financial Officer	1	1	0	0	1	1	0
Controller/Director Finance/Acctg Manager	1	1	2	2	2	1	1
, , ,	3	3	3	3	2		
Senior Accountant/Staff Accountant/Acctg Cler						3	2
Administrative/Executive Assistant	1	1	1	1	1	1 2	1
Purchasing Manager, Buyer, Contracts, InvCont	3	2	3	3	2	_	3
Customer Service	1	1	1	1	1	1	2
Human Resources	_	_	_	_		_	_
Human Resources	3	2	2	2	1	2	2
Safety & Security	1	1	1	0	1	0	1
Information Systems	_	_	_		_	_	_
Information Systems, SCADA	8	6	3	4	3	3	3
Administration							
Administration	2	4	3	2	2	2	2
Communications & RiverRenew	6	2	4	5	4	4	4
Communications & RiverRenew	104	99	104	102	83	100	100
-	104	99	104	102	03	100	100

Operating Information

TABLE 12

Number of Customers and Consumption

Fiscal Year	Customer Accounts	MG Treated	Fairfax MG Treated
6/30/2022	26,767	13,090	6,204
6/30/2021	26,589	14,266	6,535
6/30/2020	26,671	12,962	6,008
6/30/2019	26,594	11,481	5,820
9/30/2018	26,681	12,850	6,671
9/30/2017	26,611	11,769	5,941
9/30/2016	26,440	12,334	5,960
9/30/2015	26,333	12,035	6,112
9/30/2014	26,848	13,213	6,698
9/30/2013	26,330	12,813	6,633

Source: Alexandria Renew Enterprises

Note: The amount of wastewater treated includes flow generated by the City customers and portions of the County which is outside of the City. The amount of wastewater that flows outside the County is metered and included in Table 12 above.

Operating Information

TABLE 13

Wastewater Treatment Capacity and Infrastructure Assets Owned For the Fiscal Year Ending June 30, 2022

Wastewater treatment capacity:				
	Design Capacity	54 MGD (million gallons per day)		
<u>Asset</u>		Capacity:		
Four Mile Run Pump Station Slater's Lane Pump Station Potomac Yard Pump Station Mark Center	Pump Station Pump Station Pump Station Pump Station	Firm pumping capacity 9.4 MGD Firm pumping capacity .75 MGD Firm pumping capacity 9.5 MGD Firm pumping capacity 1.6 MGD		
Bush Hill Service Chamber Jefferson at Carlyle Mills Service Chamber	Lift Station Lift Station	Firm pumping capacity .18 MGD Firm pumping capacity .525 MGD		
Holmes Run Trunk Sewer	Gravity Sewer	Design Capacity varies from 71.5 MGD at Hooff's Run to 18.9 MGD at the City Limits		
Commonwealth Interceptor	Gravity Sewer & Force Main	Design Capacity varies from 97.0 MGD at the WRRF to 13 MGD at the Potomac Yards Pump Station force main discharge.		
Potomac Yard Trunk Sewer	Gravity Sewer	Design Capacity varies from 17MGD at the WRRF to 13 MGD at the Potomac Yards Pump Station force main discharge.		
Potomac Interceptor	Gravity Sewer	Design Capacity varies from 18.7 MGD at the WRRF to 11.0 MGD at Pendleton St.		

The City owns the collection system; Alexandria Renew Enterprises owns the intercepting sewer system, the pump stations and the treatment facility.

Source: Alexandria Renew Enterprises





1800 Limerick Street, Alexandria, VA 22314 703.721.3500 • alexrenew.com









CEO Board Report September 2022

Dear Members of the Board of Alexandria Renew Enterprises,

During the Alexandria Renew Enterprises (AlexRenew) Board of Directors meeting on September 20, 2022, the Board approved the Electronic Participation Policy and was introduced to the Commonwealth Interceptor Upgrade Project.

In September, AlexRenew had two (2) reported cases of COVID-19. AlexRenew continues to adapt its policies to ensure that it follows the CDC guidance and complies with Virginia Department of Labor and Industry standards.

On October 5, the Chesapeake Bay Foundation released its 2022 Status of the Chesapeake Bay Blueprint report, summarizing the progress made toward the Chesapeake Clean Water Blueprint. The report indicates that Virginia could meet pollution-reduction commitments by the 2025 deadline, largely driven by reductions from upgrades to wastewater treatment plants. Click for WTOP's October 6 article summarizing the report.

