RIVANNA

WATER & SEWER AUTHORITY

ANNUAL COMPREHENSIVE FINANCIAL REPORT
YEAR ENDED JUNE 30, 2022

Serving Charlottesville & Albemarle County, Virginia

Front cover photo is Beaver Creek Reservoir

RIVANNA WATER & SEWER AUTHORITY
CHARLOTTESVILLE, VIRGINIA

ANNUAL COMPREHENSIVE FINANCIAL REPORT

YEAR ENDED JUNE 30, 2022

Prepared By:

Department of Finance and Administration

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RIVANNA WATER & SEWER AUTHORITY

Annual Comprehensive Financial Report
Year Ended June 30, 2022

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RIVANNA WATER & SEWER AUTHORITY

Annual Comprehensive Financial Report
Year Ended June 30, 2022

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BOARD MEMBERS

Michael A. Gaffney, Chair

Michael C. Rogers, Vice-Chair

Jeff Richardson, Secretary-Treasurer

Lauren Hildebrand

Ann Mallek

Gary B. O'Connell

Brian Pinkston

EXECUTIVE DIRECTOR

William I. Mawyer, Jr., P.E.

DIRECTOR OF FINANCE/ADMINISTRATION

Lonzy E. Wood, III

GENERAL COUNSEL

Williams, Mullen, Clark & Dobbins, P.C.
Richmond, Virginia

TRUSTEE AND ESCROW AGENT

Bank of New York Mellon
New York, New York

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October 31, 2022

To the Board of Directors
Rivanna Water and Sewer Authority
Charlottesville, Virginia

The Annual Comprehensive Financial Report (ACFR) of the Rivanna Water and Sewer Authority (the Authority) for the fiscal year ended June 30, 2022 is submitted herewith. This report has been prepared in conformity with the reporting and accounting standards promulgated by the Government Accounting Standards Board and the Financial Accounting Standards Board and with the accounting and reporting standards for enterprise funds set out by the Government Finance Officers Association of the United States and Canada, with such modifications as apply to our status as an independently chartered corporation.

Based upon a comprehensive framework of internal control that it has established for this purpose, management assumes responsibility for the completeness and reliability of the information contained in this report. The objective of internal control is to provide reasonable, rather than absolute, assurance that the financial statements are free of material misstatements, because the cost of each internal control should not outweigh the potential benefit.

Management's discussion and analysis (MD&A) immediately follows the independent auditors' report and provides a narrative introduction, overview, and analysis of the basic financial statements. MD&A complements this letter of transmittal and should be read in conjunction with it.

ORGANIZATION AND SERVICES PROVIDED

The Rivanna Water and Sewer Authority is a regional non-profit public corporation and political subdivision of the Commonwealth of Virginia chartered in 1972 under the Virginia Water and Waste Authorities Act (1950, as amended), that supplies drinking water to and treats the wastewater of Charlottesville (City) and certain areas of Albemarle County (County). The Authority is a wholesale agency and bills monthly both Charlottesville and the Albemarle County Service Authority, which handle retail distribution of water and collection of sewage in their respective service areas.

The Authority is charged to acquire, finance, construct, operate and maintain facilities for the impoundment, production, storage, treatment and transmission of potable water and for the interception, treatment and discharge of wastewater. The Authority operates under the terms of a Service Agreement signed June 12, 1973 by the officers of the Charlottesville City Council, the Albemarle County Board of Supervisors, the Albemarle County Service Authority and the Rivanna Water and Sewer Authority. The Authority has determined that it is not part of the reporting entity of either the City of Charlottesville or the County of Albemarle and will not be included in the financial report of either (see Note 1 to the Financial Statements).

ORGANIZATION AND SERVICES PROVIDED: (CONTINUED)

The Authority is governed by a seven-member Board of Directors (Board). The Board appoints an Executive Director, who manages Authority operations under its direction. The Authority is now organized in administration, laboratory, engineering, maintenance, water, and wastewater departments. The Authority operates and maintains six water treatment plants and four wastewater treatment plants and the associated water storage facilities, pump stations, transmission mains and interceptor sewers. Retail distribution of water and collection of wastewater is performed by the Authority's two customers: the City of Charlottesville's Utilities Division and the Albemarle County Service Authority.

JOINT ADMINISTRATION

By mutual agreement of the respective Boards of Directors, the Authority currently shares administrative staff and office space with the Rivanna Solid Waste Authority, which is billed monthly for its portion of the costs. Administrative procedures were implemented to ensure proper segregation of funds, purchasing activity, personnel, and similar matters. The Authorities also agreed to administer joint Safety Regulations and a joint Safety Program.

ECONOMIC CONDITION AND PROSPECTS

Both Charlottesville and Albemarle County traditionally enjoy low unemployment rates, steady economic growth and high bond ratings. The local economy was dramatically affected by the COVID-19 pandemic like the rest of the state and nation several years ago but appears to have fully recovered. Recently, unemployment rates have started to increase slightly to 2.9% in June of 2022 compared to a low of 2.3% in December of 2021. However, those rates are comparable to pre-pandemic unemployment rate of 2.1%.

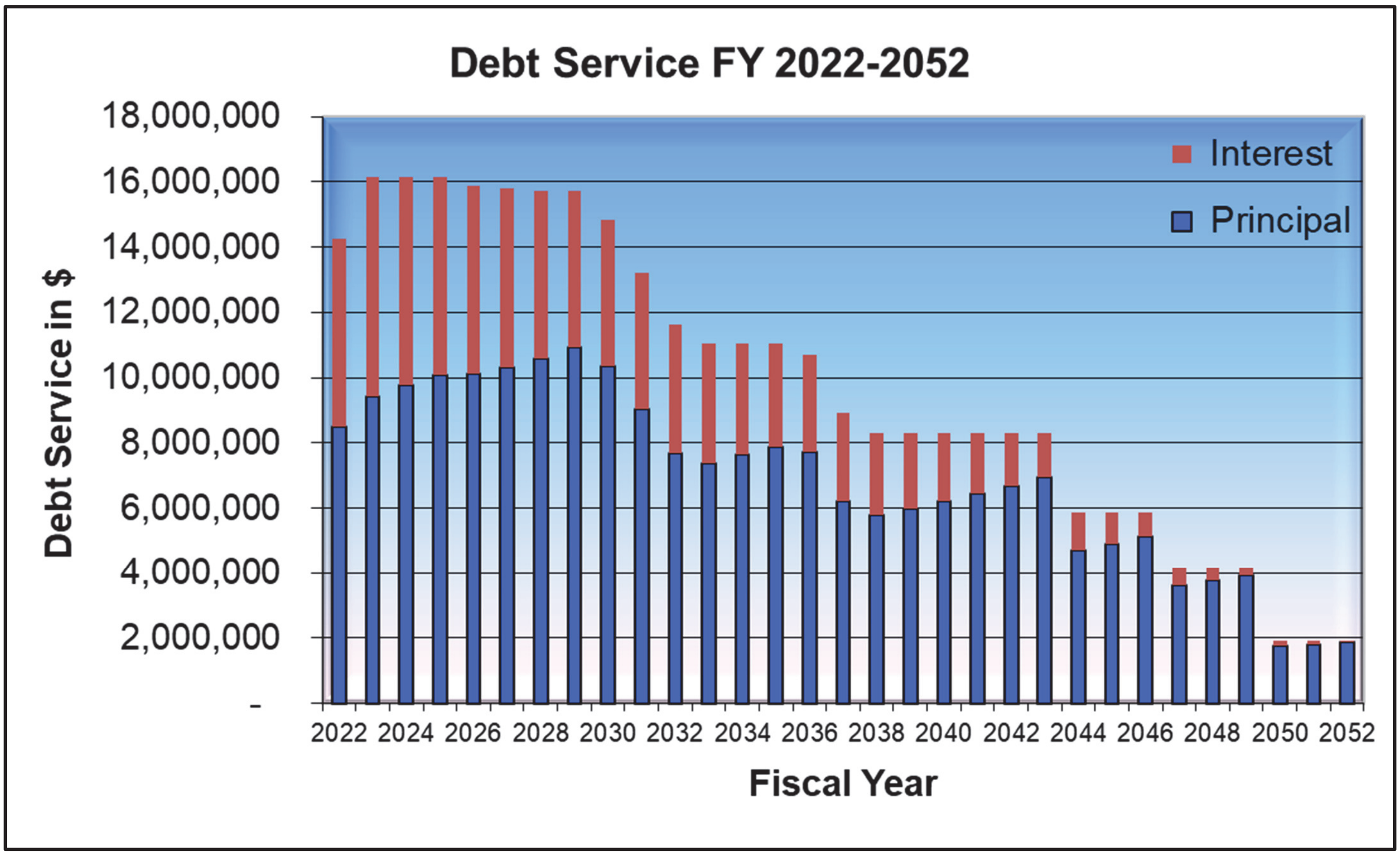
The water and wastewater services of the Authority are considered essential services, and none of our facilities were closed during the pandemic. The Administrative offices were closed to the public and were still closed for most of the year, however, most staff were working in the office as business continued for such things as deliveries, processing transactions, mail processing, bid openings, employee onboarding, etc. Some employees were on staggered schedules and others in a work-from-home status. The Authority did not have to furlough any of its employees. There were no impacts to our operations and budget.

