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Healthier Waterways for a Sustainable Community

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ALEXANDRIA, VA

2019



Comprehensive Annual Financial Report For the Nine Months Ended June 30, 2019

ALEXANDRIA RENEW ENTERPRISES ALEXANDRIA, VA COMPREHENSIVE ANNUAL FINANCIAL REPORT FISCAL PERIOD ENDED JUNE 30, 2019

Prepared by the Finance Department

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ALEXANDRIA RENEW ENTERPRISES COMPREHENSIVE ANNUAL FINANCIAL REPORT FISCAL PERIOD ENDED JUNE 30, 2019

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ALEXANDRIA RENEW ENTERPRISES CHIEF EXECUTIVE OFFICER'S TRANSMITTAL LETTER

Board of Directors John Hill, Chair Bruce Johnson, Vice Chair William Dickinson, Sec'y-Treas James Beall Patricia Turner

Chief Executive Officer Karen L. Pallansch, P.E., BCEE

> General Counsel McGuireWoods, LLP

October 15, 2019

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

I am pleased to present the Alexandria Renew Enterprises (AlexRenew) **Comprehensive Annual Financial Report** (CAFR) for the 9-month fiscal period ended June 30, 2019 (FP2019). AlexRenew changed its fiscal year cycle effective July 1, 2019, which is the reason the FP2019 CAFR covers a short period. This report presents the financial position of AlexRenew and demonstrates compliance with applicable finance-related legal and contractual provisions. This report reflects the principle of full disclosure, allowing readers to gain maximum understanding of AlexRenew's financial position.

Moore Stephens Lovelace, an independent accounting and consulting services firm, along with the AlexRenew Finance Department, have prepared this report 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 retained by AlexRenew.

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.

ABOUT ALEXANDRIA RENEW ENTERPRISES (ALEXRENEW)

Established in 1952 by the Alexandria City Council, our chartered mission was and remains to clean wastewater and protect public health and the environment. We started operations in 1956 with a mandate to transform water. Since then, we have invested billions of dollars into critical clean water infrastructure. We currently own approximately \$977 million in total assets, including three pump stations, two service chambers, four intercepting sewers, four combined sewer outfalls, and our water resource recovery facility.

Today, AlexRenew cleans approximately 35 million gallons of dirty water daily on an urban facility that includes wastewater interception, pumping, and treatment facilities designed for 54 million gallons per day. We employ approximately 100 environmental stewards that serve more than 329,000 customers in the City of Alexandria (City) and parts of Fairfax County (County) through separate contractual relationships.

AlexRenew is governed by an Alexandria City Council-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. We are an independent, special-purpose government unit with administrative and financial independence from the City.

1800 Limerick Street, Alexandria, Virginia 22314 • 703-549-3381 • alexrenew.com

Alexandria's Water Transformers

Last year, we removed 99.5 percent of phosphorus and 95 percent of nitrogen from Alexandria's dirty water, protecting our waterways from these harmful pollutants and enabling aquatic life to thrive. We ensure that we clean used water with excellence through careful monitoring at our on-site laboratory, which conducted approximately 24,000 individual analyses last year, thoroughly testing each step in our water cleaning process. This testing ensures we comply with clean water regulations while making sure the water we return to the Potomac River yields a return of healthier waterways.

We have also collaborated with George Mason University's Potomac Environmental Research and Education Center for five years to sample water and aquatic life in Hunting Creek, where we release our cleaned water back into the Potomac River. This year, they reported a healthy ecosystem with more than one dozen species of fish and submerged aquatic vegetation carpets, and found more than five times the adult Alewife fish in Hunting Creek than the previous year.

We demonstrate our focus on environmental sustainability by renewing resources that help improve our environment. We reuse about 1.3 billion gallons of recycled water per year in our daily operations, and as a result, we mitigate burdens on the City's potable water system while saving almost \$3 million in drinking water expenses. In the process of cleaning dirty water, we capture our methane gas which offsets our purchased energy costs and helped reduce our greenhouse gas footprint by 9% from 2017 to 2018. We also produced 6,211 dry tons of biosolids, a 13% increase over last year, to help farmers enrich their soil.

LOCAL ECONOMY

The City has experienced a stable economy over the last decade, and this trend is expected to continue. As an inner suburb to Washington, DC, the City has been historically impacted in various ways due to fluctuations in federal spending. The City's unemployment rate – measured at 1.9% in June 2019 – remains below the national unemployment rate of 3.7% and Virginia unemployment rate of 2.9%.

The largest sectors of employment by total wages in the City are professional, scientific, and technical services, and public administration. The U.S. Patent and Trademark Office continues to expand and the National Science Foundation, with 3,100 high level jobs, completed its relocation to Alexandria in FY2017. Amazon's recent announcement that it will build part of its new second corporate headquarters in nearby National Landing may also impact employment in the City, particularly as it relates to the \$1 billion Virginia Tech Innovation Campus that is planned in the City in conjunction with the Amazon announcement.

City real estate values continue to rise as assessed real property increased 2.35% from FY2017 to FY2018. While the City's average office vacancy rate remains relatively high, it is below the average for the Northern Virginia region.

2040 VISION AND STRATEGIC OUTCOMES

We focus our work and align our budget to support our 2040 vision and the following strategic outcomes:

- <u>Operational Excellence</u>: Continually enhance water resource recovery procedures to provide exceptional quality products.
- <u>Public Engagement and Trust</u>: Engage our community to help them become informed consumers and supporters of clean water.
- <u>Watershed Stewardship</u>: Facilitate collaboration to collectively manage and improve water resources.
- <u>Adaptive Culture</u>: Establish an organization-wide commitment to exceptional outcomes through an enthusiasm for learning, adapting, and solving problems to achieve clean water.
- <u>Effective Financial Stewardship</u>: Manage our financial resources to create an efficient and resilient organization that contributes to the health of the local economy.

FP2019 ACHIEVEMENTS

RiverRenew Program to Remediate Alexandria's Combined Sewers and Improve Water Quality

Alexandria's combined sewer system dates back to the 1800s. In a combined sewer system, only one kind of pipe is designated for transporting both sewage and rainwater. When it's not raining, these pipes transport sewage for treatment at our water resource recovery facility. On rainy days, the capacity of the combined sewer pipes is often exceeded. Instead of being transported and treated at AlexRenew, sewage mixed with rainwater overflows into Alexandria's waterways via four discharge points, or "outfalls."

AlexRenew finalized ownership of the four combined sewer outfalls in Alexandria in July 2018, and leads the program to fix this problem by a July 2025 deadline established by the Virginia General Assembly. The program, called RiverRenew, involves building a network of deep tunnels and sewers that will capture almost all of the combined sewer overflows and send them to our water resource recovery facility for treatment, improving the water quality in local waterways for generations to come.

AlexRenew made significant progress this past year in advancing RiverRenew. This progress, largely through achieving key permitting and design milestones, is essential to meeting the 2025 deadline. This past year, AlexRenew worked with the City of Alexandria to select and launch a RiverRenew Stakeholder Advisory Group (SAG) that represents Alexandria neighborhoods, businesses, and environmental groups. The SAG has provided valuable feedback on designs for the RiverRenew program, and has been essential in garnering support for permitting.

The RiverRenew program team also participated in 20 community events and presented at over 40 community meetings; feedback from this outreach was critical to incorporating community amenities such as stream restoration and a publicly-accessible promenade into the overall design for RiverRenew.

Energy Master Plan Results

AlexRenew created an energy savings program in 2008, and has seen great progress during the past 11 years, reducing its annual energy consumption by 17%, total energy usage per gallon of wastewater treated by more than 15%, and greenhouse gas emissions by almost 10%. AlexRenew achieved these energy savings even while adding energy-intensive water treatment technologies and additional capacity during the past decade to ensure it continues to provide cleaner, safer water to the Alexandria community.

Some of the key energy saving initiatives that contributed to these energy consumption reductions include: installing 450 solar panels on the AlexRenew Environmental Center, which currently produce almost 50% of the building's energy; using renewable methane gas to offset purchased natural gas by about 25%; converting over 600 exterior campus lamps to LED which saves more than 85% of the energy used for campus lighting; installing 25 modern power monitors to evaluate energy usage; implementing energy efficient processes for cleaning water, such as using mainstream anammox; and ensuring that any equipment that needs to be upgraded is energy-efficient.

Utilizing Deammonification to Use Less Air, Energy and Chemicals

Our mainstream anammox process, which started in 2016, is the first full-scale installation in the United States that implements shortcut nitrogen removal processes incorporating an innovative deammonification pathway in mainstream biological treatment. By using mainstream anammox, our Methanol usage decreased by 41% from 2016 to 2017 (427,587 gals to 177,542 gals). Methanol usage has continued to decrease every year since implementation. Methanol usage decreased by an additional 4% from 2017 to 2018 (177,542 gals to 170,937 gals). By implementing this sustainable method, AlexRenew has saved approximately \$300,000 in chemical costs.

ENGAGING WITH OUR COMMUNITY THROUGH PARTNERSHIPS

In FP2019, we worked with nearly 50 partners to organize, participate in, or lead over 80 events, further expressing our enthusiasm for cleaning our community's water and inspiring personal connections with local waterways. Through family-oriented, water-centric environmental events, such as our annual Water Discovery Day, event partnerships with the City of Alexandria Department of Recreation, Parks and Cultural Affairs, and our participation in the City's annual Earth Day Celebration, we strengthen our community's understanding of the importance of clean water and our connection with local waterways.

Nearly 5,000 people visited our facilities in FP2019; the majority of these guests attended meetings hosted by community groups and water organizations in our Environmental Center, which features a suite of conference rooms available for public use. We also hosted approximately 70 tours for groups that included middle and high school students, adult learners, international water organizations, environmental groups, and members of civic associations.

WORKFORCE DEVELOPMENT INITIATIVES

Our skilled team of professionals includes 26 licensed wastewater operators, six professional engineers, 18 certified maintenance and reliability technicians, 10 licensed electricians, and 29 American Safety Services Association certified flaggers. We also have certified professionals in our Human Resources, Purchasing, and Finance departments. We are creating job opportunities and training the workforce of tomorrow through our apprentice program. This program allows apprentices to gain the education and experience necessary for success within the field of wastewater treatment. We have had 19 apprentices graduate from the program, and earlier this year, we hired seven new apprentices.

Last year, we hosted two Urban Alliance Foundation interns at AlexRenew because we believe that training the next generation is a smart investment. This internship program is the only year-long program for high school seniors in the City of Alexandria and includes formal training and mentoring among a cross function of our staff.

We also partnered with the Arlington Career Center for an internship program, hosting a senior student on Supervisory Control and Data Acquisition (SCADA) team. Also, this past summer, our RiverRenew team hosted two engineering students, who assisted them with a variety of tasks on the program.