AlexRenew continues to partner with the Virginia Department of Health (VDH) and Biobot for COVID-19 wastewater surveillance programs. AlexRenew was selected by VDH to increase sampling from one to two days per week. AlexRenew's contribution to increased sampling will enable VDH to improve accuracy and precision within its laboratory methods and will allow for better tracking of viral concentration over time. Recent data from VDH and Biobot show decreasing viral concentrations in AlexRenew's wastewater.

Operational Excellence

Precipitation for September at the Reagan National Airport was 2.27 inches of rain which is below the Washington, D.C. historical average precipitation of 3.72 inches for the month.

Biosolids production for September was 1,518 wet tons, all of which was beneficially used through land application in the Virginia counties of Essex, Fauquier, Hanover, King George, Fluvanna, and Buckingham.

AlexRenew met all Virginia Pollutant Discharge Elimination System (VPDES) effluent parameters for September 2022.

Treatment	Daily Average Flow	Carbonaceous Biochemical Oxygen Demand	Total Suspended Solids	Ammonia (as N)	Dissolved Oxygen	Total Nitrogen ¹	Total Nitrogen LOAD	Total Phosphorus	Total Phosphorus LOAD
	MGD	(Monthly Average) mg/L	(Monthly Average) mg/L	(Monthly Average) mg/L	(Minimum)	(Annual Average) mg/L	(YTD)	(Monthly Average) mg/L	(YTD)
Permit	54.0	5.0	6.0	Seasonal ²	6.0	3.0	493,381	0.18	29,603
Reported	34.4	< QL	< QL	< QL	7.5	2.5	206,026	0.05	6,205

NOTES

- 1. Total Nitrogen expressed as year-to-date average.
- 2. Ammonia has seasonal limits: April October: 1.0 mg/L

Public Engagement and Trust

Tours and Events

AlexRenew welcomed a total of 155 visitors from the following organizations that hosted meetings on the 6th floor of the Environmental Center: City of Alexandria Department of Transportation and Environmental Services (25), Alexandria Chamber (20), Islamic Relief USA (100), and Kids' First Years (10).

Customer Service

Customer service received a total of 795 calls with 51 percent opting for self-service. Average call answer time was 16 seconds. Call center staff answered 102 emails.

Social Media and Website

During the month of September, we had more than 750 engagements on Facebook and 383 engagements on Twitter. We have 3,640 followers on Facebook, 3,334 on Twitter, 2,469 on LinkedIn, and 267 on Instagram. Alexrenew.com was visited 5,754 times and had 9,311 page views in September. We had 25 visitors click through to AlexRenew.com from social media.

Watershed Stewardship

See RiverRenew Dashboard. (Attachment 1)

Adaptive Culture

Since September 2022, AlexRenew has logged 20,403 hours without a lost time accident.

Thank you for your ongoing dedicated service to AlexRenew.

Regards,

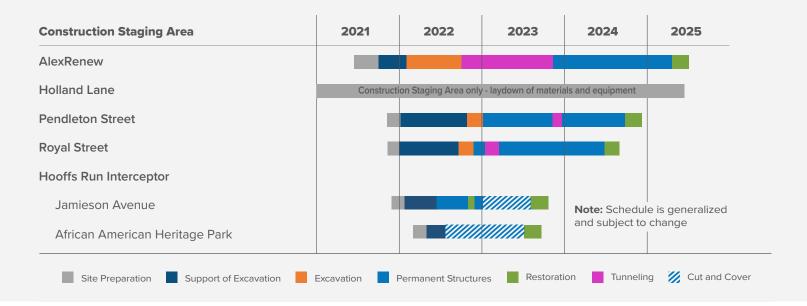
Karen Pallansch Chief Executive Officer

RiverRenew Overview

To improve the waterways that connect us, AlexRenew is implementing RiverRenew to prevent millions of gallons of combined sewage from polluting Alexandria's local rivers and streams each year. Three RiverRenew projects at AlexRenew's wastewater treatment plant are complete. The remaining project includes the construction of a new tunnel to connect AlexRenew's wastewater treatment plant to the four existing combined sewer outfalls in Alexandria.

The Tunnel Project is illustrated on Page 4 of this Dashboard. Construction associated with the Tunnel Project started in early 2021 and will continue through 2025 at five primary locations in Alexandria. The phases of construction at each location are illustrated in the schedule below.