The University of Virginia provides a significant buffer against large swings in the economy of our service area. In addition, the Charlottesville urban area is a major retail trade center for the surrounding region. Housing growth remains steady. As inflation increased during the year, interest rates and house activity began to cool off. After a very active market for housing in early 2021, there was a drop in sales of 11% in the second quarter of 2022 compared to a year earlier according to the Charlottesville Area Association of Realtors. Despite the slowdown, housing prices still gained $41,850 per unit with the median price climbing to $417,850.

ECONOMIC CONDITION AND PROSPECTS (CONTINUED)

LONG-TERM FINANCIAL PLANNING

Despite the significant infrastructure needs identified in the CIP, the Authority is positioned to provide for these needs by using more cash up front for projects and having a debt and rate structure (and a system for increasing debt charges to our customers) that will accommodate more debt in the future. The Authority has slowly but consistently been implementing rate increases to pay for such infrastructure needs in 5-year increments. This practice encourages the creation of reserves for capital spending until a project is started and partially financed with debt proceeds. As shown in the following graph, which represents debt service payments on existing debt, the Authority has a consistent to a declining debt structure for the next 10 years with large declines thereafter. Additionally, the rates are currently programmed to generate $19.7 million annually in debt service revenues; however, the water and wastewater capital needs will require additional rate increases in the future to maintain solid cash positions and fund future debt service needs.



MAJOR INITIATIVES

The Authority uses our strategic plan developed several years ago to guide our budgeting, policy development and daily operational efforts. The coming year, staff will update the plan with new priorities, measures, and strategies. The draft framework is shown below:

VISION

To serve the community as a recognized leader in environmental stewardship by providing exceptional water and solid waste services.

MISSION

Our knowledgeable and professional team serves the Charlottesville, Albemarle, and UVA community by providing high-quality water and wastewater treatment, refuse, and recycling services in a financially responsible and sustainable manner.

VALUES

INTEGRITY: We are open and transparent, led by example, and are committed to ethical behavior

TEAMWORK: We work collaboratively to help each other succeed and serve the community

RESPECT: We treat our fellow employees, customers, business partners, and stakeholders with dignity and respect by embracing their diverse backgrounds and experiences

QUALITY: We deliver exceptional services and products, serve our community responsibly, and safeguard natural resources

There are several capital improvements that were under construction this year with the Observatory and South Rivanna water treatment plants improvements projects. These three projects are estimated to cost $43 million. The plants must stay on-line during the construction process which takes great efforts to plan out the improvements and coordinate with operating staff to meet our production and construction goals.

Future Projects:

Two of the largest projects in the next 5 years.

- Beaver Creek dam and raw water pump station projects. The current dam does not meet dam safety standards and will undergo spillway modifications which will impact the existing raw water pump station. Estimated costs of these projects is $31.8 million.

- The Central Water Line project will construct a new finished water line through the southern parts of the urban area. This will be solving a long-standing hydraulic and redundancy issue between the two main water treatment plants. The plants currently have challenges serving the full pressure zones needs of the entire urban system independently. This project is estimated to cost $24 million.

See the MD&A for more information.

BUDGETARY CONTROLS AND FINANCIAL POLICIES

The Authority is required by the Service Agreement to adopt an annual budget for setting wholesale rates as well as for fiscal guidance to staff. Separate fiscal year budgets are currently prepared for six rate centers to include direct costs and allocations of administrative, engineering, maintenance, lab and debt service expenses. Until the Service Agreement was amended in August 2015, projections of flows and expenses were used to calculate rates per thousand gallons for the two Urban rate centers and flat monthly charges for the other rate centers to cover both operating and debt service costs. Actual flows vary each year from the flows estimated when the rates were set, due to unpredictable weather conditions. Effective with the October 2015 billing, RWSA began charging a fixed monthly rate for the Urban rate center debt service costs while continuing to charge operations rates per thousand gallons. This was a very positive change, because RWSA is required to make fixed debt service payments each fiscal year, and it is important to have a fixed revenue source to pay those expenses.

A proposed budget for each fiscal year is prepared by the Authority Directors and the Executive Director and submitted to the Board of Directors, usually in February, with a public hearing held on the proposed rates in April or May. All budget items lapse at the end of the fiscal year except capital commitments. It should be noted that the budget is prepared for internal use and does not reflect the accrual basis of accounting. An example of this is that principal payments on debt are shown as an expense.

Budgetary compliance is monitored and reported to the Board by the Director of Finance & Administration and the Executive Director. Projections of both revenues and expenses are understood to reflect anticipated service levels and to incorporate a variety of economic, climatic, and demographic forecasts. Variances from budget line items are examined at least monthly to assure a reasonable relation between actual costs and actual service levels, emergencies, or economic conditions. The Authority Board of Directors adopted in August 2011 certain financial policies that help guide the capital and operating budget process by defining reserves, reserve goals, uses of discretionary funds, and setting financial targets on debt and capital funding. The financial policy was revised in October 2014 for continuing disclosure and post issuance compliance requirements, and again in August 2020 to better define reserves and change the way debt service charges are established.

The Authority's accounting records are maintained on the accrual basis of accounting. Under this method, revenues are recognized when earned and expenses are recorded when incurred, without regard to receipt or payment of cash. Current controls provide reasonable assurance that the Authority's assets are properly recorded and protected and that the financial data may be used with confidence in the preparation of historical reports and projections. Accounting control is maintained by segregation of duties and data security systems in all areas of record keeping, disbursements, and purchasing authority. These controls are reviewed regularly by staff and are evaluated as part of the annual financial audit (see Annual Audit section below).

ANNUAL AUDIT

The Code of Virginia, the June 12, 1973 Service Agreement, the Trust Agreement and its Supplements require an annual audit of the books and records of the Authority. The opinion of our independent certified public accountants is included in the Financial Section.

AWARDS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to Rivanna Water and Sewer Authority for its annual comprehensive financial report for the fiscal year ended June 30, 2021. To be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current annual comprehensive financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

ACKNOWLEDGEMENTS

The help of the Authority's staff, especially Kathy Ware, Senior Accountant, and of our certified public accountants is gratefully acknowledged. Such help and the Board of Directors' support and commitment to financial reporting excellence are essential to the preparation of this report.

Respectfully submitted,

William I. Mawyer, PE
Executive Director

Lonzy E. Wood, III, CPA
Director of Finance and Administration

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Rivanna Water & Sewer Authority
Virginia

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2021

Christopher P. Morrill

Executive Director/CEO

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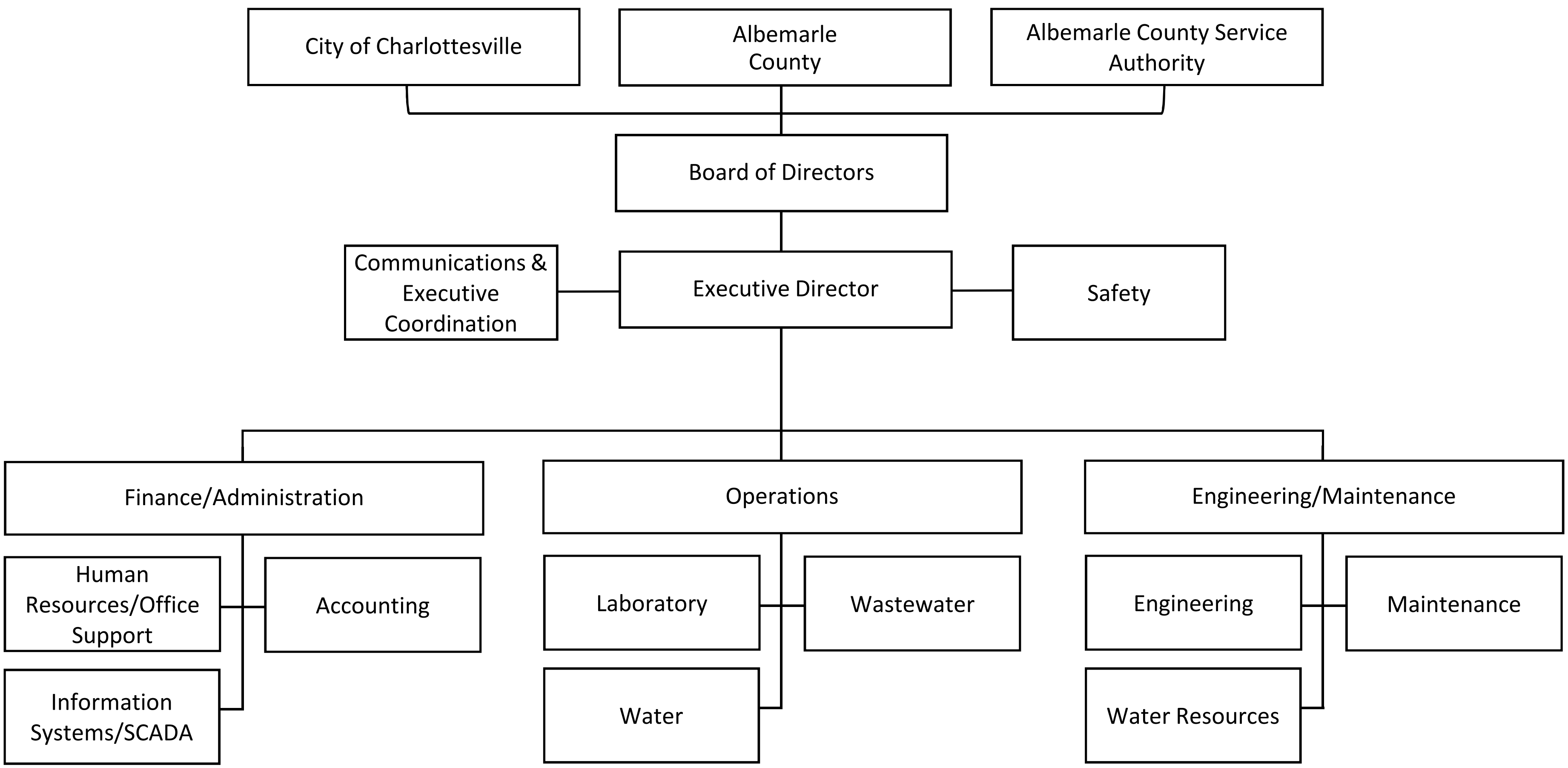
Rivanna Water & Sewer Authority