AWARDS AND RECOGNITION

The AlexRenew 2018 Comprehensive Annual Financial Report received the Government Finance Officers Association (GFOA) Certificate of Achievement for Excellence in Financial Reporting. This certificate is the highest form of recognition in governmental accounting and financial reporting provided by the GFOA. AlexRenew has been a recipient of this recognition each of the last ten years.

The American Academy of Environmental Engineers and Scientists (AAEES) presented AlexRenew with a Grand Award for our Four Mile Run Pump Station educational fence, which surrounds the station. The fence features ten "education stations" that engage visitors and passersby in what the pump station does, how we clean water, and water stewardship.

FINANCIAL DISCUSSION

Financial Condition

AlexRenew's financial condition remained strong at year-end. We achieved each of our legal requirements, as prescribed by our master trust indenture and service agreements, and our policy targets while also maintaining sufficient liquidity and a responsible unrestricted net position.

We maintained appropriate fiscal and business discipline as we implemented our FP2019 operating and maintenance budget resulting in a moderate operating budget excess, strengthening our financial position. Our rates were unchanged for FP2019 leading to revenue stability and close expense control ensured spending was targeted, responsible and in keeping with our effective financial stewardship obligations. Our capital budget included approximately \$4.6 million for improvements, replacements and repairs, and \$26 million for new or continuing larger-scale projects. Major projects funded included, among others, Process Optimization, Process Air Compressor upgrades, PLC and HMI upgrades and preliminary engineering work and other plant improvements associated with the RiverRenew program.

AlexRenew did not issue additional debt during FY2018 or FP2019. During FY17, we closed a \$23.0 million tax-exempt bond issue through the Virginia Resources Authority. Proceeds from this transaction were used to repay a \$10.0 million line of credit and to fund \$13 million in various capital improvement needs. Our FY2020 capital budget has been approved at approximately \$44.2 million and includes a funding component for the RiverRenew program. As we look forward to FY2020 and beyond, AlexRenew will continue to emphasize best practices and fiscal discipline to ensure our financial resiliency and to sustain a strong financial position.

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 our Board approved investment policy. We are focused, first and foremost on maintaining capital preservation and liquidity while achieving a market return on our financial resources.

Capital Assets

AlexRenew's capital assets are currently valued at nearly \$993 million. This is reflective of a significant capital program in recent years that will continue as we look forward to the implementation of the RiverRenew program, which is expected to include meaningful capital investment. As we build and manage our long-term capital improvement plan, we will again be particularly conscious of the implications for our customers and our own financial stability.

Budget and Internal Controls

The AlexRenew Board of Directors (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. The budget is initially delivered to the Board in March providing for approximately three months of review, consideration and public input. This process includes formal public notice and a public hearing to ensure our community receives full disclosure and has the opportunity to participate in developing the budget.

The AlexRenew Board does not have the authority to create "appropriations bills or ordinances," but approves the annual budget to ensure compliance with environmental regulations and its master trust indenture and service agreements, and to recover the organization's costs to deliver service.

AlexRenew has two major sources of revenue including wastewater treatment charges paid by City residential, commercial and industrial customers, and reimbursements from Fairfax County for certain operating, maintenance and capital costs. Under a formal service agreement, Fairfax County pays a percentage of operating expenses based upon flow volume into the AlexRenew treatment facility, makes a pre-determined annual deposit into our Improvement, Renewal and Replacement Fund and makes recurring contributions into our capital project fund in support of capital projects that benefit the County.

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.

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 we maintain accurate and reliable financial records for the preparation of financial statements and representations made by AlexRenew. Our internal accounting control structure provides reasonable, but not absolute, assurance that we meet these objectives. 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.

CONCLUSION

Yount, Hyde & Barbour, P.C., an independent registered public accounting firm have audited AlexRenew's financial statements. The goal of the independent audit is to provide reasonable assurance that the financial statements of AlexRenew for the fiscal period ended June 30, 2019 are not materially misstated.

The independent auditors have rendered their opinion on AlexRenew's financial statements for the fiscal period ended June 30, 2019. 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. This letter of transmittal is prepared to complement the MD&A and should be read in conjunction with it.

Thank you to our staff, and in particular our finance team, and the professionals at Moore Stephens Lovelace whose hard work and dedication has made possible the preparation of this CAFR. Thank you to our Board as well, for their vision, leadership and passion for our mission and the important work we do at AlexRenew.

Regards,

Hare Hallaror

Karen Pallansch, P.E., BCEE, WEF Fellow Chief Executive Officer Alexandria Renew Enterprises

ALEXANDRIA RENEW ENTERPRISES

DIRECTORY OF PRINCIPAL OFFICIALS

June 30, 2019

BOARD OF DIRECTORS

John Hill - Chairman Bruce Johnson - Vice Chairman William Dickinson - Secretary/Treasurer James Beall Patricia Turner

Shahram Mohsenin, Fairfax County Representative

CHIEF EXECUTIVE OFFICER (CEO)

Karen L. Pallansch, P.E., BCEE

INDEPENDENT AUDITORS

Yount, Hyde & Barbour, P.C.

Introductory Section

ALEXANDRIA RENEW ENTERPRISES

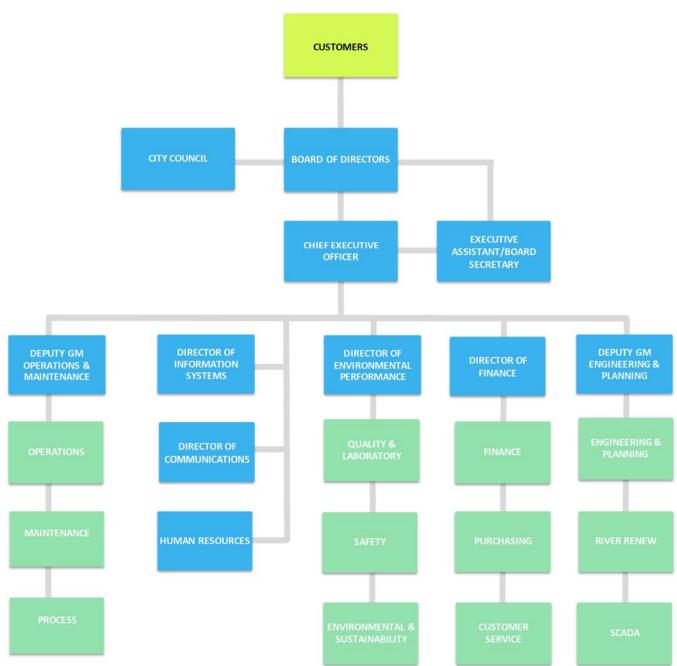
BOARD OF DIRECTORS







Pictured from top left to right: Chairman John Hill, Vice Chairman Bruce Johnson Bottom Row from left to right: Mr. William Dickinson (Secretary/Treasurer), Mr. James Beall, and Ms. Patricia Turner



ORGANIZATIONAL CHART



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Alexandria Renew Enterprises Virginia

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

September 30, 2018

Christophen P. Morrill

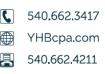
Executive Director/CEO

Financial Section

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50 South Cameron St. Winchester, VA 22601



INDEPENDENT AUDITOR'S REPORT

To the Board of Directors Alexandria Renew Enterprises Alexandria, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activity and the fiduciary fund of Alexandria Renew Enterprises, as of and for the nine-month period ended June 30, 2019, and related notes to the financial statements, which collectively comprise Alexandria Renew Enterprises' basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America, *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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Dedicated to Trust and Excellence.

To the Board of Directors Alexandria Renew Enterprises Page 2

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activity and the fiduciary fund of Alexandria Renew Enterprises, as of June 30, 2019, and the respective changes in its financial position and its cash flows thereof for the nine-month period then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

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, 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.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise Alexandria Renew Enterprises' basic financial statements. The Introductory and Statistical Sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Introductory and Statistical Sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated September 27, 2019 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 the results of that testing, and not to provide an opinion on 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.

yount, Hyde & Barbon, P.C.

Winchester, Virginia September 27, 2019

MANAGEMENT'S DISCUSSION AND ANALYSIS

Alexandria Renew Enterprises presents the following review of its financial activities for the nine-month fiscal period ended June 30, 2019 (FP2019). 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 system's financial position and operating results for the nine-month fiscal period ended June 30, 2019.

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 "acquire, construct, improve, extend, operate and maintain a sewage disposal system".

Five citizen members appointed by the 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 contributed 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.

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 the FP2019. This financial section information should be read in conjunction with the financial statements.

Financial Highlights

The following are key financial highlights for FP2019:

- The Authority treated 11.48 billion gallons of wastewater during FP2019. This represents an 11% decrease in wastewater treated. This decrease in treated wastewater is primarily a result of only nine months of activity for the fiscal period.
- The County contributed 5.8 billion gallons of wastewater flow to the Authority in FP2019, which accounted for approximately 50% of the wastewater treated at the Authority's facilities and is within the County's allocation per the Service Agreement.

Financial Highlights (Continued)

- The Authority experienced a marginal decrease of 0.3% to 26,594 in number of accounts in FP2019 relative to the prior fiscal year.
- 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 FP2019 was \$6.77 per 1,000 gallons of water and is consistent with the prior fiscal year. The Base charge approved by the Board was \$9.61 per month for residential customers and varies based on meter size for commercial customers, again consistent with the prior fiscal year.
- Wastewater treatment charges of \$28.3 million were 28.1% lower in FP2019 compared to the prior fiscal year. This is primarily a result of only nine months of activity for the fiscal period.
- Debt service coverage, on an accrual basis was 2.38x for FP2019. This exceeded the 1.10x required by the Authority's Master Indenture of Trust (Indenture) and 1.50x established by the Board's Financial Policies.
- Total assets and deferred outflows of resources for FP2019 were \$836.7 million. Total assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources (Net Position) in the amounts of \$708.1 million for FP2019. Of the total Net Position, \$32.0 million were unrestricted and available to support operations for FP2019. The increase in total assets is a result of the multiple improvement, replacement and construction projects for plant infrastructure, equipment and the RiverRenew program to remediate the combined sewer outfall (CSO) assets donated by the City in the prior fiscal year.
- Capital assets net of depreciation and amortization increased \$6.1 million in FP2019. The increase is primarily due to increased capital expenditures.
- Payments from the County of \$7.9 million in FP2019 represented the County's share of operating costs based upon their proportional contribution to total plant flow. County payments were \$10.6 million in prior fiscal year. This payment decrease is the result of only nine months of activity for the fiscal period.
- Total operating expenses, excluding depreciation and amortization, for FP2019 decreased 26.6% compared to FY2018. This decrease in operating expenses, equal to \$6.2 million, was due primarily to only nine months of activity for the fiscal period.

Required Financial Statements

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

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

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 FP2019.