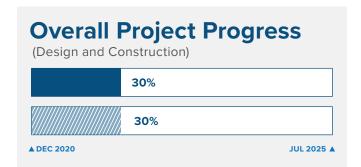
RiverRenew Tunnel Project Schedule



Summary of Major Tunnel Project Delays

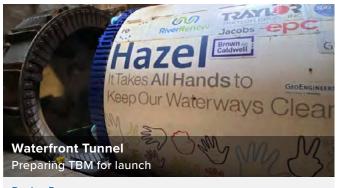
Date:	Activity:
12/2021	Monitoring potential supply chain issues due to ongoing pandemic.
12/2021	COVID outbreak at tunnel segment mold plant in Slovenia. Manufacturing for tunnel segment molds relocated to Turkey. Anticipated one-month delay on tunnel segment molds.
1/2022	Concrete for shaft slurry walls delayed due to weather, COVID impacts, shortage of CDL drivers due to Omicron spike, and lack of concrete materials in the Greater Metro D.C. area. Monitoring schedule impacts to critical path.
2/2022	TBM fabrication and delivery delayed by three weeks. Monitoring schedule impacts to critical path.

RiverRenew Tunnel Project Design-Build Progress





Design Progress	
Ş	92%
	96%///
Construction Progress	OCT 2022 ▲
18%	
///////////////////////////////////////	
	JUL 2024 ▲



Design Progress		
		96%
(//////////////////////////////////////		/////97% ////
Construction Progr	ess	OCT 2022 ▲
	30%	
(//////////////////////////////////////	30%	
		SEP 2023 ▲



Design Progress	
	84%
	89%
Construction Progress	JAN 2023 ▲
16%	
///////////////////////////////////////	
	NOV 2024 ▲



Design Progress	
	95%
	///////////////////97%
Construction Progress*	NOV 2022 ▲
13%	
//////// 13%	
	Aug 2023 ▲



	80%
	80%
Construction Progress	NOV 2022 ▲
13%	
///////// 13%	
	JUL 2025 ▲



Actual Progress



Planned Progress



Planned Completion Date

RiverRenew Tunnel Project Six-Month Look-Ahead

Pendleton Street

MAJOR WORK ACTIVITIES

Activity	Date
Shaft support of excavation	Ongoing through Nov 2022
Shaft excavation	Dec 2022
Shaft base slab construction	Mar 2023

PERMITS

Permit	Date
Building Permit - Shaft Support of Excavation	Oct 2022
DSUP Final Site Plan Approval	Dec 2022
Building Permit - Shaft Liner and Base Slab	Dec 2022
Building Permit - Shaft Roof	Dec 2022
Building Permit - Permanent Seawall	Dec 2022

Royal Street

MAJOR WORK ACTIVITIES

Activity	Date
Shaft excavation	Ongoing through Dec 2022
Shaft base slab construction	Dec 2022
Near surface structures support of excavation	Jan 2023
Near surface structures foundations installation	Mar 2023

PERMITS

Permit	Date
DSUP Final Site Plan Approval	Nov 2022
Building Permit - Shaft Liner and Base Slab	Nov 2022
Building Permit - Shaft Roof	Dec 2022
Building Permit - Near Surface Structure and SOE	Dec 2022

Waterfront Tunnel

MAJOR WORK ACTIVITIES

Activity	Date
Tunnel boring machine (TBM)	
Assembly	Ongoing through Oct 2022
Begin mining	Oct 2022

Community Outreach

Event	Date
Council-Board Workgroup Meeting No. 16	Oct 19, 2022
2022-2023 RiverRenew SAG Meeting No. 5	Nov 17, 2022

Hooffs Run

MAJOR WORK ACTIVITIES

Activity	Date
North of Jamieson Ave	
Diversion Chamber construction	Ongoing through Jan 2023
Open cut construction	Oct 2022
Junction chamber base construction	Dec 2022
African American Heritage Park	
Junction Chamber construction	Ongoing through Oct 2022
Manholes and open-cut construction	Oct 2022

AlexRenew

MAJOR WORK ACTIVITIES

Activity	Date
Near surface structures support of excavation	Ongoing through Nov 2022
Near surface structures deep foundations installation	Nov 2022
Hooffs Run Interceptor (portion at AlexRenew)	Nov 2022
Pumping Shaft base slab construction	Dec 2022
Pumping Shaft liner construction	Jan 2023

PERMITS

Permit	Date
DSUP Final Site Plan Approval	Oct 2022
Building Permit - Near Surface Structures	Dec 2022
Building Permit - Superstructure Architectural	Dec 2022