Organizational Chart



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Independent Auditors' Report

To the Board of Directors
Rivanna Water & Sewer Authority
Charlottesville, Virginia

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of the business-type activities of Rivanna Water& Sewer Authority, as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities of Rivanna Water& Sewer Authority, as of June 30, 2022, and the changes in financial position, and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the *Specifications for Audits of Authorities, Boards, and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Rivanna Water& Sewer Authority, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Change in Accounting Principle

As described in Note 16 to the financial statements, in 2022, the Authority adopted new accounting guidance, GASB Statement Nos. 87, Leases and 92, Omnibus. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

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

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

Auditors' Responsibilities for the Audit of the Financial Statements

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

In performing an audit in accordance with generally accepted auditing standards, *Government Auditing Standar*ds, and the *Specifications for Audits of Authorities, Boards, and Commissions*, we:

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

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Rivanna Water & Sewer Authority's internal control. Accordingly, no such opinion is expressed.

- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Rivanna Water & Sewer Authority's ability to continue as a going concern for a reasonable period of time.

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

Required Supplementary Information

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

Other Information

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

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

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 31, 2022, on our consideration of Rivanna Water & Sewer Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Rivanna Water & Sewer Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Water& Sewer Authority's internal control over financial reporting and compliance.

Robinson, Farmer, Cox Associates
Charlottesville, Virginia
October 31, 2022

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To the Board of Directors
Rivanna Water & Sewer Authority
Charlottesville, Virginia

As management of the Rivanna Water & Sewer Authority (the Authority), we offer readers of our financial statements this narrative overview and analysis of the financial activities of the Authority for the fiscal year ended June 30, 2022. We encourage readers to consider the information presented here in conjunction with additional information that we have furnished in our letter of transmittal, which can be found on pages 3 through 8 of this report.

Overview of the Financial Statements:

This discussion and analysis is intended to serve as an introduction to the Authority's basic financial statements. Since the Authority is engaged only in business-type activities, its basic financial statements are comprised of only two components: 1) enterprise fund financial statements and 2) notes to the financial statements. This report also contains required supplementary information in addition to the basic financial statements themselves.

Enterprise fund financial statements. The enterprise fund financial statements are designed to provide readers with a broad overview of the Authority's finances, in a manner similar to a private-sector business.

The statement of net position presents information on the Authority's assets, deferred outflows of resources, liabilities, and deferred inflow of resources with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating.

The statement of revenues, expenses, and changes in net position presents information showing how the Authority's net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of the cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods (e.g. earned but unused vacation leave).

The basic enterprise fund financial statements can be found on pages 30 through 33 of this report.

Notes to the financial statements. The notes provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes to the financial statements can be found on pages 35 through 74 of this report.

Required supplementary information. This report also includes required supplementary information concerning the Authority's progress in funding its obligation to provide pension and other postemployment benefits to its employees. It is located immediately following the notes to financial statements.

Financial Highlights:

- The Authority's total net position increased by $4.7 million in FY 2022.
- Construction in progress increased by $19.7 million this year with $24.7 million in construction costs incurred and $4.9 million in capital projects completed and capitalized.
- Noncurrent liabilities increased by $31.9 million this year. This is primarily the result of new debt being issued with a par amount of $36.9 million.

Financial Highlights: (Continued)

- Adjustments were recorded this year to increase noncurrent assets and deferred inflows of resources by $1.96 million and to increase capital assets and noncurrent liabilities by $4.9 million to implement GASB No. 87, Leases.

- Operating revenues increased by $2.7 million mainly due to rate increases.

- Total operating expenses increased $502,000, primarily due to increased personnel costs and operations and maintenance expenses.

Financial Analysis:

Total net position increased $4.7 million this year, which is an indication that the Authority's overall financial position improved. The Authority's assets and deferred outflows exceeded its liabilities and deferred inflows (net position) by $164.9 million at June 30, 2022. Of this amount, $32.8 million (unrestricted net position) may be used to meet the Authority's normal ongoing operating obligations to customers and creditors while $4.6 million of net position is restricted for the bondholders. The net investment in capital assets net position increased $1.0 million this year primarily due to construction spending. The largest portion of the Authority's net position (77%) reflects its investment in capital assets, net of depreciation and related debt outstanding that was used to acquire those assets. The Authority uses these capital assets to provide services to its customers; consequently, these assets are not available for future spending. Although the Authority's investment in capital assets net position is reported net of related debt, the resources needed to repay this debt are derived from the revenue generating capability of these capital assets and not from the capital assets themselves.

	Net Position	
	2022	2021
Current and other assets	$ 80,917,654	$ 57,470,866
Capital assets	316,991,975	295,218,671
Total assets	$ 397,909,629	$ 352,689,537
Deferred outflows of resources	$ 1,891,737	$ 1,953,105
Noncurrent liabilities	$ 211,091,731	$ 179,197,893
Current liabilities	18,610,814	14,731,412
Total liabilities	$ 229,702,545	$ 193,929,305
Deferred inflows of resources	$ 5,239,849	$ 543,229
Net position:		
Net investment in capital assets	$ 127,517,995	$ 126,518,011
Restricted for bond covenants	4,581,454	4,726,258
Unrestricted	32,759,523	28,925,839
Total net position	$ 164,858,972	$ 160,170,108

Due to the implementation of GASB No. 87, Leases, adjustments were made at the beginning of this year to record a lease receivable and an offsetting deferred inflow of resources of $1.96 million as lessor and a right-to-use lease asset (capital asset) and offsetting lease liability of $4.9 million as lessee. See Notes 4, 5, and 16 of the notes to the financial statements for more information.

Financial Analysis: (Continued)

Operating revenues increased by $2.7 million this year. This increase was due to significant increases in the rates charged as formulated in the FY 2022 budget. Rates and charges to our two customers were estimated to increase 11.3%. Rates had not increased since FY 2020. A more detailed look at rates and charges are reviewed in the Review of Operations section.

Total operating expenses increased by $502,000 or 2% in FY 2022 primarily due to increases in personnel and IT costs. Key elements of these changes are explained further in the Review of Operations section.

	Changes in Net Position	
	2022	**2021**
Revenues:		
Operating revenues:		
Metered water sales	$ 19,279,042	$ 16,395,335
Wastewater service charges	18,694,954	18,887,091
Nonoperating revenues:		
Investment earnings	222,088	125,631
Interest revenue - leases	19,058	-
Administrative reimbursement	557,071	561,473
Lease revenue	143,451	100,804
Other revenues	245,766	546,217
Total revenues	$ 39,161,430	$ 36,616,551
Expenses:		
Operating expenses:		
Personnel costs	$ 9,478,916	$ 9,315,313
Professional services	925,766	1,062,473
Other services and charges	4,275,419	3,812,208
Operations and maintenance	5,579,336	5,825,420
Depreciation and amortization	7,878,076	7,620,209
Nonoperating expenses:		
Interest expense	6,132,303	5,495,857
Debt issuance costs	518,307	90,298
Total expenses	$ 34,788,123	$ 33,221,778
Income before capital grants	$ 4,373,307	$ 3,394,773
Capital grants	315,557	77,500
Change in net position	$ 4,688,864	$ 3,472,273
Net position, beginning of year	160,170,108	156,697,835
Net position, end of year	$ 164,858,972	$ 160,170,108

Capital Asset and Debt Administration:

Capital Assets - The Authority's investment in capital assets net of accumulated depreciation increased 7% in the current year because of costs incurred on construction projects (noted below) less depreciation and amortization on capital assets of $7.9 million. Construction costs of $24.7 million were incurred in FY 2022, and $4.9 million in capital projects were completed and capitalized during the year. This year the Authority recorded a $4.9 million right-to-use lease asset as a capital asset to recognize the Observatory Water Treatment Plant long-term lease with the University of Virginia to conform to GASB 87. More detailed information on the Authority's capital assets is presented in Notes 4 and 5 of the notes to the financial statements and is addressed further in the Review of Operations section below.