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, 2019, and September 30, 2018:

Condensed Statements of Net Position (in Millions of Dollars)

	6/30/2019	9/30/2018	\$ Change	% Change
Current unrestricted assets	\$ 44.90	\$ 51.86	\$ (6.96)	(13.4) %
Current restricted assets	30.37	25.62	4.75	18.5 %
Capital Assets, net	759.84	753.73	6.11	0.81 %
Total Assets	835.11	831.21	3.90	0.5 %
Deferred Outflows	1.62	1.92	(0.30)	(15.63) %
Current liabilities	20.79	19.85	0.94	4.7 %
Long-term liabilities	106.65	112.80	(6.15)	(5.45) %
Total Liabilities	127.44	132.65	(5.21)	(3.9) %
Deferred Inflows	1.21	1.83	(0.62)	(33.88) %
Net Investment in capital assets	649.68	638.35	11.33	1.8 %
Restricted	26.36	21.36	5.00	23.4 %
Unrestricted	32.04	38.94	(6.90)	(17.7) %
Total Net Position	\$708.08	\$698.65	\$ 9.43	<u> 1.3 </u> %

Financial Analysis (Continued)

The following table reflects the Authority's comparative revenues, expenses, and changes in net position for the nine-month period ending June 30, 2019 and the fiscal year ending September 30, 2018:

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

	6/30/2019	9/30/2018	\$ Change	% Change
Revenues				
Program revenues:				
Wastewater Treatment Fees & Miscellaneous	\$ 28.32	\$ 39.39	(11.07)	(28.10) %
Fairfax County Wastewater Fees	7.93	10.61	(2.68)	(25.30) %
General revenues:				
Investment Income	1.24	0.30	0.94	313.30 %
Total Revenues	37.49	50.30	(12.81)	(25.50) %
Program expenses				
Depreciation and Amortization expenses	14.91	19.47	(4.56)	(23.40) %
Other Operating Expenses	17.22	23.46	(6.24)	(26.60) %
Non-operating Expenses	3.78	4.57	(0.79)	(17.30) %
Total Expenses	35.91	47.50	(11.59)	(24.40) %
Changes in Net Position before Capital Contributions	1.58	2.80	(1.22)	(43.60) %
Capital Contributions	7.85	18.64	(10.79)	(57.90) %
Changes in Net Position	9.43	21.44	(12.01)	-56 %
Net Position:				
Beginning	698.65	677.21	21.44	0.03 %
Ending	\$708.08	\$698.65	\$ 9.43	0.01 %

Financial Analysis (Continued)

The following table summarizes other selected information of the Authority at June 30, 2019 and September 30, 2018:

Other Selected Information

		6/30/2019		9	/30/2018	6	D	ifference	% Change	
Selected data:										
Employees at year end		102			83			19	23	%
Alexandria accounts		26,594			26,681			(87)	(0)	%
Wastewater treated (millions of gallons)		11,480			12,849			(1,369)	(11)	%
Portion contributed by										
Fairfax County (millions of gallons)		5,820			6,670			(850)	(13)	%
Percentage contributed by										
Fairfax County		50.69	%		51.91	%		(1.22) %	(2.35)	%
Rates, Residential Customers:										
Charge per 1000 gallons of										
water consumption	\$	6.77		\$	6.77		\$	-	0	%
Base Charge		9.61			9.61			-	0	%
Average residential customer bill (based on 4	,000	gallon per	mon	th v	vater usa	ge):				
Per year	\$	440.28		\$	440.28		\$	-	0	%
Per quarter		110.07			110.07			-	0	%
Per month		36.69			36.69			-	0	%
Rates, Commercial Customers:										
Charge per 1000 gallons of										
water consumption	\$	6.77		\$	6.77		\$	-	0	%
Base Charge										
Water Meter Size										
5/8"	\$	28.83		\$	28.83			-	0.00%	%
3/4"		28.83			28.83			-	0.00%	%
1"		72.07			72.07			-	0.00%	%
1-1/2"		144.16			144.16			-	0.00%	%
2"		230.65			230.65			-	0.00%	%
3"		432.47			432.47			-	0.00%	%
4"		720.77			720.77			-	0.00%	%
6"		1,441.56		1	1,441.56			-	0.00%	%
8"		2,306.50		2	2,306.50			-	0.00%	%

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 are several tracts of undeveloped land, the flows from these parcels, when developed, will not meaningfully increase the Authority's wastewater treatment charge revenue. This is particularly true given the trend for water conservation and sustainability efforts within the community.

The number of City accounts decreased by 87 or -0.3% in FP2019 when compared to FY2018. The current number of accounts 26,594 represents a 5% increase for the 10-year period beginning FY2009 to present.

In the prior fiscal year, the number of the accounts increased by 70.

Financial Condition

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

Total assets and deferred outflows of resources grew \$3.6 million or 0.1% during FP2019. Net Position increased by \$9.4 million in FP2019, with a substantial portion of the change resulting in an increase in capital assets.

Results of Operations

<u>Revenues:</u> The Authority's revenues from operations fall into two main categories: 1) wastewater treatment and base charges 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. Revenues decreased by \$12.81 million or 25.5% over last year primarily due to only having nine months of activity in the fiscal period.

<u>Capital contributions:</u> The County pays 60% unless otherwise negotiated of the cost of joint capital improvements to our water resource recovery facility based upon the Service Agreement with the Authority. These payments are recorded as non-operating revenues in the statements of revenues, expenses and changes in net position.

Total capital contributions were \$7.9 million FP2019.

Expenses:

FP2019-FY2018 comparison: Total operating expenses for FP2019, excluding depreciation and amortization, decreased by \$6.2 million or 26.6% relative to FY2018. The primary reason for this decrease is due to only nine months of activity in the fiscal period.

Results of Operations (Continued)

Capital Assets

The Authority maintains investments in a broad range of capital assets, which includes land, buildings, sanitary sewer intercepting lines and force mains, pumping stations, a water resource recovery facility, CSO's, machinery and equipment, computers and vehicles. The Authority also owns capacity rights at the Arlington County Water Pollution Control Facility (Arlington). Pursuant to service agreement between the City of Alexandria, the Authority and Arlington County, the Authority pays 8.5% of the cost of capital improvements at the Arlington County Wastewater Pollution Control Facility (WPCF). 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. Under the Service Agreement, the County invests a percentage of total facility assets into this fund for adequate reinvestment to ensure continuing compliance with 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:

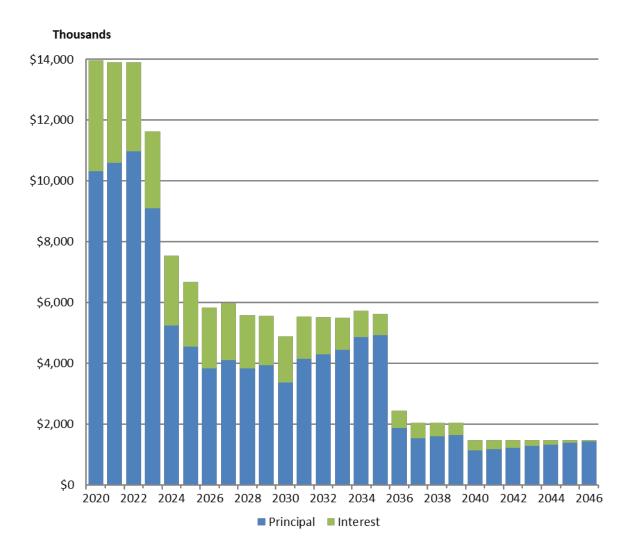
The Authority had \$111.1 million in long-term debt outstanding at June 30, 2019, including \$10.5 million considered short-term. Principal payments totaled \$5.1 million during FP2019. During FP2019, the Authority did not issue new bonds and long-term debt decreased during the fiscal period by \$5.2 million.

The Authority's financial strength, ability to pay current debt service (principal and interest), and future borrowing capability is demonstrated, in part, by its debt service coverage which is currently a strong 2.38x. Our 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 1.50x total debt service for the fiscal year.

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

<u>Results of Operations, (Continued)</u>

The graph below presents principal and interest payments due each year until the revenue bonds mature in 2046.



Results of Operations (Continued)

The following table calculates the performance relative to the Rate Covenant for FP2019, and FY2018: *(in millions)*

	6/30/2019			30/2018	% Change	
Unrestricted Operating Revenue	\$	36.25	\$	50.00	(27.50)	%
Total Operating Expenses						
(Less Depreciation and Replacements)		17.22		23.46	(26.60)	%
Net Revenue	\$	19.03	\$	26.54	(28.30)	%
Annual Debt Service	\$	8.00	\$	13.91	(42.51)	%
Revenue Covenant ¹		2.38		1.91	24.73	%

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

Additional information on the Authority's debt can be found in Note 5 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, business support and professional services.

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

Budget Information, (Continued)

Certain expenditures for construction have been estimated net of contractual retainage not paid by contract terms until projects are complete. In some cases, AlexRenew has issued debt for its share of construction cost (net of County share) through the Virginia Resources Authority (VRA).

The following Statement of Consolidated Enterprise Budget is presented to compare FP2019 operations to budget estimate.

		FP	2019 Budget Actual	F	FY 2019 ïnal Budget*	Variance	Variance (%)
Revenues and Other Sources:							
Wastewater Treatment Charges		\$	28,299,921	\$	29,396,627	\$ (1,096,706)	-3.73%
Fairfax County:							
Operating			7,927,353		8,497,247	(569,894)	-6.71%
IR&R	-		2,334,276		2,334,272	 4	0.00%
	Total	\$	38,561,550	\$	40,228,146	\$ (1,666,596)	-4.14%
Expenditures							
Operational Excellence			4,307,918		4,693,050	(385,132)	-8.21%
Public Engagement and Trust			1,134,662		1,460,550	(325,888)	-22.31%
Watershed Stewardship			1,737,120		2,374,275	(637,155)	-26.84%
Effective Financial Stewardship			798,532		1,285,875	(487,343)	-37.90%
Adaptive Culture			9,083,517		11,068,582	 (1,985,065)	-17.93%
Operating Budget Sub-Total			17,061,749		20,882,332	(3,820,583)	-18.30%
Alex-only Improvement, Renewal & Replacement			5,385		452,250	(446,865)	-98.81%
Joint Improvement, Renewal & Replacement			2,554,051		4,218,750	(1,664,699)	-39.46%
Alex-only Capital Projects			720,367		6,126,750	(5,406,383)	-88.24%
Joint Capital Projects			18,769,174		19,949,250	(1,180,076)	-5.92%
	Total	\$	39,110,726	\$	51,629,332	\$ (12,518,606)	-24.25%
Nonoperating Revenues (Expenditures)							
Investment Income			1,235,709		86,250	1,149,459	1332.71%
Debt Principal Payments			(5,144,328)		(7,614,434)	2,470,106	-32.44%
Debt Interest Expense			(2,748,836)		(3,819,737)	1,070,901	-28.04%
Proceeds from Debt			-		12,395,057	(12,395,057)	-100.00%
Fairfax County Contributions			5,513,863		10,354,050	(4,840,187)	-46.75%
	Total	\$	(1,143,592)	\$	11,401,186	\$ (12,544,778)	-110.03%
Excess of Revenues		\$	(1,692,768)	\$	-	\$ (1,692,768)	-16%

CONDENSED ENTERPRISE BUDGET FP 2019

* Adjusted to 9-month period

Final Comments

FP2019 continued a trend of strong financial performance by the Authority and its ability to maintain adequate liquidity and financial flexibility, ensure appropriate reserves are maintained, and meet its capital spending requirements.