Work Hours

NORMAL WORK HOURS

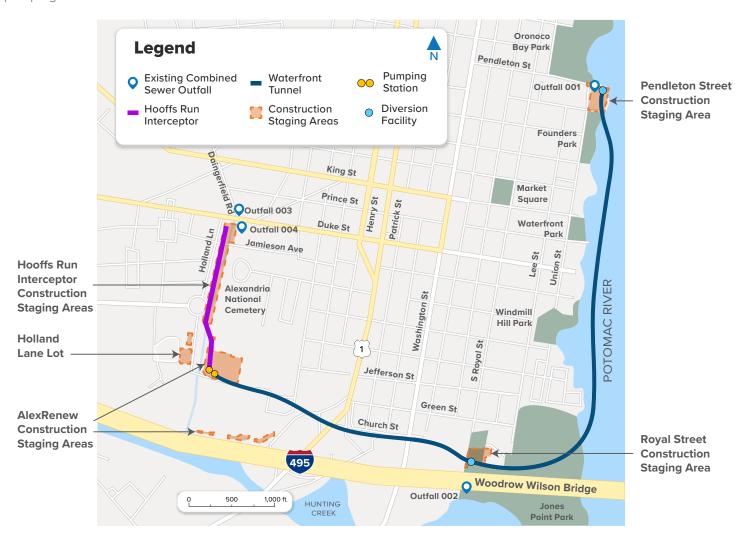
Pendleton Street	5 a.m. – 11 p.m.
Royal Street	5 a.m. – 11 p.m.
Hooffs Run	7 a.m. – 6 p.m.

EXTENDED WORK HOURS

Pendleton Street	Intermittent through
	Dec 2022 Attachment 1

RiverRenew Tunnel Project Snapshot

The Tunnel Project includes the following major components: a two-mile-long, 12-foot-wide, 100-foot-deep tunnel; a six-foot-wide sanitary sewer interceptor; diversion facilities to capture combined sewer discharges; and two pumping stations.





Hooffs Run Interceptor

Click **here** to learn more about upcoming activity at our Hooffs Run site.



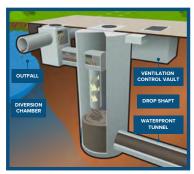
Pumping Station

Click **here** to take a 3D tour of RiverRenew's future pumping station.



Waterfront Tunnel

Click here to watch an animated video about RiverRenew and learn how the Waterfront Tunnel will be constructed.

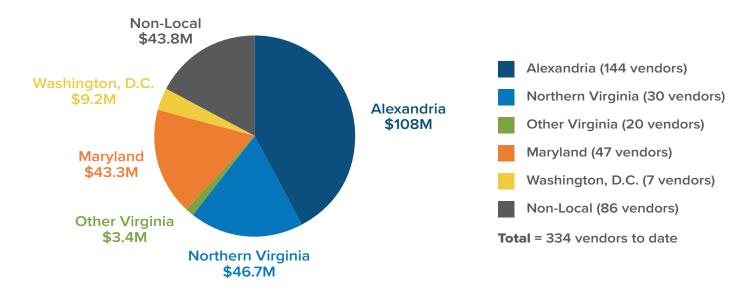


Diversion Facility

Click **here** for an introduction to diversion facilities from two RiverRenew engineers.

RiverRenew Program Costs to Date

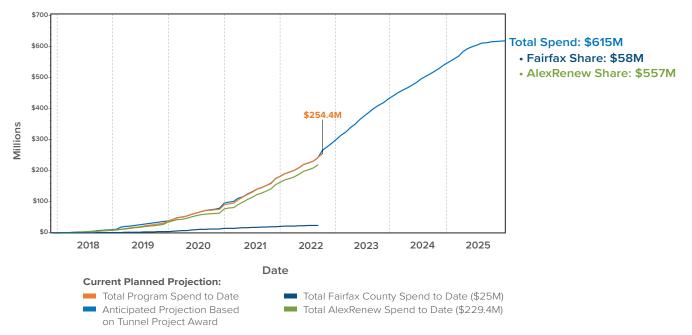
RiverRenew Spend to Date by Locality



RiverRenew Tunnel Project Contracts

Vendor	Role	Contract Type	Contract No.	Contract Date	Spent to Date (\$ millions)
Traylor-Shea Joint Venture	Design-Builder Tunnel System Project	Design-Build	19-079	Dec 2020	\$134.5
Brown and Caldwell	Owner's Advisor	Professional Services	17-022	Nov 2017	\$61.3
EPC	Resident Engineering & Inspection Tunnel System Project	Professional Services	20-013	Apr 2020	\$8.4
Completed RiverRenew Wast	\$50.2				

RiverRenew Cash Flow Analysis



RiverRenew Community Outreach



Community Meetings

Community meetings are presentations given to various stakeholder groups, including the SAG, and community listening sessions. These presentations can be delivered in person or virtually.

Highlights:

• 2022-2023 RiverRenew SAG Meeting No. 4: **September 15**

Looking Ahead:

• 2022-2023 RiverRenew SAG Meeting No. 5: **November 17**



Community Events

Participating in or co-sponsoring **community events** strengthens AlexRenew's relationship with its water and community partners.