Capital Asset and Debt Administration: (Continued)

The various categories of capital assets net of depreciation and amortization at the end of the past two fiscal years are as follows:

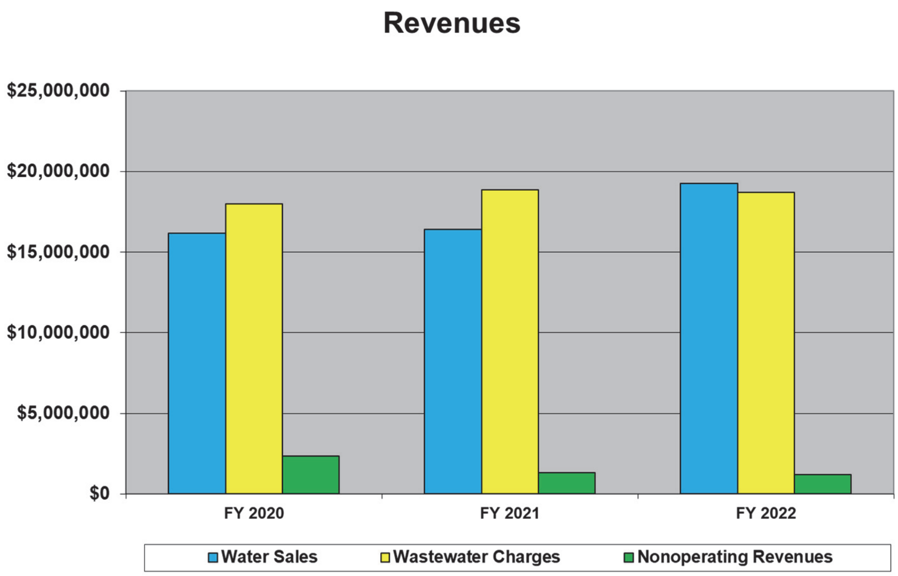
	2022	2021
Land and improvements	$ 12,310,763	$ 12,310,763
Buildings and operating equipment	255,334,708	258,418,648
Trucks and autos	569,223	537,535
Office equipment	303,314	5,920
Construction in progress	43,675,990	23,945,805
Right-to-use lease asset	4,797,977	-
Total capital assets, net	$ 316,991,975	$ 295,218,671

Major capital asset activity for the current fiscal year included:

S. Rivanna WTP Improvements	$ 7,670,703
Observatory WTP Improvements	5,773,890
Crozet Flow Equalization Tank	2,580,710
Airport Rd. Pump Stn. & N. Rivanna Transmission Main	1,727,073
MCAWRRF In-plant Clarifier & Lime Silo Demolition	661,324
MCAWRRF Lighting Upgrade	470,474
Beaver Creek Dam Alteration	424,318
Crozet WTP Expansion	350,503
Central Water Line	350,020
Security Enhancements	349,014
Interceptor Sewer & Manhole Repair-Phase 1	324,448
SH Dam-Rubber Crest Gate Replacement	321,573
MCAWRRF 5kV Electrical System Upgrade	310,922
Emmet Street Waterline Betterment	296,086
MCAWRRF Aluminum Slide Gate Replacement	269,390
Influent Pump & VFD Addition	257,837
Scottsville WTP Lagoon Liner Replacement	235,153
Asset Management	231,772
Ragged Mtn Reservoir to Observatory WTP Raw Water Line	221,153
MCAWRRF Generator Fuel Storage Expansion	175,578
IT Master Plan-Software	148,857
S. Rivanna Reservoir to Ragged Mtn Reservoir Water Line R/W	143,495
Ragged Mtn Reservoir to Observatory Raw Water PS	121,843
S. Fork Rivanna River Crossing	113,005
S. Rivanna Reservoir to Ragged Mtn Reservoir-Birdwood to Old Garth	74,826
New Raw Water Pump Station & Intake (BCR)	63,384
Radio Upgrades	60,557
Other Projects	133,300
Retainage on Construction in Progress	803,037
Total Current Year Construction Costs and Adjustments	$ 24,664,245

Long-Term Debt - At the end of the current fiscal year, the Authority had $214.0 million in bonds outstanding, which is an increase of $31.4 million. There was a bond issue completed during the year. The Series 2021 Bond was issued at a par amount of $36.98 million with a premium in the amount of $3.5 million. More detailed information regarding the Authority's long-term debt is presented in Note 6 of the notes to the financial statements.

Review of Operations:



For FY 2022, total operating revenues increased $2.7 million or 7.6%. The increase was mainly due to a 14.7% increase in debt service charges needed to fund capital spending. Flows for water and wastewater were lower than anticipated resulting in an operations rate revenue increase of just 1.9%. The budget for FY 2022 estimated an overall 5.9% increase in operations rate revenues. COVID-19 did not impact demand for water or wastewater services. Nonoperating revenues were down $146,700 due to a drop in miscellaneous income. In the previous year, the Authority received $128,200 in legal settlement revenue from several chemical providers and $156,300 in cost reimbursements for a UVA Hospital water project, that inflated FY 2021 revenues. Investment earnings increased $96,500 for FY 2022 after sharp decreases the past few years due to construction fund interest earned on the new bond proceeds received in November. Capital grants also increased $238,100 for the Beaver Creek Dam project.

The capital program has been the single largest driver to the Authority's revenue requirements, especially for wastewater rates, for the past several years. Over the past five years, the Authority has invested over $81.0 million in capital infrastructure. The majority of that investment was financed with long-term debt. Roughly $12 million of this spending was funded through cash reserves over that same time. Capital and reserves will be discussed later in this narrative.

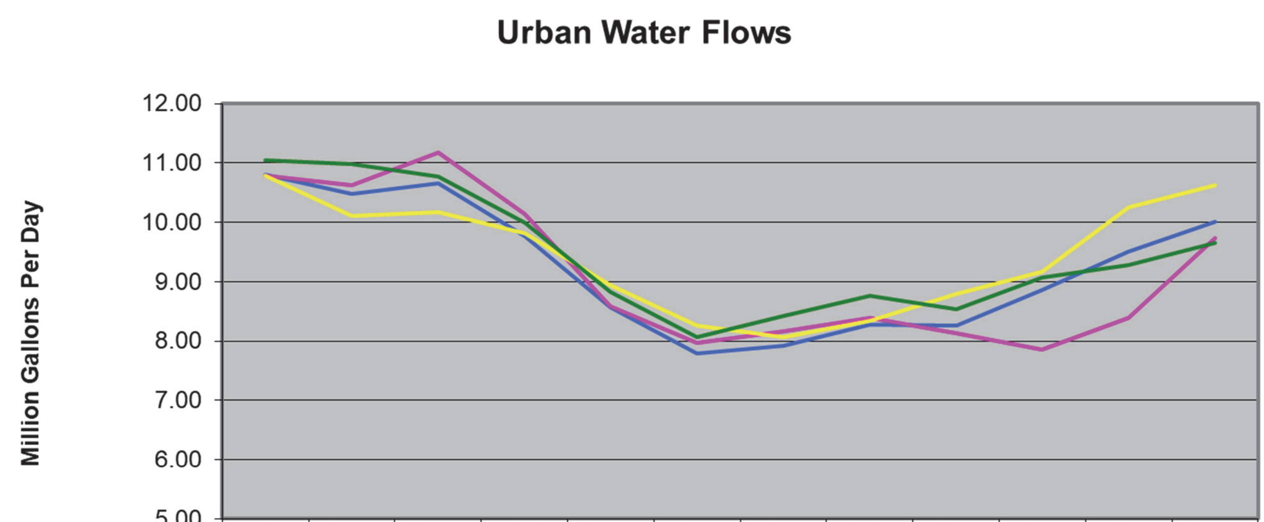
As shown in the chart below, FY 2022 Urban operations rates and debt service rates were scheduled to increase. There were no rate increases in FY 2021 due to the COVID-19 pandemic, so the use of reserves was needed to cover any revenue needs for debt service costs and operating costs that year. Only $516,000 of reserves were used in the current year compared to nearly $1.7 million the previous year.