Contacting the Authority's Financial Management:

This financial report is designed to provide our citizens, customers, and creditors 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, contact the Alexandria Renew Enterprises, 1800 Limerick St. Alexandria, Virginia 22314, call 703.549.3381, or visit us on the web at <u>www.alexrenew.com</u>.

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BASIC FINANCIAL STATEMENTS

ALEXANDRIA RENEW ENTERPRISES STATEMENT OF NET POSITION June 30, 2019

ASSETS	
Current assets	
Cash and cash equivalents (Note 2):	
Unrestricted	\$ 18,322,567
Restricted	19,953,566
Accounts receivable, net (Note 3)	3,757,060
Due from other governments (Note 3)	20,998
Prepaid expenses	740,325
Inventory	245,728
Investments (Note 2):	21,000,270
Unrestricted Restricted	21,809,379
Restricted	10,422,947
Total current assets	75,272,570
Non-current assets	
Capital assets, net of depreciation and amortization (Note 4)	759,842,445
Total non-current assets	
	759,842,445
DEFERRED OUTFLOWS OF RESOURCES	
Pension related deferred outflows (Note 6)	574,622
Other post employment benefits related deferred outflows (Note 7)	76,004
Deferred charge on refunding	972,701
Total deferred outflows of resources	1,623,327
Total assets and deferred outflows of resources	\$ 836,738,342
LIABILITIES, DEFERRED INFLOWS OF RESOURCES,	
AND NET POSITION	
Current liabilities	\$ 4.783.649
Accounts payable and accrued expenses (Note 3) Due to City of Alexandria	\$ 4,783,649 729,429
Accrued paid time off	805,531
Current maturities of long-term debt (Note 5)	10,457,748
Payable from restricted assets	10,457,740
Accounts payable and accrued expenses (Note 3)	2,987,416
Accrued interest payable	1,033,899
Total current liabilities	20,797,672
Long-term liabilities	
Accrued paid time off, less current portion	268,510
Other post employment benefits (Note 7)	748,417
Net pension liability (Note 6)	4,956,676
Long-term debt (Note 5)	100,680,925
Te del la se desse l'abilitation	106 654 529
Total long-term liabilities	106,654,528
Total liabilities	127,452,200
DEFERRED INFLOWS OF RESOURCES	
Pension related deferred inflows (Note 6)	840.124
Other post employment benefits related deferred inflows (Note 7)	369,297
Total deferred inflows of resources	1,209,421
	1,209,421
Total liabilities and deferred inflows of resources	\$ 128,661,621
NET POSITION	
Net investment in capital assets	649,676,473
Restricted:	
Operating	2,283,181
Parity debt service	3,516,438
Improvement, renewal & replacement	16,881,171
Capital projects	3,674,408
Unrestricted	32,045,050
Total net position	708,076,721
•	
Total liabilities, deferred inflows of resources, and net position	¢ 076 770 740
	\$ 836,738,342

ALEXANDRIA RENEW ENTERPRISES STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION For The Nine Months Ended June 30, 2019

	99,921 27,353 23,423
Fairfax County wastewater fees7,92	
	23,423
Miscellaneous	
Total operating revenues 36,2:	50,697
OPERATING EXPENSES	
Personnel services 7,58	84,511
Utilities 2,68	82,315
Chemicals 1,42	22,876
Operations maintenance 94	42,681
Arlington sewage disposal 99	98,838
Sludge disposal 60	53,426
Depreciation and amortization (Note 4) 14,90	09,317
Repairs and replacements, sewage disposal systems 15	56,330
General, administrative, customer service, and other 2,70	67,358
Total operating expenses 32,12	27,652
Operating income 4,12	23,045
NONOPERATING REVENUES (EXPENSES)	
Investment income 1,23	35,709
Interest on debt (2,74	48,836)
Loss on disposed capital assets (1,02	29,897)
Total non-operating revenues (expenses) (2,54	43,024)
Change in net position before capital contributions 1,58	80,021
CAPITAL CONTRIBUTIONS 7,84	48,140
Change in net position 9,42	28,161
NET POSITION, BEGINNING 698,64	48,560
NET POSITION, ENDING \$ 708,0	

ALEXANDRIA RENEW ENTERPRISES STATEMENT OF CASH FLOWS For The Nine Months Ended June 30, 2019

CASH FLOWS FROM OPERATING ACTIVITIES

Cash received from Fairfax County for operations8,032,1Cash received from other sources23,4	423
Cash received from other sources 23,4	
	187)
Payments to suppliers for goods and services (10,482,4	
Payments to employees for services (8,771,3	313)
Net cash provided by operations 17,549,0	008
CASH FLOWS FROM CAPITAL AND RELATED	
FINANCING ACTIVITIES	
Acquisition/construction of capital assets (20,750,2	211)
Capital contributions from Fairfax County 8,086,1	159
Proceeds from sale of property 268,2	249
Principal payments on debt (5,144,3	328)
Interest paid on borrowing (2,852,3	326)
Net cash used in capital and related financing activities (20,392,4	457)
CASH FLOWS FROM INVESTING ACTIVITES	
Proceeds from sales and maturities of investments 6,717,9	984
Purchase of investments (10,632,5	542)
Interest received on investments 1,235,7	709
Net cash used in investing activities (2,678,8	849)
Net decrease in cash and cash equivalents (5,522,2	298)
CASH AND CASH EQUIVALENTS	
Beginning 43,798,4	431
Ending \$ 38,276,1	133
RECONCILIATION TO STATEMENT OF NET POSITION	
Cash and cash equivalents - unrestricted \$ 18,322,5	567
Cash and cash equivalents - restricted 19,953,5	566
Total cash and cash equivalents\$ 38,276,1	133

ALEXANDRIA RENEW ENTERPRISES STATEMENT OF CASH FLOWS (continued) For The Nine Months Ended June 30, 2019

RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES

Operating income	\$ 4,123,045
Adjustments to reconcile operating income to net cash	
provided by operating activities:	
Depreciation and amortization	14,909,317
Pension expense, net of of employer contributions	(1,029,185)
Changes in assets and liabilities	
(Increase) decrease in:	
Accounts receivable	567,157
Due from other governments	104,750
Prepaid expenses	(292,269)
Inventory	(16,361)
(Decrease) increase in:	
Accounts payable and accrued expenses	(694,062)
Due to City of Alexandria	(118,628)
Accrued paid time off	46,076
Other post employment benefits	 (50,832)
Net cash provided by operating activities	\$ 17,549,008
NONCASH CAPITAL AND RELATED FINANCING ACTIVITIES	
Carrying value of disposed capital assets	\$ 1,298,146

Capital asset purchases included in accounts payable at year end	\$ 5,406,532

ALEXANDRIA RENEW ENTERPRISES STATEMENT OF FIDUCIARY NET POSITION June 30, 2019 OPEB Trust Fund

ASSETS

Assets held in trust, at fair value Investment in pooled funds	\$ 852,970
NET POSITION Net position restricted for OPEB	\$ 852,970

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION For The Nine Months Ended June 30, 2019 OPEB Trust Fund

ADDITIONS	
Contributions from employer	\$ 81,481
Investment Income:	
Net increase in fair value of investments	8,884
Less investment expenses	 (1,541)
Net investment income	 7,343
Total additions	 88,824
DEDUCTIONS	
Benefits paid to participants	81,481
Total deductions	 81,481
Change in net position	7,343
Total net position - beginning	 845,627
Total net position - ending	\$ 852,970

NOTES TO FINANCIAL STATEMENTS June 30, 2019

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 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 primary activities of the Authority are accounted for within a single proprietary (enterprise) fund. Proprietary funds are used to account for operations that are (a) financed and operated in a manner similar to private business enterprises where the intent of the governing body is that the cost (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes.

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.

Change in Fiscal Year

The Authority changed its fiscal year cycle effective July 1, 2019, which is the reason the fiscal period ending June 30, 2019 CAFR covers a short period.

NOTES TO FINANCIAL STATEMENTS June 30, 2019

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

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.

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

In FY2010, 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 are shown as restricted in the financial statements.

Investments

Investments are stated at fair value, except for investments in the LGIP and 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 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).

NOTES TO FINANCIAL STATEMENTS June 30, 2019

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
Local Government Investment Pool (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 related are recorded as current assets, net of an allowance for doubtful accounts of \$673,743, at June 30, 2019. The allowance is based upon management's specific identification of receivables that may become uncollectible.

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.

NOTES TO FINANCIAL STATEMENTS June 30, 2019

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, 2019

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 position 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 five-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 position 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 five-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, 2019

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 Local Government Investment Pool (LGIP), a 2a-7 like pool, and the Commonwealth of Virginia State Non-Arbitrage Program (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, 2019, 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, 2019, 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.

Investment Type	 Fair Value	S&P Credit Rating	Weighted Average Maturity *
Federal agency bonds and notes	\$ 6,993,089	AA+	1.87
U.S. Treasury bonds and notes Supra-National agency notes	10,929,760 4,521,152	AA+ AAA	2.90 1.52
Corporate bonds and notes	1,806,710	AA to AAA	1.36
LGIP	 123,141	AAAm	N/A
Total investments	\$ 24,373,852		

The Authority's investments as of June 30, 2019 consisted of the following:

*Average maturity in years

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 2. Deposits and Investments (Continued)

Interest Rate Risk (Continued)

Reconciliation of deposits and investments:

Amounts per disclosures al	ove	:	Amounts per Statem	ent of Ne	et Position:
Cash and cash equivalents Long-term certificates	\$	41,509,392	Cash and cash equivalents	\$	38,276,133
of deposit		4,625,215	Investments		32,232,326
Total deposits		46,134,607	Total	\$	70,508,459
Total investments		24,373,852			
Total	\$	70,508,459			

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.