Highlights:

·Sip 'n See events ongoing

Looking Ahead:

- Sip 'n See event at Hooffs Run: Tuesdays between 11 a.m. and 1 p.m.
- Sip 'n See event at Royal Street: Wednesdays from 11 a.m. to 1 p.m.
- Sip 'n See event at Pendleton Street: Thursdays between 11 a.m. and 1 p.m.



Digital Programming

Digital programming keeps the community connected to RiverRenew with regular program updates on RiverRenew.com, content on AlexRenew's social media pages, and distribution of *The River Renewer*, a quarterly newsletter promoting updates and milestones to more than 500 contacts.

Highlights:

- The **latest edition** of our Get to Know Our Craft Personnel video series, highlighting TBM operator Mark
- A **social post** sharing the scale model of Hazel the TBM on display in our Environmental Center
- Ongoing behind-the-scenes construction content shared on social media





Education

Education initiatives are intended to engage audiences of all ages and help them learn more about RiverRenew and its technical components.

Looking Ahead:

- Behind-the-scenes banner at Pendleton Street showing shaft slurry wall construction
- New learning activity about multi-service vehicles featuring Mark the Multi-Service Vehicle (MSV)



Community Days

Community days feature project-specific events to celebrate construction progress on the Tunnel Project and engage the community along the way.

Highlights:

 Fall Festival at Beatley Central Library: September 17

Looking Ahead:

•Imagine a Day Without Water: October 20



PR

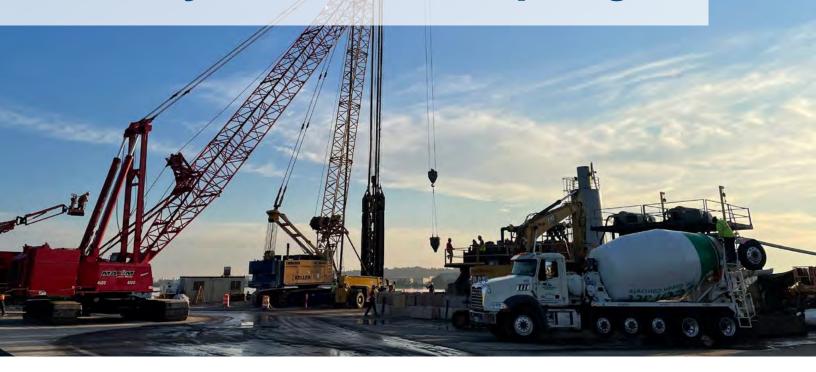
Council-Board Workgroup

The **Council-Board Workgroup** comprises two members from AlexRenew's Board of Directors and two members from the Alexandria City Council.

Looking Ahead:

• Council-Board Workgroup Meeting No. 16: October 19

Monthly Construction Spotlight



Work resumes at Pendleton Street with slurry wall construction and extended hours

Following completion of slurry wall construction at AlexRenew and Royal Street, slurry wall equipment and materials were mobilized to the Pendleton Street Site earlier this month. RiverRenew crews are now hard at work constructing the shaft slurry walls at this site. This activity will last through December 2022, and during this time crews will be working extended work hours to complete large concrete pours.

The extended work hours are permitted by the City of Alexandria and include:

- Work hours: 5 a.m. to 11 p.m.
- Haul hours: 7 a.m. to 6 p.m.

In addition, a total of 11 days this period may include 24-hour work and hauling to provide flexibility in completing the largest concrete pours, which need to occur continuously.

Completing this process will allow crews to excavate a shaft inside these walls, which will be used to remove Hazel, the TBM, and deliver captured combined sewer flows to the Waterfront Tunnel.

To stay up to date on ongoing and upcoming work at Pendleton Street, including slurry wall construction, visit **RiverRenew.com/construction/pendleton-street**.

Building for the Future of Alexandria's Waterways

To learn more, visit www.RiverRenew.com







Month: September 2022

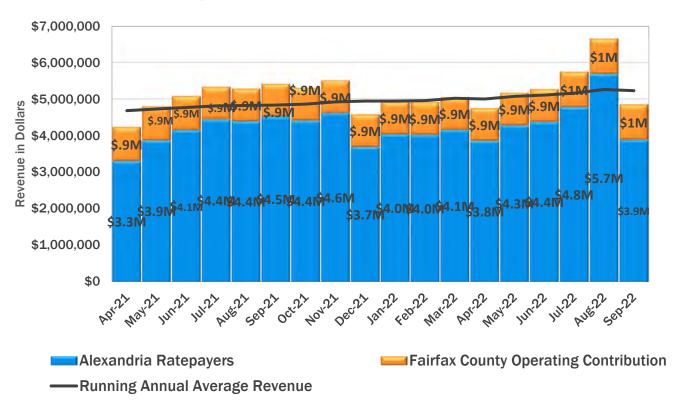
Overview

Performance of AlexRenew's annual approved budget is reviewed and evaluated monthly to ensure overall organizational financial stability. Staff is working with our external auditor to complete the audit of Fiscal Year (FY) 22 finances.