Urban Rates							
			Water			Wastewater	
Operations Rates - City & ACSA ($ per 1,000 gallons):							
	FY 2020	$	2.095	1.2%	$	2.369	10.4%
	FY 2021	$	2.095	0.0%	$	2.369	0.0%
	FY 2022	$	2.346	12.0%	$	2.517	6.2%
Debt Service Rates ($ per month):							
City:	FY 2020	$	193,580	6.9%	$	407,588	-2.0%
	FY 2021	$	193,580	0.0%	$	407,588	0.0%
	FY 2022	$	246,188	27.2%	$	376,036	-7.7%
ACSA:	FY 2020	$	321,303	4.5%	$	278,174	12.9%
	FY 2021	$	321,303	0.0%	$	278,174	0.0%
	FY 2022	$	388,956	21.1%	$	337,983	21.5%

Review of Operations: (Continued)

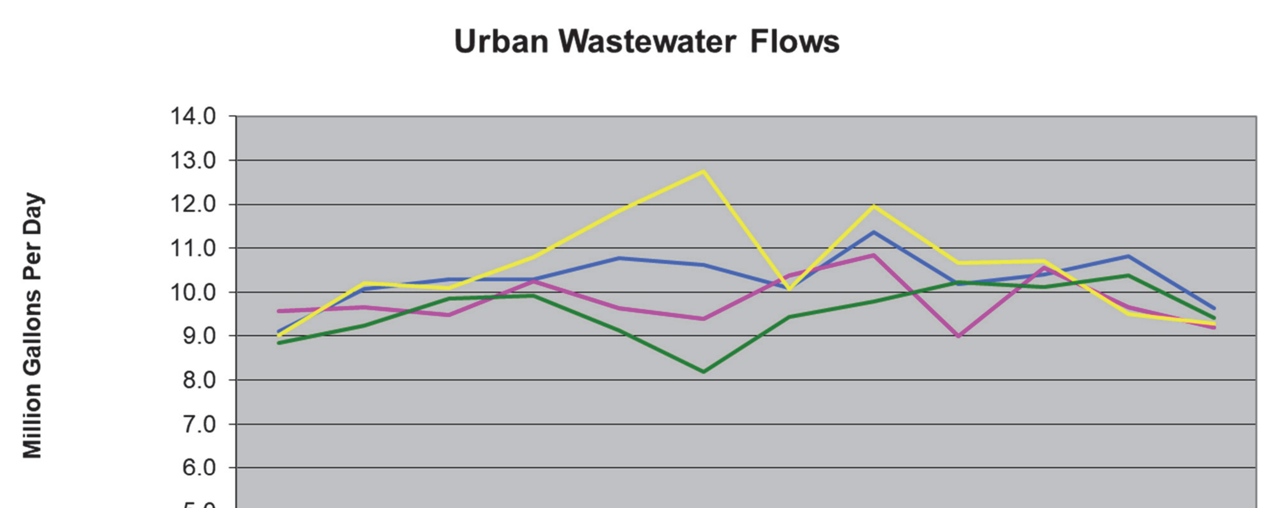
Flows in the two urban rate centers are the single largest determining factor in the revenues billed to our two customers. The graphs below show the flows for the year compared to the last two years and the five-year average.

Urban Water flows were generally consistent within the 5-year trend.



	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
5 YR AVG.	10.81	10.48	10.66	9.77	8.57	7.79	7.93	8.28	8.25	8.86	9.51	10.01
FY 2020	10.79	10.62	11.18	10.14	8.59	7.98	8.16	8.39	8.14	7.85	8.39	9.74
FY 2021	10.78	10.10	10.17	9.81	8.94	8.26	8.07	8.35	8.79	9.17	10.26	10.62
FY 2022	11.04	10.98	10.78	9.99	8.82	8.07	8.43	8.77	8.54	9.07	9.28	9.65

Wastewater flows (below) were below average due to a dry fall and winter season. This chart clearly demonstrates how erratic wastewater flow can be compared to the trend due to weather patterns that can significantly affect metered flows and revenues.



	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
5 YR AVG	9.11	10.07	10.29	10.29	10.78	10.63	10.10	11.37	10.19	10.39	10.81	9.64
FY 2020	9.58	9.66	9.48	10.26	9.63	9.38	10.37	10.84	8.99	10.56	9.66	9.19
FY 2021	9.03	10.20	10.10	10.79	11.85	12.75	10.06	11.95	10.67	10.72	9.51	9.27
FY 2022	8.84	9.23	9.85	9.92	9.14	8.19	9.43	9.78	10.23	10.13	10.39	9.41

Review of Operations: (Continued)

Total operating expenses increased by $502,000 for FY 2022, and nonoperating expense, including debt issuance costs and interest expense, increased by $1.06 million. Bond interest expense increased by $514,000 and debt issuance costs increased by $428,000 related to the Series 2021 Bond issuance in November. Interest expense in the amount of $122,400 was accrued pursuant to GASB 87 on the UVA property lease.

Direct operating costs in certain categories experienced overall increases in FY 2022. Personnel costs increased 575,000 due to staff pay increases and related benefit costs. Part of these costs were reduced $411,500 for adjustments to the pension liability valuations. IT support was increased this year as various vulnerability and security assessments were completed. Efforts to segment the network and create redundant data communications ability were underway as the year ended. IT spending increased $458,800. Operations costs for items like chemicals and materials and supplies increased $400,000. Line break repairs saw a decrease of $483,000 as there were fewer repairs this year.

Change in Expenses FY 2022 vs. FY 2021:

	FY 2022	FY 2021	Change	
Direct operating*	$ 20,259,437	$ 20,015,414	$ 244,023	1%
Depreciation & amortization	7,878,076	7,620,209	257,867	3%
Interest	6,132,303	5,495,857	636,446	12%
Debt issuance costs	518,307	90,298	428,009	474%
	$ 34,788,123	$ 33,221,778	$ 1,566,345	5%

* - Personnel, Chemicals, Operations & Maintenance, Utilities

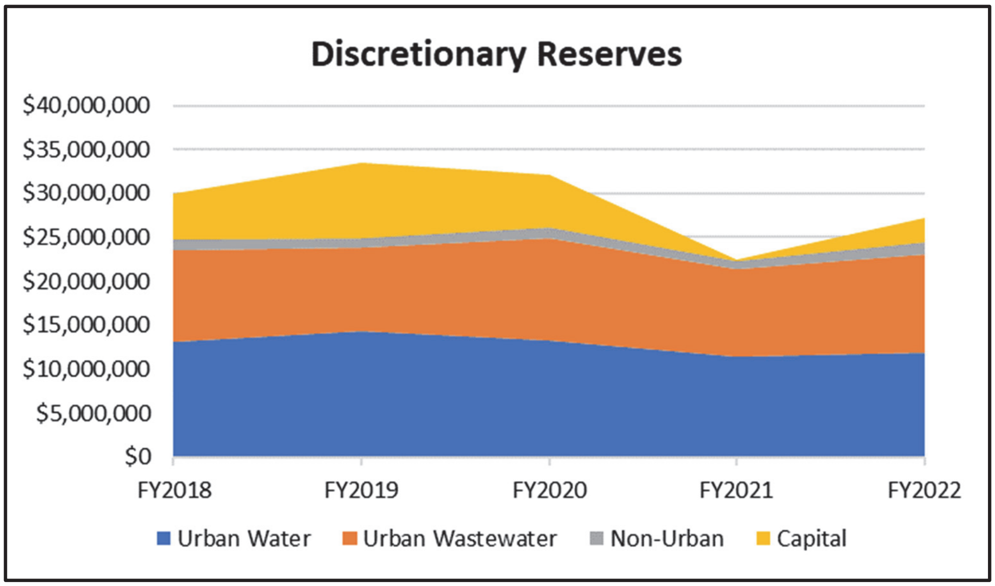
The Authority came out of COVID-19 conditions with little change to operations this year. Most staff were already working on-site as they were before the pandemic. There were some supply chain conditions that affected a few chemical providers which caused changes in suppliers mid-contract. There were some other issues with long lead times on major equipment items related to a few of our capital projects. However, for the most part, there were few impacts to navigate through from COVID-19 this year.

The sharp increases in fuel prices did impact some of our services for hauling biosolids. The contractor could no longer provide this service although there were still several months and renewal periods remaining on the contract. This caused several contracts to have to be rebid mid-year.

Cash balances have been declining the past few years as capital projects have been executed. Restricted cash, which is made up of mostly bond proceeds from the 2021 Series Bond in the construction fund, increased $19.4 million to fund capital spending. This is the sole purpose of the construction fund. The construction fund still had a $31.1 million FY 2022 yearend balance for future capital spending needs. Unrestricted cash and cash equivalent investments, which represents total discretionary reserves balances, were at $34.8 million at the end of FY 2022. This is a $4.3 million increase. The Authority has rate stabilization and other discretionary reserves specifically for the purpose of managing its rates to the retail systems during situations like the COVID-19 pandemic. This year the Authority started recovering from using reserves the previous two years. Rate stabilization reserves totaled $1.5 million at June 30, 2022, which is part of the unrestricted cash. The policy goal is to maintain a $2 million balance for emergencies. Despite relying on reserves and establishing a zero-rate increase budget for FY 2021, the Authority still maintained a fairly strong debt coverage ratio of 1.2. (See Table 8 in the Statistical Section.)

Review of Operations: (Continued)

For the past decade, the Authority slowly built cash reserves for rate stabilization, unforeseen maintenance issues and support for an aggressive capital replacement program through its rate setting policies. The Board of Directors supports the need for a strong cash position to mitigate unforeseen costs in an aging infrastructure, to better handle wide fluctuations in flow, and to manage our rate structure during times of emergency. COVID-19 was one of those events that reserves were used to mitigate an economic need. Over the past two years, $2.2 million in reserves were used, which is shown in the graph below, to soften the rate impacts of a growing budget. The aggressive capital construction activities over the past decade will continue into the future and will further necessitate a strong liquidity position as the Authority has over $214 million in outstanding debt. Recognizing the increase in debt service obligations over the years, the executive management wisely continues to emphasize the need to maintain adequate reserves to provide financial flexibility and maintain an excellent bond rating of AA+ from Standard & Poor's. Below is a chart showing discretionary reserves, which have remained steady for the past five years.