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

Receivables, due to/from other governments and payables were composed of the following at June 30, 2019:

Accounts receivable: Billed customer services Unbilled customer services Other Less: Allowance for uncollectible	\$ 2,460,446 1,938,069 32,288 (673,743)
Total accounts receivable	\$ 3,757,060
Due from other governments: County of Fairfax, Virginia	\$ 20,998
Accounts payable and accrued expenses: Accounts payable – vendors Other	\$ 7,584,802 7,195
Accrued expenses – payroll, payroll taxes, and other	 179,068
Total accounts payable and accrued expenses	\$ 7,771,065

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 4. Capital Assets

Changes in capital assets for FP2019 were as follows:

	 10/1/2018	 Additions	ŀ	Reductions	 6/30/2019
Capital assets, not being depreciated:					
Land and improvements	\$ 40,172,404	\$ -	\$	- 5	\$ 40,172,404
Construction in progress	 31,577,069	 19,311,268		(76,384)	50,811,953
Tetel					
Total capital assets, not					
being depreciated	 71,749,473	 19,311,268		(76,384)	 90,984,357
Capital assets, being depreciated					
Plant and infrastructure	833,396,217	1,224,638		(698,968)	833,921,887
Plant equipment and office equipment	 26,362,834	 1,290,823		(629,342)	27,024,315
Total capital assets, being depreciated	 859,759,051	 2,515,461		(1,328,310)	860,946,202
Loss commutated domination for					
Less accumulated depreciation for:	(105 642 000)	(11 752 400)		15.000	
Plant and infrastructure	(195,643,882)	(11,752,480)		45,286	(207,351,076)
Plant equipment and office equipment	 (13,192,498)	 (2,401,571)		47,324	 (15,546,745)
Total accumulated depreciation	(208,836,380)	(14,154,051)		92,610	(222,897,821)
	 ((,,)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(, , , , , , , , , , , , , , , , , ,
Total capital assets, being depreciated, net	 650,922,671	 (11,638,590)		(1,235,700)	638,048,381
Capital assets, being amortized					
Capacity rights	40,081,462	511,242		-	40,592,704
Less accumulated amortization for:					
Capacity rights	(9,027,731)	(755,266)		_	(9,782,997)
cupuenty rights	 (7,027,731)	 (155,200)			(),102,771)
Total capital assets, being amortized, net	31,053,731	(244,024)		-	30,809,707
	 , ,	 			<u> </u>
Total capital assets	\$ 753,725,875	\$ 7,428,654	\$	(1,312,084)	\$ 759,842,445

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.

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 4. Capital Assets (Continued)

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. 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 facilitates.

Note 5. 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.

Sewer bonds consist of the following at June 30, 2019:

Sewer revenue bond, Series 2000A, \$25,000,000; secured equally and ratably with other bond issues by pledge of revenues of the Authority; semi-annual installments of \$889,850, including principal and interest at 3.50% due through March 2020.	\$ 1,734,048
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 \$2,405,000, including principal and interest at 3.85% due through September 2022.	21,391,136
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 \$742,125, including principal and interest beginning March 2006 at 2,10% due through Sentember 2024	7 450 525
March 2006 at 3.10% due through September 2024.	7,452,535

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 5. Long-Term Debt (Continued)

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 \$105,060, including principal and interest beginning in March 2006 at 3.10% due through September 2024.	\$ 1,055,025
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 \$412,313 at 3.10% due through March 2027.	5,680,128
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 \$536,250, including principal and interest, beginning March 2011 at 3.55% due through September 2030.	9,012,314
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.	6,368,102
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 \$392,261, including principal and interest, beginning March 2016 at 2.10% due through September 2035.	10,892,246
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 \$78,452, including principal and interest, beginning March 2016 at 2.10% due through September 2035.	2,122,871
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.	19,455,000

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 5. Long-Term Debt (Continued)

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. \$23,000,000 108,163,405 Plus unamortized premiums and discounts, net 2,975,268

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

Fiscal Year	Principal	Interest	Total
2020	\$ 10,320,729	\$ 3,653,542	\$ 13,974,271
2021	10,602,744	3,302,582	13,905,326
2022	10,967,851	2,936,554	13,904,405
2023	9,107,496	2,529,360	11,636,856
2024	5,236,659	2,293,777	7,530,436
2025-2029	20,260,298	9,377,118	29,637,416
2030-2034	21,125,666	6,014,162	27,139,828
2035-2039	11,576,962	2,589,262	14,166,224
2040-2044	6,145,000	1,190,484	7,335,484
2045-2046	2,820,000	113,274	2,933,274
Total	\$ 108,163,405	\$ 34,000,115	\$ 142,163,520

\$ 111,138,673

The change in debt for the fiscal period ended June 30, 2019 is as follows:

	10/1/2018	 Additions	Reductions	6/30/2019	Due Within One Year
Sewer revenue bonds Plus deferred amounts:	\$113,307,733	\$ -	\$ (5,144,328)	\$108,163,405	\$10,320,729
Net premium	3,078,032	 -	(102,764)	2,975,268	137,019
Total	\$116,385,765	\$ -	\$ (5,247,092)	\$111,138,673	\$10,457,748

During FP2019, the Authority was in compliance with the covenants associated with the outstanding bond indentures.

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 6. Defined Benefit Pension Plan

Plan Description

All full-time, salaried, permanent employees of the Authotity 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, creditable service, 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.

- **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.
- **Creditable Service** Creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service 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 creditable service. 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, 2019

Note 6. Defined Benefit Pension Plan (Continued)

<u>Plan Description</u> (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. It is one of the benefit payout options available to a member at retirement. An early retirement reduction factor is applied to the Basic Benefit if the member retires with a reduced retirement benefit or selects a benefit payout option other than the Basic Benefit.
- 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 creditable service or at age 50 with at least 30 years of creditable service.
- **Earliest Reduced Retirement Eligibility** Age 55 with at least five years (60 months) of creditable service or age 50 with at least 10 years of creditable service.
- **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 creditable service, 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 under the Virginia Sickness and Disability Program (VSDP).
 - 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. The COLA will go into effect on July 1 following one full calendar year (January 1 to December 31) from the date the monthly benefit begins.

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 6. 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. VSDP members are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.
- **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 creditable service in their plan. Prior creditable service counts towards vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. When buying service, members must purchase their most recent period of service first. 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, creditable service, 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 2 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 2 or ORP.
- **Retirement Contributions** Employees contribute 5.00% of their compensation each month to their member contribution account through a pre-tax salary reduction.
- Creditable Service 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 creditable service 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 creditable service or when their age and service equal 90.

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 6. Defined Benefit Pension Plan (Continued)

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

Plan 2 (Continued)

- **Earliest Reduced Retirement Eligibility** Age 60 with at least five years (60 months) of creditable service.
- **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%.
 - **Eligibility** Same as Plan 1.
 - 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, creditable service, 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 and 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.

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 6. Defined Benefit Pension Plan (Continued)

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

Hybrid Retirement Plan (Continued)

- **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.
- Creditable Service
 - **Defined Benefit Component:** Under the defined benefit component of the plan, creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.
 - **Defined Contributions Component:** Under the defined contribution component, creditable service 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 creditable service. Plan 1 or Plan 2 members with at least five years (60 months) of creditable service who opted into the Hybrid Retirement Plan remain vested in the defined benefit component.
 - **Defined Contributions 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 by law until age 70½.
 - Calculating the Benefit
 - **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.

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 6. Defined Benefit Pension Plan (Continued)

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

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

- 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.
- Normal Retirement Age
 - **Defined Benefit Component:** Same as Plan 2.
 - **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 creditable service or when their age and service equal 90.
 - **Defined Contribution Component:** Members are eligible to receive distributions upon leaving.
- Earliest Reduced Retirement Eligibility -
 - **Defined Benefit Component:** Members may retire with a reduced benefit as early as age 60 with at least five years (60 months) of creditable service.
 - **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.
 - 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 optins) 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 non-work-related disability benefits.

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 6. Defined Benefit Pension Plan (Continued)

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

Hybrid Retirement Plan (Continued)

- Purchase of Prior Service
 - **Defined Benefit Component** Same as Plan 1, with the following exceptions:
 - Hybrid Retirement Plan members are ineligible for ported service.
 - The cost for purchasing refunded service is the highest of 4% of creditable compensation or average final compensation.
 - Plan members have one year from their date of hire or return from leave to purchase all but refunded prior service at approximate normal cost. After that one-year period, the rate for most categories of service will change to actuarial cost.
 - **Defined Contribution Component** Not Applicable.

Employees Covered by Benefit Terms

As of the June 30, 2017 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	88
Inactive members:	
Vested inactive members	15
Non-vested inactive members	32
Inactive members active elsewhere in VRS	9
Total inactive members	56
Active members	94
Total covered employees	238

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. Prior to July 1, 2012, all or part of the 5.00% member contribution may have been assumed by the employer. Beginning July 1, 2012, new employees were required to pay the 5.00% member contribution. In addition, for existing employees, employers were required to begin making the employee pay the 5.00% member contribution. This could be phased in over a period of up to five years and the employer is required to provide a salary increase equal to the amount of the increase in the employee-paid member contribution.

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 6. Defined Benefit Pension Plan (Continued)

<u>Contributions</u> (Continued)

The Authority's contractually required contribution rate for the period ended June 30, 2019 was 7.27% of covered employee compensation. This rate was based on actuarially determined rates from actuarial valuations as of June 30, 2017.

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 \$429,141 for the fiscal period ended June 30, 2019.

Net Pension Liability

The Authority's net pension liability was measured as of June 30, 2018. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2017, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018.

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, 2016, 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, 2018.

Inflation	2.50%
General Employees - Salary increases, including inflation	3.50 - 5.35%
Investment rate of return	7.00%, net of pension plan investment expense, including inflation

Mortality rates: General Employees - 20% of deaths are assumed to be service related. Mortality is projected using the applicable RP-2014 Mortality Table Projected to 2020 with various setbacks or setforwards for both males and females.

The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as, a result of the experience study, are as follows:

General Employees - Largest 10 - Non-LEOS and all Others (Non-10 Largest): Updated mortality table.

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 6. **Defined Benefit Pension Plan (Continued)**

Long-Term Expected Rate of Return

The long-term expected rate of return on pension System investments was determined using a lognormal 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. 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	40.00 %	4.54 %	1.82 %
Fixed Income	15.00 %	0.69 %	0.10 %
Credit Strategies	15.00 %	3.96 %	0.59 %
Real Assets	15.00 %	5.76 %	0.86 %
Private Equity	15.00 %	9.53 %	1.43 %
Total	100.00 %		4.80 %
	Inflation		2.50 %
* Expected a	rithmetic nominal return		7.30 %

* The above allocation provides a one-year return of 7.30%. 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 6.83%, including expected inflation of 2.50%.