Revenues

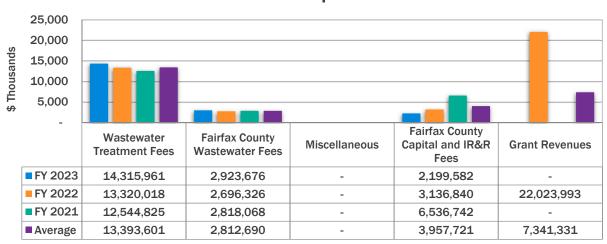
- FY23 operating revenues total \$17.2 million through the end of September with approximately \$14.3 million in Wastewater Treatment Charge revenue and \$2.9 million collected from Fairfax County. Wastewater Treatment Charge revenue is approximately \$0.9 million (7.5%) more compared to the same time period in FY22, and \$1.6 million (12.45%) above the Fiscal 2023 YTD budget. Data indicates a decrease month-over-month in customer revenue due to a combination of seasonal trends and an overstatement in prior month customer revenue as a result of a report anomaly. Revenue amounts should smooth out in next few months as Finance staff continue to monitor revenue trends.
- Revenue performance is primarily driven by billed flows that may be impacted by seasonality and by the Virginia American Water meter reading process, which can vary month-to-month.
- The Fairfax County operating expense charge and IR&R contribution YTD are on budget respectively. Fairfax County capital outlay contributions are also in-line with capital expenditures.

Monthly Wastewater Treatment Fee Revenue

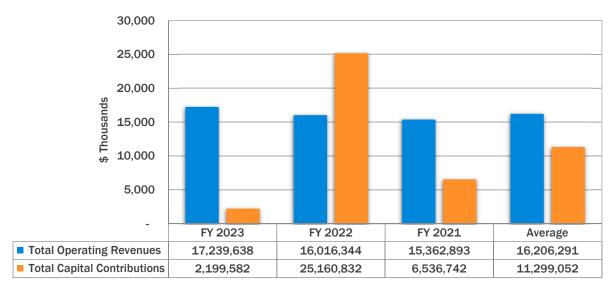




Annual Revenue and Capital Contributions 3 Year Comparison



Operating Revenue vs. Capital Contributions



Expenses

FY23 operating and maintenance expenses are \$0.3 million below the year-to-date budget, representing a spend rate of 23.9%. While utilities, general administrative & maintenance costs have decreased, other expenses such as personnel services, chemicals, sludge disposal and sewage disposal costs are rising, mostly due to inflationary pressures.

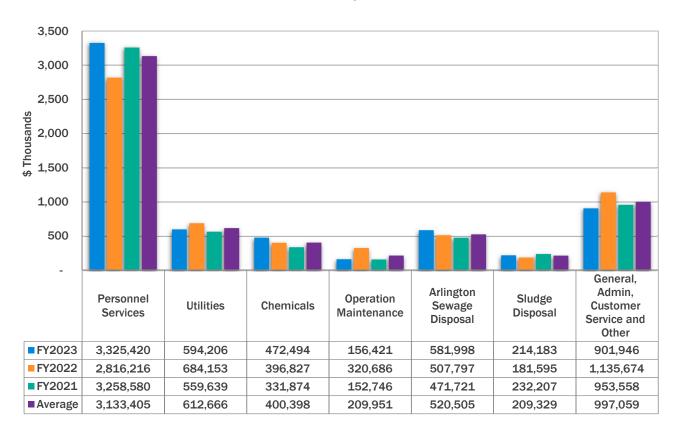


Capital outlay expenses are \$6.6 million year-to-date, representing a spend rate of 4.4%. At three (3) months into the fiscal year, the overall spend rate is 18.4% of the total budget.