Over the last several years, financial policies have been adopted and revised as needed to formally support this philosophy. The Authority generally targets to have 60 days of working capital on hand for daily operations, which is roughly $6.9 million. The Authority has a financial policy goal of funding 10% of our total capital program costs with cash reserves. Over the last ten years, the Authority has used capital cash to fund roughly $25.1 million in projects. Capital spending using cash and debt financing sources over that same 10-year period was roughly $196.7 million, which means our actual cash reserve funding at 12.7% is a little better than the policy targets.

Capital Improvements & Future Long-Term Trends

The Authority generally updates the five-year projection of our Capital Improvement Plan (CIP) annually. The following table shows the changes in the CIP adopted in May 2022 (for FY 2023–2027) compared to the previously adopted capital plan:

Changes in Capital Improvement Plan (CIP)			
FY 2022-2026	$	170,153,300	Previously adopted CIP
		(10,658,300)	Budgets for completed or closed projects
		44,125,000	Adjustments on existing projects
		1,500,000	New project budgets added
FY 2023-2027	$	205,120,000	Total 5-year CIP

Review of Operations: (Continued)

The total 5-year CIP is estimated at $205.1 million in capital spending needs through the year 2027. Of this amount, roughly $23.1 million is work-in-progress (nearly 11%) and has already been expended and funded at year end. There is $31.1 million in unspent bond proceeds from the Series 2018 bond and the Series 2021 bond remaining to fund future capital work. The future funding needs will be roughly $121.7 million in additional debt (revenue bonds) to be issued and $14.0 million in future reserves to be placed in the capital fund.

Most of the Authority's capital spending investment over the last decade was to bring the wastewater systems into compliance with a DEQ Consent Order and meet nutrient reduction goals for the Chesapeake Bay clean-up programs. There are still some infrastructure improvements in the wastewater facilities like the interceptor and manhole refurbishment.

The focus of the Authority's current and future capital efforts has turned to the water infrastructure. The water infrastructure needs treatment improvements, capacity increases and general renewal for resiliency purposes.

Water Line Break

The South Rivanna Water Treatment Plant (SR WTP) has gone through a major upgrade to meet firm capacity of 12 million gallon per day (mgd) output.

The Observatory WTP will be next this coming year for major construction. This plant has seen very few upgrades since its construction in the mid-1950s. This plant is going through a system-by-system upgrade and an increase in production capacity from 7.7 million to 10 mgd.

Review of Operations: (Continued)

The northern area of Albemarle County will see some significant changes in the water infrastructure. The North Rivanna WTP will eventually be decommissioned. This plant is operationally inefficient and would require significant upgrades to continue its use. This plant will be replaced by a new pump station at Airport Road and several additional river crossings at the South and North Fork Rivanna rivers. Eventually there will also be a new storage take near the new pump station to meet the pressure needs for this developing area of the County.

Transmission Main for Northern Area

Review of Operations: (Continued)

In addition to the treatment process improvements, the raw water supply infrastructure for the Crozet growth area will need major improvements in the coming years. The Beaver Creek Dam spillway does not meet current dam safety regulations and is classified as a Significant Hazard Dam. A labyrinth spillway (see example below) and chute through the existing dam with a bridge to allow a state roadway, Browns Gap Turnpike, to cross over top will be constructed to correct this deficiency. A new raw water intake will have to be constructed as well. These two projects are estimated to cost $26.9 million over the next 5 years.

Labyrinth Spillway

Requests for Information:

This financial report is designed to provide a general overview of the Authority's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Finance Department at 695 Moores Creek Lane, Charlottesville, Virginia 22902-9016.

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Basic Financial Statements

Statement of Net Position
At June 30, 2022

ASSETS		
Current assets:		
Cash and cash equivalents (Note 1)	$	34,843,581
Restricted cash and cash equivalents		36,910,342
Accounts receivable		3,270,026
Lease receivable - current portion (Note 16)		100,178
Total current assets	$	75,124,127
Noncurrent assets:		
Lease receivable (net of current portion) (Note 16)	$	1,763,583
Restricted assets:		
Cash and cash equivalents		4,029,944
Total restricted assets	$	5,793,527
Capital assets: (Note 4)		
Land and improvements	$	12,310,763
Buildings and operating equipment		369,702,133
Trucks and autos		1,640,614
Office equipment		434,609
Less accumulated depreciation		(115,570,111)
Subtotal	$	268,518,008
Right-to-use lease asset (net of amortization) (Note 16)		4,797,977
Construction in progress (Note 5)		43,675,990
Net capital assets	$	316,991,975
Total noncurrent assets	$	322,785,502
Total assets	$	397,909,629
DEFERRED OUTFLOWS OF RESOURCES		
Deferred charge on refunding	$	514,781
Deferred outflows - pension (Note 8)		1,258,138
Deferred outflows - OPEB - group life insurance (Note 12)		118,818
Total deferred outflows of resources	$	1,891,737

The accompanying notes to financial statements are an integral part of this statement.

Statement of Net Position (Continued)
At June 30, 2022

LIABILITIES		
Current liabilities:		
Accounts payable and other accrued expenses	$	4,898,390
Accrued interest payable-lease		122,391
Compensated absences - current portion (Note 7)		538,000
Lease liability - current portion (Note 16)		175,000
Other long-term obligation - current portion (Note 9)		119,142
Revenue bonds - current portion (Note 6)		5,358,603
Subtotal current liabilities	$	11,211,526
Current liabilities (payable from restricted assets):		
Retainage payable	$	1,602,162
Accrued interest payable-bonds		1,715,672
Revenue bond principal - current portion (Note 6)		4,081,454
Subtotal current liabilities (payable from restricted assets)	$	7,399,288
Total current liabilities	$	18,610,814
Noncurrent liabilities:		
Compensated absences (net of current portion) (Note 7)	$	53,148
Lease liability (net of current portion) (Note 16)		4,550,062
Other long-term obligation (net of current portion) (Note 9)		145,340
Net OPEB liability (Note 12)		325,297
Net pension liability (Note 8)		1,409,421
Revenue bonds (net of current portion) (Note 6)		204,608,463
Total noncurrent liabilities	$	211,091,731
Total liabilities	$	229,702,545
DEFERRED INFLOWS OF RESOURCES		
Deferred inflows - pension (Note 8)	$	2,806,701
Deferred inflows - leases (Note 16)		1,835,551
Deferred gain on partial bond refunding		472,968
Deferred inflows - OPEB - group life insurance (Note 12)		124,629
Total deferred inflows of resources	$	5,239,849
NET POSITION		
Net Position:		
Net investment in capital assets	$	127,517,995
Restricted for bond covenants		4,581,454
Unrestricted		32,759,523
Total net position	$	164,858,972

The accompanying notes to financial statements are an integral part of this statement.

Statement of Revenues, Expenses, and Changes in Net Position
Year Ended June 30, 2022

Operating revenues:		
Metered water sales	$	19,279,042
Wastewater service charges		18,694,954
Total operating revenues	$	37,973,996
Operating expenses:		
Personnel costs	$	9,478,916
Professional services		925,766
Other services and charges		4,275,419
Operations and maintenance		5,579,336
Depreciation and amortization		7,878,076
Total operating expenses	$	28,137,513
Operating income	$	9,836,483
Nonoperating revenues (expenses):		
Investment earnings	$	222,088
Interest revenue - leases		19,058
Administrative reimbursement		557,071
Lease revenue		143,451
Other revenues		245,766
Interest expense		(6,132,303)
Debt issuance costs		(518,307)
Total nonoperating revenues (expenses)	$	(5,463,176)
Income before capital grants	$	4,373,307
Capital grants		315,557
Change in net position	$	4,688,864
Net position, beginning of year		160,170,108
Net position, end of year	$	164,858,972

The accompanying notes to financial statements are an integral part of this statement.

Statement of Cash Flows
Year Ended June 30, 2022

Cash flows from operating activities:		
Receipts from customers and users	$	38,858,943
Payments to suppliers of goods and services		(10,435,509)
Payments to and on behalf of employees for services		(9,437,312)
Net cash provided by (used for) operating activities	$	18,986,122
Cash flows from capital and related financing activities:		
Additions to capital assets	$	(22,835,562)
Principal payments on bonds		(8,510,895)
Principal payments on lease liability		(175,000)
Capital grants		315,557
Proceeds of bonds		36,980,000
Premium (discount) on bonds issued		3,516,091
Debt issuance costs		(518,307)
Interest payments		(6,326,179)
Net cash provided by (used for) capital and related financing activities	$	2,445,705
Cash flows from investing activities:		
Maturity of investments	$	2,000,530
Interest and dividends received		244,261
Net cash provided by (used for) investing activities	$	2,244,791
Increase (decrease) in cash and cash equivalents	$	23,676,618
Cash and cash equivalents at beginning of year (including $21,518,459 reported in restricted accounts)		52,107,249
Cash and cash equivalents at end of year (including $40,940,286 reported in restricted accounts)	$	75,783,867
Reconciliation of operating income (loss) to net cash provided by (used for) operating activities:		
Operating income	$	9,836,483
Adjustments to reconcile operating income (loss) to net cash provided by (used for) operating activities:		
Depreciation and amortization		7,878,076
Other nonoperating revenues		965,346
Changes in operating assets, deferred outflows of resources, liabilities and deferred inflows of resources:		
(Increase) decrease in receivables		(52,189)
(Increase) decrease in lease receivable		96,025
Increase (decrease) in compensated absences		35,903
Increase (decrease) in other long-term obligation		(96,766)
Increase (decrease) in net OPEB liability		(126,457)
Increase (decrease) in net pension liability		(2,849,729)
(Increase) decrease in deferred outflows of resources - pension		8,982
Increase (decrease) in deferred inflows of resources - pension		2,768,660
(Increase) decrease in deferred outflows of resources - OPEB		3,309
Increase (decrease) in deferred inflows of resources - OPEB		111,139
Increase (decrease) in deferred inflows of resources - leases		(124,235)
(Increase) decrease in prepaid expenses		123,078
Increase (decrease) in operating payables and accrued expenses		408,497
Net cash provided by (used for) operating activities	$	18,986,122
Noncash investing, capital and financing activities:		
Increase (decrease) in fair value of investments	$	13,971
(Increase) decrease in retainage payable for capital projects		803,037
Increase (decrease) in accrued interest-lease		122,391

The accompanying notes to financial statements are an integral part of this statement.