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 6. Defined Benefit Pension Plan (Continued)

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. 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. Through the fiscal period ended June 30, 2019, the rate contributed by the employer for the Authority Retirement Plan will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2019 on, participating employers are assumed 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

	Increase (Decrease)					
	Total Pension Liability (a)		Plan Fiduciary Net Position (b)			Net Pension Liability (a) – (b)
Balances at September 30, 2018	\$	49,112,197	\$	43,358,962	\$	5,753,235
Changes for the year:						
Service cost		592,542		-		592,542
Interest		3,340,976		-		3,340,976
Differences between expected						
and actual experience		(414,228)		-		(414,228)
Contributions – employer		-		711,111		(711,111)
Contributions – employee		-		460,389		(460,389)
Net investment income		-		3,175,320		(3,175,320)
Benefit payments, including refunds						
of employee contributions		(2,767,926)		(2,767,926)		-
Administrative expenses		-		(28,184)		28,184
Other changes		-		(2,787)		2,787
Net changes		751,364		1,547,923		(796,559)
Balances at June 30, 2019	\$	49,863,561	\$	44,906,885	\$	4,956,676

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 6. Defined Benefit Pension Plan (Continued)

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the Authority using the discount rate of 7.00%, 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 (6.00%) or one percentage point higher (8.00%) than the current rate:

	 1.00% Decrease (6.00%)	Current Discount Rate (7.00%)		 1.00% Increase (8.00%)
Authority's net pension liability	\$ 10,854,003	\$	4,956,676	\$ (9,109)

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

For the fiscal period ended June 30, 2019, the Authority recognized pension expense of (\$658,892). At June 30, 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources		Infl	erred ows of ources
Differences between expected and actual experience	\$	-	\$	347,291
Change in assumptions		-		136,171
Net difference between projected and actual earnings on pension plan investments		-		356,662
Employer contributions subsequent to the measurement date		574,622		
Total	\$	574,622	\$	840,124

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 6. Defined Benefit Pension Plan (Continued)

The \$574,622 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, 2020. Other amounts reported as deferred inflows of resources related to pensions will be recognized in pension expense as follows:

 Year Ending June 30	(R to	ddition/ eduction) Pension Expense
2020 2021 2022 2023	\$ \$ \$	(210,797) (139,582) (450,313) (39,432)

Payables to the Pension Plan

At June 30, 2019, approximately \$78,000 was payable to the System for the legally required contributions related to the June 2019 payroll.

Note 7. 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. 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, 2018, the following employees were covered by the benefit terms:

Inactive members and dependent spouses currently receiving benefits	29
Active members	<u>100</u>
	<u>129</u>

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 7. 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 5.1% initially, decreasing annually to a rate of 4.1%. An inflation rate of 2.5% is used in the assumptions. The unfunded liability is amortized over a closed period of 30 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

The components of the net OPEB liability at June 30, 2019 were as follows.

Total OPEB Liability	\$1,601,387
Plan fiduciary net position	<u>(852,970)</u>
Net OPEB liability	<u>\$748,417</u>
Plan fiduciary net position as a Percentage of the total OPEB	
Liability	53.3%

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 7. Other Post-Employment Benefits (Continued)

Changes in Net OPEB Liability

		Increase (Decrease)					
		Total OPEB Liability (a)		Plan Fiduciary Net Position (b)		Net OPEB Liability (a) – (b)	
Balances at September 30, 2018	<u>\$</u>	1,523,103	<u>\$</u>	845,627	<u>\$</u>	677,476	
Changes for the year:							
Service cost		29,417		-		29,417	
Interest		78,720		-		78,720	
Effect of assumptions							
Changes or inputs		51,628				51,628	
Benefit payments		(81,481)		(81,481)		-	
Employer contributions		-		81,481		(81,481)	
Net investment income		-		8,884		(8,884)	
Administrative expenses		-		(1,541)		1,541	
Balances as of June 30, 2019	\$	1,601,387	\$	852,970	\$	748,417	

Sensitivity of the Net OPEB Liability

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%)	
Authority's OPEB liability Authority's fiduciary net position	\$	1,711,630 852,970	\$	1,601,387 852,970	\$	1,500,353 852,970	
Net OPEB Liability	\$	858,660	\$	748,417	\$	647,383	

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 7. Other Post-Employment Benefits (Continued)

Sensitivity of the Net OPEB Liability (Continued)

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 (6.00%)		F	Current Trend Rate (7.00%)	 1.00% Increase (8.00%)
Authority's OPEB liability Authority's fiduciary net position	\$	1,462,207 852,970	\$	1,601,387 852,970	\$ 1,759,195 852,970
Net OPEB Liability	\$	609,237	\$	748,417	\$ 906,225

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

For the period ended June 30, 2019, the Authority recognized OPEB Expense of \$30,649. As of June 30, 2019, 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 Net difference between projected and actual earnings	\$	- 46,174 29,830	\$	356,174
Total	\$	76,004	\$	369,297

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	
2020	\$	(46,735)
2021	\$	(46,735)
2022	\$	(46,735)
2023	\$	(43,707)
2024	\$	(47,961)
Thereafter	\$	(61,420)

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 7. Other Post-Employment Benefits (Continued)

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.

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 following is the Board of Trustees' adopted asset allocation policy as of June 30, 2019:

	Allocation –	Allocation –
Asset Class (Strategy)	Portfolio I	Portfolio II
Total Equity	59%	32%
Total Fixed Income	21%	58%
Total Real Assets	10%	5%
Diversified Hedge Funds	10%	5%
Total	100%	100%

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 fiscal period ended June 30, 2019, the annual money-weighted rate of return on investments, net of investment expense, was 1.40%. 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, 2019

Note 8. 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 9. 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 9. Subsequent Events

During FP2019, the Authority's Board authorized a resolution approving the issuance of sewer revenue bonds in the maximum principal amount of \$10,400,000 to finance various capital projects, including the replacement of process air compressor blowers. The sewer revenue bonds are expected to close in FY2020 and will be issued under the Authority's existing Master Indenture of Trust and sold to the Virginia Clean Water Revolving Loan Fund, acting by and through the Virginia Resources Authority.

Note 10. New Accounting Standards

The Governmental Accounting Standards Board (GASB) has issued the following Statements which are not yet effective.

GASB Statement No. 84, *Fiduciary Activities*, establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria is on (1) whether a government is controlling the assets of the fiduciary, and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and post-employment benefit arrangements that are fiduciary activities. This Statement will be effective for the year ending June 30, 2020.

GASB Statement No. 87, *Leases,* establishes a single model for lease accounting based on the foundational principal that leases are financings of the right-to-use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. This Statement will be effective for the year ending June 30, 2021.

GASB Statement No. 90, *Majority Equity Interests*, clarifies majority equity interest reporting rules. This Statement requires that a government's majority equity interest in a legally separate organization should be reported as an investment if that equity interest meets GASB's definition of an investment. This Statement will be effective for the year ending June 30, 2020.

NOTES TO FINANCIAL STATEMENTS June 30, 2019

Note 10. New Accounting Standards (Continued)

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, 2022.

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

REQUIRED SUPPLEMENTARY INFORMATION

REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS June 30, 2019

	Plan Year Ended June 30,					
Total Pension Liability	2018	2017	2016	2015	2014	
Service cost	\$ 592,542	\$ 643,808	\$ 682,527	\$ 771,341 \$	757,878	
Interest on total pension liability	3,340,976	3,299,804	3,236,592	3,206,163	3,092,779	
Difference between expected and actual experience	(414,228)	(207,089)	(598,619)	(1,127,638)	-	
Change in assumptions	-	(485,329)	-	-	-	
Benefit payments, including refunds of employee contributions	(2,767,926)	(2,558,116)	(2,276,811)	(2,553,525)	(1,908,245)	
Net change in total pension liability	751,364	693,078	1,043,689	296,341	1,942,412	
Total pension liability - beginning	49,112,197	48,419,119	47,375,430	47,079,089	45,136,677	
Total pension liability - ending	49,863,561	49,112,197	48,419,119	47,375,430	47,079,089	
Plan Fiduciary Net Position Contributions - employer	711,111	697,581	893,151	915,790	852,928	
Contributions - employee	460,389	428,499	397,795	413,212	583,295	
Net investment income	3,175,320	4,804,505	681,557	1,789,373	5,462,840	
Benefit payments, including refunds of employee contributions	(2,767,926)	(2,558,116)	(2,276,811)	(2,553,525)	(1,908,245)	
Administrative expenses	(28,184)	(28,599)	(25,420)	(25,361)	(29,559)	
Other	(2,787)	(4,237)	(294)	(375)	288	
Net change in plan fiduciary net position	1,547,923	3,339,633	(330,022)	539,114	4,961,547	
Plan fiduciary net position - beginning	43,358,962	40,019,329	40,349,351	39,810,237	34,848,690	
Plan fiduciary net position - ending	44,906,885	43,358,962	40,019,329	40,349,351	39,810,237	
Net pension liability - ending	\$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	90%	88%	83%	85%	85%	
Covered payroll	\$9,260,472	\$ 8,185,472	\$ 7,802,611	\$ 7,746,889 \$	8,434,533	
Net pension liability as a percentage of covered payroll	54%	70%	108%	91%	86%	

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. Since fiscal year 2015 (plan year 2014) was the first year for this presentation, no earlier data is available. Additional years will be included as they become available.

REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF PENSION CONTRIBUTIONS June 30, 2019

Entity Year Ended	Contractually Determined Contribution	Contributions in Relation to Contractually Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
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. Since 2015 was the first year for this presentation, no earlier data is available. Additional years will be included as they become available.

REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN NET OBEB LIABILITY AND RELATED RATIOS June 30, 2019

Total OPEB Liability	6/30/2019	9/30/2018	9/30	/2017
Service cost	\$ 29,417	\$ 36,657	\$	53,055
Interest on total OPEB liability	78,720	102,653		129,354
Effect of Economic/Demographic Gains or Losses	-	(455,903)		-
Effect of Assumptions Changes or Inputs	51,628	-		-
Benefit payments, including refunds of employee contributions	(81,481)	(90,513)		(92,542)
Net change in total OPEB liability	78,284	(407,106)		89,867
Total OPEB liability - beginning	1,523,103	1,930,209	1,	840,342
Total OPEB liability - ending	1,601,387	1,523,103	1,9	930,209
Plan Fiduciary Net Position				
Contributions - employer	81,481	90,513		156.091
Net investment income	8,884	74,315		80,776
Benefit payments, including refunds of employee contributions	(81,481)	(90,513)	(123,090)
Administrative expenses	(1,541)	(2,279)		(2,059)
Net change in plan fiduciary net position	7,343	72,036		111,718
Plan fiduciary net position - beginning	845,627	773,591		661,873
Plan fiduciary net position - ending	852,970	845,627		773,591
Net OPEB liability - ending	\$ 748,417	\$ 677,476	\$ 1,	156,618
Plan fiduciary net position as a percentage of total OPEB liability	53%	56%		40%
Covered payroll	\$6,524,150	\$9,055,713	\$ 8,4	480,330
Net OPEB liability as a percentage of covered employee payroll	11%	7%		14%

This schedule is intended to show information for 10 years. Since fiscal year 2017 was the first year for this presentation, no earlier data is available. Additional years will be included as they become available.

REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF INVESTMENT RETURNS - OPEB TRUST June 30, 2019

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

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. Since fiscal year 2017 was the first year for this presentation, no earlier data is available. Additional years will be included as they become available.

ALEXANDRIA RENEW ENTERPRISES

REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF OPEB CONTRIBUTIONS June 30, 2019

	tuarially	Cont Re Ac		Contributions as a		
Entity Year Ended	 termined ntribution		termined ntribution	Deficiency (Excess)	Covered Payroll	Percentage of Covered Payroll
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. Since fiscal year 2017 was the first year for this presentation, no earlier data is available. Additional years will be included as they become available.

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION June 30, 2019

Note 1. Changes of Benefit Terms

There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation. The 2014 valuation includes Hybrid Retirement Plan members for the first time. The hybrid plan applies to most new employees hired on or after January 1, 2014 and not covered by enhanced hazardous duty benefits. Because this is a fairly new benefit and the number of participants was relatively small, the impact on the liabilities as of the measurement date of June 30, 2018 are not material.

Note 2. Changes of Assumptions (Pension)

The following changes in actuarial assumptions were made effective June 30, 2016 based on the most recent experience study of the System for the four-year period ending June 30, 2016:

Largest 10 - Non-LEOS:

- Update mortality table
- Decrease in rates of service retirement
- Adjusted withdrawal rates to better fit experience
- Decrease in rates of disability retirement
- Increase in rates of line of duty disability

Largest 10 – LEOS:

- Update mortality table
- Lowered retirement rates at older ages
- Adjusted withdrawal rates to better fit experience
- Increase in disability rates
- Increase in rates of line of duty disability

All Others (Non 10 Largest) – Non-LEOS:

- Update mortality table
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
- Adjusted withdrawal rates to better fit experience
- Increase in rates of line of duty disability

All Others (Non 10 Largest) – LEOS:

- Update mortality table
- Increased age 50 retirement rates, and lowered rates at older ages
- Adjusted withdrawal rates to better fit experience
- Adjusted disability rates to better fit experience
- Decrease in rates of line of duty disability

Note 3. Changes of Assumptions (OPEB)

The following changes in actuarial assumptions were made effective January 1, 2018:

- Age-related claims costs assumptions were updated
- The healthcare trend assumptions were updated
- The withdrawal, retirement, mortality and disability assumptions were changed.

STATISTICAL SECTION (UNAUDITED)

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.

Condensed Schedules of Net Position

TABLE 1

Last Ten Fiscal Years										
	6/30/2019	9/30/2018	<u>9/30/2017</u>	9/30/2016	<u>9/30/2015</u>	9/30/2014 ⁽²⁾	9/30/2013 ⁽¹⁾	<u>9/30/2012</u>	<u>9/30/2011</u>	<u>9/30/2010</u>
Assets										
Current Assets	\$ 75,272,570	\$ 77,481,606	\$ 71,992,329	\$ 58,517,536	\$ 74,456,170	\$ 86,428,544	\$ 71,873,061	\$ 48,735,050	\$ 49,878,801	\$ 40,936,857
Non-current Assets	759,842,445	753,725,875	747,728,427	751,420,427	716,656,368	651,084,163	578,892,676	551,185,919	531,506,570	529,716,752
Deferred Outflows	1,623,327	1,924,167	3,009,750	2,193,183	2,332,861					
Total Assets and Deferred Outflows	\$ 836,738,342	\$ 833,131,648	\$ 822,730,506	\$ 812,131,146	\$ 793,445,399	\$ 737,512,707	\$ 650,765,737	\$ 599,920,969	\$ 581,385,371	\$ 570,653,609
Liabilities										
Current Liabilities	\$ 20,797,672	\$ 19,854,654	\$ 18,400,831	\$ 34,860,034	\$ 41,395,712	\$ 41,743,756	\$ 24,535,900	\$ 19,960,226	\$ 22,766,941	\$ 21,561,196
Long-term Liabilities	106,654,528	112,799,800	127,027,777	111,329,090	121,578,497	106,414,204	100,476,050	105,147,225	108,100,791	113,707,151
Deferred Inflows	1,209,421	1,828,634	881,910	1,862,505	2,432,782	-	-	-	-	
Total Liabilities and Deferred Inflows	\$ 128,661,621	\$ 134,483,088	\$ 146,310,518	\$ 148,051,629	\$ 165,406,991	\$ 148,157,960	\$ 125,011,950	\$ 125,107,451	\$ 130,867,732	\$ 135,268,347
Net Position										
Net Investment in Capital Assets	\$ 649,676,473	\$ 638,348,836	\$ 622,454,674	\$ 630,741,541	\$ 586,995,330	\$ 537,784,921	\$ 471,881,818	\$ 435,451,972	\$ 403,409,766	\$ 395,087,048
Restricted Net Position	26,355,198	21,357,370	29,705,073	13,652,933	11,629,933	16,799,469	16,486,146	15,795,460	16,426,547	13,827,081
Unrestricted Net Position	32,045,050	38,942,354	24,260,241	19,685,043	29,413,145	34,770,357	37,385,823	23,566,086	30,681,326	26,471,133
Total Net Position	\$ 708,076,721	\$ 698,648,560	\$ 676,419,988	\$ 664.079.517	\$ 628,038,408	\$ 589,354,747	\$ 525,753,787	\$ 474,813,518	\$ 450,517,639	\$ 435,385,262
		,,		,,						
Total Liabilities, Deferred Inflows										
and Net Position	\$ 836,738,342	\$ 833,131,648	\$ 822,730,506	\$ 812,131,146	\$ 793,445,399	\$ 737,512,707	\$ 650,765,737	\$ 599,920,969	\$ 581,385,371	\$ 570,653,609

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.

Financial Trends, continued

TABLE 2

Condensed Schedules of Revenues, Expenses and Changes in Net Position

Last Ten Fiscal Years

	6/30/2019 ⁽²⁾	9/30/2018	9/30/2017 ⁽¹⁾	<u>9/30/2016</u>	<u>9/30/2015</u>	9/30/2014 ⁽¹⁾	9/30/2013 ⁽¹⁾	9/30/2012	<u>9/30/2011</u>	<u>9/30/2010</u>
Operating Revenues										
Waste Water Treatment										
Service Charges	\$ 36,227,274	\$ 49,974,184	\$ 48,971,156	\$ 47,139,072	\$ 47,773,073	\$ 48,560,009	\$ 48,807,164	\$ 43,082,976	\$ 44,093,367	\$ 42,900,219
Other	23,423	16,630	127,186	81,727	26,008	6,044	3,480	486,114	139,808	33,211
Total Operating Revenues	\$ 36,250,697	\$ 49,990,814	\$ 49,098,342	\$ 47,220,799	\$ 47,799,081	\$ 48,566,053	\$ 48,810,644	\$ 43,569,090	\$ 44,233,175	\$ 42,933,430
Non-operating Revenues										
Investment Income	\$ 1,235,709	\$ 300,954	\$ 296,581	\$ 453,508	\$ 483,340	\$ 283,273	\$ 58,128	\$ 132,671	\$ 150,169	\$ 175,253
Sale Of Property	-	-	-	-	-	1,000,000	15,203,750	-	199,600	-
Capital Contribution	7,848,140	18,636,519	9,119,146	26,671,809	38,870,682	52,160,997	24,882,239	19,121,393	5,831,343	15,278,723
Total Non-operating										
Revenues	\$ 9,083,849	\$ 18,937,473	\$ 9,415,727	\$ 27,125,317	\$ 39,354,022	\$ 53,444,270	\$ 40,144,117	\$ 19,254,064	\$ 6,181,112	\$ 15,453,976
Total Revenues	\$ 45,334,546	\$ 68,928,287	\$ 58,514,069	\$ 74,346,116	\$ 87,153,103	\$ 102,010,323	\$ 88,954,761	\$ 62,823,154	\$ 50,414,287	\$ 58,387,406
Operating Expenses										
Personnel Services	\$ 7,584,511	\$ 10,599,487	\$ 11,607,302	\$ 10,885,117	\$ 11,915,152	\$ 12,464,250	\$ 12,038,490	\$ 11,468,523	\$ 10,767,106	\$ 11,984,116
Utilities	2,682,315	3,415,322	2,775,506	2,621,156	2,937,466	3,224,653	3,118,336	3,191,548	3,122,233	2,894,032
General and Administration	2,767,358	3,954,272	4,416,947	4,803,327	5,023,878	4,594,881	3,836,600	3,614,145	3,060,621	2,646,080
Other	4,184,151	5,489,505	3,868,705	4,459,109	5,245,885	5,303,574	5,475,709	6,658,616	5,477,530	5,518,656
Total Operating										
Expenses	\$ 17,218,335	\$ 23,458,586	\$ 22,668,460	\$ 22,768,709	\$ 25,122,381	\$ 25,587,358	\$ 24,469,135	\$ 24,932,832	\$ 22,427,490	\$ 23,042,884
Non-operating Expenses										
Depreciation/Amortization	\$ 14,909,317	\$ 19,468,132	\$ 18,608,157	\$ 11,737,374	\$ 10,238,996	\$ 9,549,807	\$ 10,158,793	\$ 9,645,068	\$ 9,419,173	\$ 9,263,777
Interest/Other Expenses	3,778,733	4,566,892	4,896,981	3,798,924	3,896,859	3,272,198	3,232,231	3,949,375	4,022,480	4,043,707
Total Non-operating							-			
Expenses	\$ 18,688,050	\$ 24,035,024	\$ 23,505,138	\$ 15,536,298	\$ 14,135,855	\$ 12,822,005	\$ 13,391,024	\$ 13,594,443	\$ 13,441,653	\$ 13,307,484
	¢ 25.006.295	¢ 47 402 610	¢ 46 172 500	¢ 28 205 007	¢ 20.259.226	¢ 29 400 2 <i>C</i> 2	¢ 27.960.150	¢ 28 507 075	¢ 25.960.142	¢ 26.250.269
Total Expenses	\$ 35,906,385	\$ 47,493,610	\$ 46,173,598	\$ 38,305,007	\$ 39,258,236	\$ 38,409,363	\$ 37,860,159	\$ 38,527,275	\$ 35,869,143	\$ 36,350,368
Change in Net Position	\$ 9,428,161	\$ 21,434,677	\$ 12,340,471	\$ 36,041,109	\$ 47,894,867	\$ 63,600,960	\$ 51,094,602	\$ 24,295,879	\$ 14,545,144	\$ 22,037,038
Total Net Position,										
Beginning of Year	\$ 698,648,560	\$677,213,883	\$ 664,079,517	\$ 628,038,408	\$ 580,143,541	\$ 525,753,787	\$474,813,518	\$450,517,639	\$ 435,972,495	\$ 413,935,457
Total Net Position, End of Year	\$ 708,076,721	\$698,648,560	\$ 676,419,988	\$ 664,079,517	\$ 628,038,408	\$ 589,354,747	\$ 525,908,120	\$474,813,518	\$450,517,639	\$ 435,972,495