Expenses by Fund

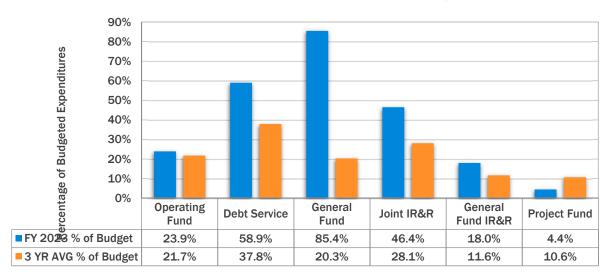
ACTUAL VS. BUDGET						SPEND				
Through August 2022						RATE				
(\$ Millions)		FY 2023	F	YTD 2023		3 YR AVG	FYTD 2023	FY 2023	3 YR AVG	Variance FY23
Expenses (By Fund)		BUDGET		ACTUAL		ACTUAL	BUDGET	% of Budget	% of Budget	to 3 YR AVG
Operating Fund	\$	30.44	\$	7.27	\$	6.32	\$ 7.61	23.9%	21.7%	2.1%
Debt Service		14.74		8.69		5.40	3.69	58.9%	37.8%	21.1%
General Fund		15.37		13.13		6.09	3.84	85.4%	20.3%	65.1%
Joint IR&R		10.30		4.78		2.02	2.58	46.4%	28.1%	18.4%
General Fund IR&R		0.69		0.12		0.04	0.17	18.0%	11.6%	6.3%
Project Fund		149.50		6.60		11.27	37.38	4.4%	10.6%	-6.2%
Total	\$	221.04	\$	40.60	\$	31.15	\$ 55.26	18.4%	16.7%	1.7%

Annual Operating Expenses 3 Year Comparison





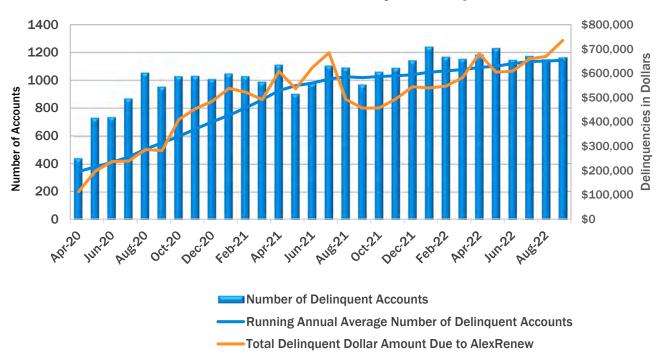
Expenditure Budget Comparison By Fund FY 23 vs. 3 Year Average



Delinquencies

The number of accounts delinquent by more than 60 days was 1,164 in September, a decrease of 15 accounts month-over-month. The total dollar amount owed to AlexRenew from these accounts totaled \$735,235 at the end of September, an increase of \$65,660 month-over-month. AlexRenew continues to work with customers with unpaid bills to assist them in bringing their accounts current.

Active Accounts 60+ Days Delinquent

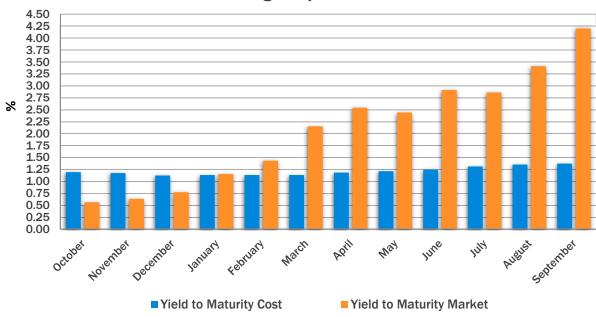




Investments

PFM Investment Advisors manages approximately \$21 million of AlexRenew's \$25 million investment portfolio. The following graph demonstrates current earnings on investments of approximately 1.37%; a level higher than general bank deposit earnings rates.





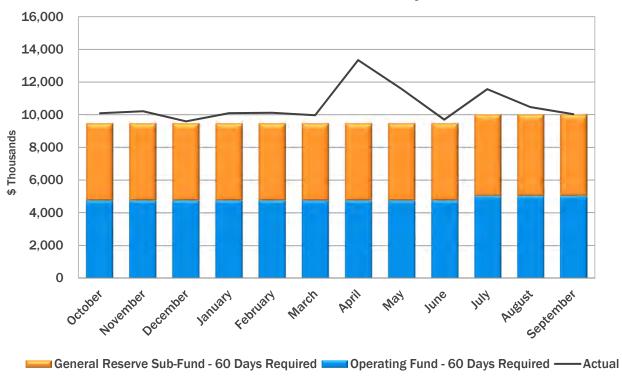
Cash Reserves

AlexRenew's Master Indenture of Trust requires that it maintain a balance on deposit in the Operating Fund equal to not less than 60 days of budgeted operating expenses. AlexRenew's Financial Policy requires a balance on deposit in the General Reserve sub-Fund, also equal to not less than 60 days of budgeted operating expenses. In total, these combined compliance conditions require AlexRenew to maintain at least 120 days cash on hand, and for FY23 this equals a minimum of \$10,008,654 The chart and graph below demonstrate that AlexRenew currently exceeds this requirement.