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Note 1−Summary of Significant Accounting Policies:

In the interest of efficient water quality management for the upper Rivanna River Basin, the Rivanna Water and Sewer Authority was formed on June 7, 1972 as a joint venture of the City of Charlottesville, the Albemarle County Service Authority, and the County of Albemarle, pursuant to the Virginia Water and Waste Authorities Act (1950 as amended). The Authority is responsible for acquiring, financing, constructing and maintaining facilities for the improvement, treatment, storage and transmission of potable water, and for the interception, treatment and discharge of wastewater for the City and County. The Authority operates under the terms of a Service Agreement among the Authority, the Albemarle County Service Authority, the City of Charlottesville, and the County of Albemarle which was signed June 12, 1973.

A. Financial Reporting Entity

The Rivanna Water & Sewer Authority was established according to the Agreement mentioned above for the purposes stated. The participating entities are City of Charlottesville, County of Albemarle, and Albemarle County Service Authority. The City of Charlottesville and the Albemarle County Service Authority have an ongoing financial responsibility to the Authority because a covenant to pay the Authority's rates and charges is included in the operating agreement.

The Authority's governing body is comprised of three members appointed by the County, three members appointed by the City, and one member who is jointly appointed by the City and County. Therefore, none of the participants appoints a voting majority of board members.

The Authority is perpetual. No participating government has access to its resources or surpluses, nor is any participant liable for the Authority's debts or deficits. The Authority also has the ability to finance its capital projects through user charges or the sale of revenue bonds.

Based on the above representations, the Rivanna Water & Sewer Authority has been determined to be a joint venture of the City of Charlottesville, County of Albemarle and Albemarle County Service Authority. The Authority is not a component unit of any of the participating governments. There are no component units to be included within the Authority's financial statements.

For purposes of reporting entity disclosure, it should be noted that a separate entity, the Rivanna Solid Waste Authority, provides garbage and refuse transfer and disposal services to the City of Charlottesville and Albemarle County. Although certain administrative employees provide services to both Authorities, each Authority is operationally and legally independent.

B. Basis of Accounting

Rivanna Water & Sewer Authority operates as an enterprise fund, uses the flow of economic resources measurement focus and its accounts are maintained on the accrual basis of accounting. Under this method, revenues are recognized when earned, and expenses are recorded as liabilities when incurred, without regard to receipt or payment of cash. The Authority accrues revenue for services rendered but not yet billed at the end of the fiscal year. The Authority accounts have been audited by an independent firm annually since its founding in accordance with the requirements of the Service Agreement, dated June 12, 1973, among the Authority, the City of Charlottesville, Albemarle County, and Albemarle County Service Authority.

Note 1−Summary of Significant Accounting Policies: (Continued)

B. Basis of Accounting (Continued)

The Authority distinguishes *operating* revenues and expenses from *nonoperating* items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the Authority's principal ongoing operations. The principal operating revenues of the Authority are charges to customers for sales and services. Operating expenses include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

C. Accounts Receivable

Accounts receivable are stated at book value utilizing the direct write-off method for immaterial uncollectible accounts.

D. Basic Financial Statements

Since the Authority is only engaged in business-type activities, it is required to present only the financial statements required for enterprise funds. For the Authority, the basic financial statements and required supplementary information consist of:

- Management's discussion and analysis
- Enterprise fund financial statements
  - Statement of Net Position
  - Statement of Revenues, Expenses, and Changes in Net Position
  - Statement of Cash Flows
  - Notes to the Financial Statements
- Required Supplementary Information
  - Schedule of Changes in Net Pension Liability and Related Ratios
  - Schedule of Employer Contributions-Pension Plan
  - Notes to Required Supplementary Information-Pension Plan
  - Schedule of Authority's Share of Net OPEB Liability-Group Life Insurance Plan
  - Schedule of Employer Contributions-Group Life Insurance Plan
  - Notes to Required Supplementary Information-Group Life Insurance Plan

E. Capital Assets

Capital assets are tangible and intangible assets, which include property, plant, equipment, and infrastructure assets (e.g., roads, bridges, sidewalks, and similar items), are reported in the financial statements. Capital assets are defined by the Authority as assets with an initial, individual cost of more than $10,000 (amount not rounded) and an estimated useful life in excess of one year. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed (except for intangible right-to-use lease assets (lease assets), the measurement of which is discussed in more detail below). Donated capital assets are recorded at acquisition value at the date of donation. Intangible assets follow the same capitalization policies as tangible capital assets and are reported with tangible assets in the appropriate capital asset class.

Note 1−Summary of Significant Accounting Policies: (Continued)

E. Capital Assets (Continued)

The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend its useful life are not capitalized.

Major outlays for capital assets and improvements are capitalized as projects are constructed.

Property, plant, equipment and infrastructure are depreciated using the straight-line method over the following estimated useful lives:

Assets	Years
Buildings & operating equipment	5 to 50
Trucks & autos	5 to 10
Office equipment	5 to 10
Data processing equipment	5

F. Cash and Cash Equivalents

The Authority's Cash and cash equivalents include cash on hand, amounts in demand deposits as well as short-term investments with a maturity date within three months of the date acquired by the government. For purposes of the statement of cash flows, the Authority considers their demand deposits and all highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents.

G. Investments

Investments with a maturity of less than one year when purchased, non-negotiable certificates of deposit, other nonparticipating investments, and external investment pools are stated at cost or amortized cost. Investments with a maturity greater than one year when purchased are stated at fair value. Fair value is the price that would be received to sell an investment in an orderly transaction at year end.

H. Budgets and Budgetary Accounting

A budget is prepared for information, fiscal planning purposes, and to provide the basis for setting wholesale rates, in accordance with the requirements of the Service Agreement, dated June 12, 1973, among the Authority, the City of Charlottesville, Albemarle County, and the Albemarle County Service Authority. Rates charged by the six rate centers are not subjected to regulatory scrutiny but may be changed at any time by the Authority's Board of Directors, if necessary, in order to adjust revenues. None of the participating entities are required to approve the budget. The budget is adopted as a planning document and is not a legal control on expenses.

I. Inventory

Consumption of materials and supplies is recorded as an expense when used. No inventory amounts are recorded as an asset, as available inventories are not significant.

Note 1−Summary of Significant Accounting Policies: (Continued)

J. Use of Estimates

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

K. Net Position

The difference between assets and deferred outflows of resources less liabilities and deferred inflows of resources is called net position. Net position is comprised of three components: net investment in capital assets, restricted, and unrestricted.

- Net investment in capital assets consists of capital assets, net of accumulated depreciation and reduced by outstanding balances of bonds, notes, and other debt that are attributable to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are included in this component of net position.

- Restricted net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Assets are reported as restricted when constraints are placed on asset use either by external parties or by law through constitutional provision or enabling legislation.

- Unrestricted net position is the net amount of the assets, deferred outflows of resources, liabilities, and deferred inflows of resources that does not meet the definition of the two preceding categories.

L. Net Position Flow Assumption

Sometimes the Authority will fund outlays for a particular purpose from both restricted (e.g., restricted bond or grant proceeds) and unrestricted resources. In order to calculate the amounts to report as restricted net position and unrestricted net position in the financial statements, a flow assumption must be made about the order in which the resources are considered to be applied. It is the Authority’s policy to consider restricted net position to have been depleted before unrestricted net position is applied.

M. Restricted Assets

Certain proceeds of the Authority’s revenue bonds, and certain resources set aside for their repayment are classified as restricted assets on the statement of net position, because they are maintained in separate bank accounts, and their use is limited by applicable bond covenants. The “revenue bond general operating reserve” is used to report resources set aside to subsidize potential deficiencies from the Authority’s operation that could adversely affect debt service payments. The “revenue bond payment account” is used to segregate resources accumulated for debt service payments over the next twelve months. The “debt service reserve” is used to report resources set aside to make up potential future deficiencies in the revenue bond payment account. The “repair and replacement reserve” is used to report resources set aside to meet unexpected contingencies or to fund asset renewals and replacements.

Note 1−Summary of Significant Accounting Policies: (Continued)

N. Long-Term Obligations

Bond premiums and discounts are amortized over the life of the bonds. Bonds payable are reported net of the applicable bond premium or discount. Bond issuance costs are expensed as incurred.