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 effect through FY2019 and the new rates were adopted by the Board starting 7/1/2019. 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)

	Fiscal Year	Wastewa Treatme Usage Cha	ent	Service Charge**
	2019	\$	6.77 \$	-
	2018		6.77	-
	2017		6.77	-
	2016		6.77	-
	2015		6.64	-
	2014		6.51	-
	2013		6.36	-
	2012		6.36	6.78
	2011		6.36	5.27
	2010		6.36	4.51
	FP 2019 Monthly	FY 201 Month		
Base Charge			<u> </u>	
Residential Customers	\$ 9.61	1\$	9.61	
	Water			EV/2010
	Meter Size	-	<u>2019</u>	FY2018
Commercial Customers	5/8"	\$	28.83 \$	28.83
	3/4"		28.83	28.83
	1"		72.07	72.07
	1-1/2"		144.16	144.16
	2"		230.65	230.65
	3"		432.47	432.47
	4"		720.77	720.77
	6"		441.56	1,441.56
	8"	2,2	306.50	2,306.50
* Based on 1,000 gallons of consumption ** Per Bill				

TABLE 4

Shown as Percentage of Revenue										
Name	Туре	6/30/2019	9/30/2018	9/30/2017	9/30/2015	9/30/2014	9/30/2013	9/30/2012	9/30/2011	9/30/2010
BROOKDALE APTS MARK CTR LLC	Apartments	1.09%								
SOUTHERN TOWERS	Apartments	1.38%	1.02%	1.06%	1.18%	0.88%	1.13%	1.17%	1.01%	0.89%
FOXCHASE	Apartments	0.64%								
PARKFAIRFAX	Apartments	0.51%								
STONERIDGE APTS MARK CENTER	Apartments	0.60%								
CITY OF ALEXANDRIA	Public	0.43%								
140 S VAN DORN ST VA OWNER LLC	Apartments	0.53%								
ARHA	Public	0.44%								
WATERGATE AT LANDMARK	Condos	0.47%	0.38%	0.44%	0.46%	0.52%	0.57%	0.53%	0.52%	0.50%
UDR NEWPORT VILLAGE LLC	Apartments	0.36%								
	MG Usage	684,798	396,772	394,269	427,024	462,735	428,893	419,674	426,740	416,900
(Other Customer Usage	10,796,005	12,452,798	11,374,736	11,607,551	12,750,383	12,383,798	11,886,963	12,262,774	12,967,482
	Total Usage	11,480,803	12,849,570	11,769,005	12,034,575	13,213,118	12,812,691	12,306,637	12,689,514	13,384,382

Ten Principal Customers by Year

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.

TABLE 5

Outstanding Debt Per Customer June 30, 2019

	(Outstanding Debt	# of Customers	 Outstanding Debt Per Customer
VRA Revolving Loan Fund & SRF	\$	65,708,405	26,594	\$ 2,470.80
VRA Pooled Financing Program		45,430,268	26,594	 1,708.29
Total	\$	111,138,673	26,594	\$ 4,179.09

Source: Alexandria Renew Enterprises

TABLE 6

Pledged Revenue Coverage*										
		6/30/2019		9/30/2018		9/30/2017		9/30/2016		9/30/2015
Pledged revenue	\$	36,250,697	\$	49,990,814	\$	49,098,342	\$	47,220,799	\$	47,799,081
Operating expenses		(17,218,335)		(23,458,587)		(22,570,403)		(22,697,959)		(25,104,967)
Net revenues		19,032,362		26,532,227		26,527,939		24,522,840		22,694,114
Principal and Interest Requirements		7,996,654		13,913,446		13,437,632		13,122,172		12,062,715
Debt coverage		2.38		1.91		1.97		1.87		1.88
		9/30/2014		9/30/2013		9/30/2012		9/30/2011		9/30/2010
Pledged revenue	\$	48,566,053	\$	48,810,644	\$	43,569,090	\$	44,233,175	\$	42,346,197
Operating expenses		(25,587,358)		(24,469,135)		(24,932,832)		(22,427,490)		(23,042,884)
Net revenues		22,978,695		24,341,509		18,636,258		21,805,685		19,303,313
Principal and Interest Requirements		11,676,850		10,507,144		10,924,517		11,182,678		10,159,813
Debt coverage		1.97		2.32		1.71		1.95		1.90

*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

City of Alexandria Demographic Statistics

Population

Calendar Year	Population	Calendar Year	Population
1970	110,938	2013	142,000
1970	103,217	2013	142,000
1990	111,183	2015	147,650
2000	128,283	2016	150,500
2010	139,966	2017	156,100
2011	140,100	2018	159,571
2012	140,800	2019	160,530

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

TABLE 8

City of Alexandria Population Indicators

	Personal	
	Income	Per Capita
Fiscal Year	(\$1000)	Income
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
2012	11,191,190	76,165
2011	10,588,665	73,298
2010	9,938,068	70,568

Demographic and Economic Information, continued

Table 9

City of Alexandria Principal Employers Current Year (as of June 30, 2019 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 Commerce	1,000 & over	3.14%	U.S. Patent Trademark Office	1,000 & over	8.38%
U.S. Department of Defense	1,000 & over	3.14%	U.S. Department of Defense	1,000 & over	7.10%
Alexandria Public Schools	1,000 & over	2.66%	City of Alexandria	1,000 & over	2.30%
City of Alexandria	1,000 & over	2.39%	Alexandria Public Schools	1,000 & over	1.90%
WMATA	500-999	0.78%	WMATA	500-999	1.30%
Northern Virginia Community College	500-999	0.78%	Northern Virginia Community College	500-999	0.70%
U.S. Department of Agriculture	500-999	0.78%	U.S. Postal Service	500-999	0.60%
U.S. Department of Homeland Defense	250-499	0.39%	U.S. Attorney's Office	500-999	0.20%
		14.07%			22.48%
LARGEST PRIVATE EMPLOYERS			LARGEST PRIVATE EMPLOYERS		
INOVA Health System	1,000 & over	3.14%	INOVA Alexandria Hospital	1,000 & over	1.80%
Institute for Defense Analysis	500 - 999	0.78%	American Building Maintenance Com	1,000 & over	1.20%
Grant Thornton LLP	500 - 999	0.78%	Institute of Defense Analysis	500-999	0.80%
The Home Depot	500 - 999	0.78%	United Postal Service (UPS)	500-999	0.70%
Clinical Oncology	250 - 499	0.39%	Center for Naval Analysis	500-999	0.60%
Oblon Spivak McClelland PC	250 - 499	0.39%	Military Professional Resources	500-999	0.50%
Catholic Diocese of Arlington	250 - 499	0.39%	Grant Thornton LLP	500-999	0.50%
Giant Food	250 - 499	0.43%			
		7.10%			6.10%
Source: Virginia Employment Commission					

Source: Virginia Employment Commission ⁽¹⁾ Employment ranges are given to ensure confidentiality.

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

Table 10

City of Alexandria Unemployment Rate Last Ten Years

6/30/2019	1.9%
9/30/2018	2.1%
9/30/2017	2.9%
9/30/2016	2.9%
9/30/2015	3.5%
9/30/2014	4.6%
9/30/2013	4.7%
9/30/2012	4.6%
9/30/2011	4.8%
9/30/2010	4.8%

Source: Virginia Employment Commission, Local Unemployment Statistics

Operating Information

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

TABLE 11

Number of Employees by Activity Fiscal Year 2019 Ended June 30; Prior Fiscal Years Ended September 30

	6/30/2019	9/30/2018	9/30/2017	9/30/2016	9/30/2015
Process					
Deputy GMOM, Prod Mgr, Process Mgr & Analyst, SCADA	6	2	6	3	3
Administrative/Executive Assistant	1	1	1	1	1
Interceptors/Pump Stations/Chem Feed	8	8	9	9	9
Operating Shift D	5	5	6	4	5
Operating Shift B	4	5	6	5	5
Maintenance Manager & Facilities	2	2	1	1	1
Thickening/Dewater/Prepast/Digestion	8	8	9	9	9
BRB's/Blowers/UV	6	6	6	7	7
Operating Shift C	5	5	5	4	5
Operating Shift A	5	6	6	5	4
Planners/Schedulers/Inv Control	3	3	3	3	3
Operating Shift E	0	0	0	5	4
Apprentices	10	3	10	10	15
Engineering					
Deputy/Director Engr Planning	1	1	1	1	1
Engineering & River Renew	7	2	5	3	2
Information Systems	4	3	3	3	3
Program Manager	0	0	1	1	1
Safety Manager/Coordinator	0	1	0	1	1
Quality Services/Sustainability					
Director of Environmental Performance	1	0	0	1	1
Quality Assurance	1	1	1	1	1
Laboratory	5	4	4	5	5
Sustainability/Regulatory	1	1	0	1	2
Finance					
Chief Financial Officer	0	1	1	0	1
Controller/Director Finance/Acctg Manager	2	2	1	1	1
Senior Accountant/Staff Accountant/Acctg Clerk	3	2	3	2	2
Administrative/Executive Assistant	1	1	1	1	0
Purchasing Manager, Buyer, Contracts	3	2	2	3	3
Human Resources					
Human Resources	2	1	2	2	3
Administration					
Administration	2	2	2	2	2
Communications	5	4	4	4	3
Customer Service	1	1	1	2	2
	102	83	100	100	105

Operating Information

TABLE 12

ALEXANDRIA RENEW ENTERPRISES

Number of Customers and Consumption

Fiscal Year	Customer Accounts	MG Treated	Fairfax MG Treated
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
9/30/2012	26,380	12,307	6,534
9/30/2011	26,222	12,690	7,134
9/30/2010	25,916	13,384	7,518

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

ALEXANDRIA RENEW ENTERPRISES

Wastewater Treatment Capacity and Infrastructure Assets Owned For the Fiscal Period Ending June 30, 2019

Wastewater treatment capacity:		
	Design Capacity	54 MGD (million gallons per day)
Asset		Capacity:
Four Mile Run Pump Station	Pump Station	Firm pumping capacity 11.3 MGD
Slater's Lane Pump Station	Pump Station	Firm pumping capacity .75 MGD
Potomac Yard Pump Station	Pump Station	Firm pumping capacity 9.5 MGD
Mark Center	Pump Station	Firm pumping capacity 1.6 MGD
Bush Hill Service Chamber Jefferson at Carlyle Mills Service	Lift Station	Firm pumping capacity .18 MGD
Chamber	Lift Station	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
Potomac Yard Trunk Sewer	Gravity Sewer	Yards Pump Station force main discharge. Design Capacity varies from 17MGD at the WRRF to 13 MGD at the Potomac Yards
Potomac Interceptor	Gravity Sewer	Pump Station force main discharge. 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.



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