Board Policy 120 Days Cash Reserves	FY 2023 Actual	Percentage of Goal	
As of September 20, 2022			
Total Operating Cash	\$ 2,156,638		
Total Certificates of Deposit (Cash Equivalent)	\$ 2,865,411		
CARE ACT COVID19 Funding Balance	\$		
Total Operating Cash	\$ 5,022,049		
Total General Reserve Sub-Fund Cash	5,004,327		
Total Operating and General Reserve Sub-Fund Cash	10,026,376	100	







Debt Service Coverage

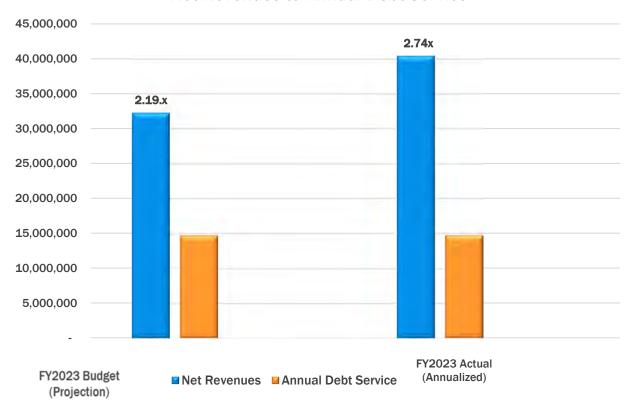
The Indenture also requires AlexRenew to maintain minimum debt service coverage such that Revenues less Operating Expenses or Net Revenues (each term as defined in the Indenture) is at least 1.10x the parity debt service due in any fiscal year. Compliance with Board-approved financial policies requires AlexRenew to maintain a higher minimum debt service coverage of at least 1.50x applying the same criteria as defined above.

In both cases, AlexRenew currently exceeds its compliance standard as indicated below. The 2.19x designated in the graph below represents projected coverage for FY23 based on original FY23 budget expectations. At three months into the fiscal year, annualized results would indicate coverage of 2.74x, ahead of the budgeted projection of 2.19x.



	FY 2023	FY 2023
Financial Policy Compliance - All-In Debt Service Coverage	Actual	Budget
Gross Revenues Available for Debt Service Coverage:		
Wastewater Treatment Charges - Alexandria Ratepayers	57,263,844	50,922,485
Fairfax County Operating Expense Charge	11,694,706	11,694,706
Reimbursement from other systems	-	-
Investment Income	554,488	115,000
Less Restricted Investment Income	-	-
Total	69,513,039	62,732,191
LESS Operating Expenses	(29,069,623)	(30,442,988)
Net Revenues [a]	40,443,415	32,289,203
Annual Debt Service [b]	14,739,509	14,739,509
Calculated All-In Debt Coverage [a/b]	2.74x	2.19x
Financial Policy Target	≥ 1 .50x	≥ 1 .50x

All-in Debt Service Coverage Net Revenues to Annual Debt Service





Glossary:

Revenue Fund

All revenue receipts of Alexandria Renew are deposited in the Revenue Fund.

The Operating Fund

The Operating Fund accounts for the administration and maintenance of the wastewater treatment system. By Board policy, the Operating Fund shall maintain 120 days of cash in reserve.

Parity Debt Service Fund

The Parity Debt Service Fund shall have deposited in it one-twelfth (1/12th) of the annual required debt payment due within the budget year. Deposits are restricted funds for use to make semiannual payments in accordance with the Alexandria Renew Trust Agreements.

Joint Improvement, Renewal & Replacement (IRR) Fund

The IR&R Fund receives deposits directly from Fairfax County (60% of IR&R budget) and from AlexRenew customer revenue (40% of IR&R budget) for asset renewal of joint use facilities. The contribution to the IRR Fund is 0.7% of the total amount of capital expenditures made subsequent to October 1, 1997, for the joint portion of the system, as set forth by the service agreement with Fairfax County.

Project Fund

The Project Fund records the cost of each joint use capital project included in the AlexRenew Capital Improvement Plans (CIP). The plans for current and future capital projects, both joint and City only, is summarized in a Ten-Year CIP. City use only CIP are accounted for within the General Fund.

General Fund

The General Fund serves as reserve fund to be used for any lawful purpose of the Authority. Deposits to the General Fund are made from the Revenue Fund after all other fund expenditures and requirements have been satisfied. Alexandria Renew principally uses the General Fund to finance specific capital improvements and to provide sufficient reserves in accordance with policy.