O. Reclassification

Certain amounts in previously issued financial statements have been restated to conform to the current year's classifications.

P. Deferred Inflows and Outflows of Resources

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net assets that applies to a future period(s) and so will not be recognized as an outflow of resources (expense) until then. The Authority has two types of items that qualify for reporting in this category. The first reporting item is comprised of certain items related to the measurement of the net pension liability and net OPEB liability and contributions to the pension and OPEB plans made during the current year and subsequent to the net pension liability and net OPEB liability measurement date. The second reporting item is a deferred charge on refunding resulting 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. For more detailed information on these items reference the related notes.

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net assets that applies to a future period(s) 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 in this category. First, certain items related to the measurement of the net pension liability and net OPEB liability are reported as deferred inflows of resources. The second reporting items is a deferred gain on partial bond refunding resulting 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. For more detailed information on these items reference the related notes.

Q. 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 fiduciary net 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.

Note 1−Summary of Significant Accounting Policies: (Continued)

R. Other Postemployment Benefits (OPEB)

Group Life Insurance

For purposes of measuring the net GLI Plan OPEB liability, deferred outflows of resources and deferred inflows of resources related to the GLI OPEB, and GLI OPEB expense, information about the fiduciary net position of the VRS GLI Plan OPEB and the additions to/deductions from the VRS GLI OPEB's fiduciary net position have been determined on the same basis as they were reported by VRS. In addition, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

S. Leases

Rivanna Water and Sewer Authority leases various assets requiring recognition. A lease is a contract that conveys control of the right to use another entity's nonfinancial asset. Lease recognition does not apply to short-term leases, contracts that transfer ownership, leases of assets that are investments, or certain regulated leases.

Lessee

The Authority recognizes lease liabilities and intangible right-to-use lease assets (lease asset) with an initial value of $110,000, individually or in the aggregate. At the commencement of the lease, the lease liability is measured at the present value of payments expected to be made during the lease term (less any lease incentives). The lease liability is reduced by the principal portion of payments made. The lease asset is measured at the initial amount of the lease liability, plus any payments made to the lessor at or before the commencement of the lease term and certain direct costs. The lease asset is amortized over the shorter of the lease term or the useful life of the underlying asset.

Lessor

The Authority recognizes leases receivable and deferred inflows of resources. At commencement of the lease, the lease receivable is measured at the present value of lease payments expected to be received during the lease term, reduced by any provision for estimated uncollectible amounts. Subsequently, the lease receivable is reduced by the principal portion of lease payments received. The deferred inflow of resources is measured at the initial amount of the lease receivable, less lease payments received from the lessee at or before the commencement of the lease term (less any lease incentives).

Key Estimates and Judgments

Lease accounting includes estimates and judgments for determining the (1) rate used to discount the expected lease payments to present value, (2) lease term, and (3) lease payments.

- The Authority uses the interest rate stated in lease contracts. When the interest rate is not provided or the implicit rate cannot be readily determined, the Authority uses its estimated incremental borrowing rate as the discount rate for leases.

Note 1−Summary of Significant Accounting Policies: (Continued)

S. Leases (Continued)

- The lease term includes the noncancellable period of the lease and certain periods covered by options to extend to reflect how long the lease is expected to be in effect, with terms and conditions varying by the type of underlying asset.

- Fixed and certain variable payments as well as lease incentives and certain other payments are included in the measurement of the lease liability (lessee) or lease receivable (lessor).

The Authority monitors changes in circumstances that would require a remeasurement or modification of its leases. The Authority will remeasure the lease asset and liability (lessee) or the lease receivable and deferred inflows of resources (lessor) if certain changes occur that are expected to significantly affect the amount of the lease liability or lease receivable.

Note 2−Acquisition of Water and Wastewater Facilities:

Under the terms of the Service Agreement (See Note 1), the Authority agreed to purchase certain water production, transmission and storage facilities and wastewater interception and treatment facilities from the City and the Albemarle County Service Authority. The agreement provides that the sale be consummated ten years from the date of the agreement or at such later time as the debts, if any, attributed to each such facility have been paid or provision is made for their payment, and that the Authority will lease the facility until such time as the sale is consummated. The purchase price is the fair value of the facilities as of June 12, 1973, as determined by all payments paid by the Authority during the term of lease applicable to the principal retired on the debt of such facilities. In accordance with generally accepted accounting principles, the aforementioned agreement has been treated as an installment purchase of the facilities, with the purchase price being discounted at an annual rate of 6% for ten years.

The following tabulation reflects the agreed upon purchase price and accounting thereof:

Fair value as of June 12, 1973:		
Facilities acquired from City of Charlottesville	$	6,128,124
Facilities acquired from Albemarle County Service Authority		3,604,384
Total purchase price	$	9,732,508
Add: Interest portion of rental payments not applied to principal reduction		1,154,074
Total contracts payable	$	10,886,582
Less: Interest included in contract price computed at annual rate of 6% for 10 years		4,940,705
Asset carrying value	$	5,945,877

Note 2−Acquisition of Water and Wastewater Facilities: (Continued)

The contracts payable have been reduced by the amount of the annual rental payments on the facilities as outlined in the following tabulation:

	City of Charlottesville	Albemarle County Service Authority
Contracts payable, June 12, 1973	$ 6,354,634	$ 4,531,948
Rental payments and contract adjustments in prior fiscal years	$ 1,760,676	$ 3,680,395
Total rental payments	$ 1,760,676	$ 3,680,395
Final payment on facilities with no outstanding debt as of June 30, 1983	4,593,958	851,553
Total payments	$ 6,354,634	$ 4,531,948
Contracts payable, June 30, 2022	$ -	$ -

The total annual rental payments over the initial ten-year agreement were not sufficient to retire the contracts payable to the Albemarle County Service Authority. The deferred interest was amortized over the initial ten-year period of the agreement and was fully amortized as of June 30, 1983.

Depreciation has been based upon the engineer's estimates of useful lives remaining as of the valuation date (June 12, 1973). Depreciation expense on these facilities was $51,137 for the year ended June 30, 2022.

Note 3−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 excess deposits. Accordingly, all deposits are considered fully collateralized.

Note 3−Deposits and Investments: (Continued)

Investments

Statutes authorize local governments and other public bodies 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 that has received at least two of the following ratings: P-1 by Moody's Investors Service, Inc.; A-1 by Standard and Poor's; or F1 by Fitch Ratings, Inc. (Section 2.2-4502), banker's acceptances, repurchase agreements, and the State Treasurer's Local Government Investment Pool (LGIP).

The Authority does not have a formal investment policy that addresses credit risk or interest rate risk.

Credit Risk of Debt Securities

The Authority's rated debt investments as of June 30, 2022 were rated by Standard & Poor's and the ratings are presented below using Standard & Poor's rating scale.

Authority's Rated Debt Investments' Values

Rated Debt Investments	Fair Quality Ratings		
	AAAm	AA+	AA+f
Local Government Investment Pool	$ 11,693,916	$ -	$ -
VML/VACo Virginia Investment Pool	10,585,310	-	-
Virginia State Non-Arbitrage Pool	31,113,216	-	-
U.S. Treasury & Agency Money Market Funds	9,524,730	-	-
Total	$ 62,917,172	$ -	$ -

Interest Rate Risk

Investment Maturities (in years)

Investment Type	Fair Value	Less Than 1 Year	1-5 Years	6-10 Years
Local Government Investment Pool	$ 11,693,916	$ 11,693,916	$ -	$ -
VML/VACo Virginia Investment Pool	10,585,310	10,585,310	-	-
Virginia State Non-Arbitrage Pool	31,113,216	31,113,216	-	-
U.S. Treasury & Agency Money Market Funds	9,524,730	9,524,730	-	-
Total	$ 62,917,172	$ 62,917,172	$ -	$ -

Note 3−Deposits and Investments: (Continued)

External Investment Pools

The Authority invests in the Virginia Investment Pool ("VIP") which is sponsored by VML/VACo Finance and is professionally managed under the governance of the VIP Board of Trustees. The VIP investment strategy is to preserve capital, and it only invests in instruments allowable by the Code of Virginia. The Authority owns shares of the VIP and not the underlying instruments held by the VIP. The VIP limits participants to two withdrawals per month.

The fair value of the positions in the external investment pools (Local Government Investment Pool and State Non-Arbitrage Pool) is the same as the value of the pool shares. As LGIP and SNAP are not SEC registered, regulatory oversight of the pools rest with the Virginia State Treasury. LGIP and SNAP are amortized cost basis portfolios. There are no withdrawal limitations or restrictions imposed on participants in LGIP and SNAP. The VML/VACo Virginia Investment Pool has a limit of two withdrawals per month.

Note 4−Capital Assets:

Details of changes in capital assets for the year ended June 30, 2022 are as follows:

	Balance July 1, 2021	Adjustments	Balance July 1, 2021 As Adjusted	Increases	Decreases	Balance June 30, 2022
Capital assets not being depreciated:						
Land and improvements	$ 12,310,763	$ -	$ 12,310,763	$ -	$ -	$ 12,310,763
Construction in progress	23,945,805	-	23,945,805	24,664,245	4,934,060	43,675,990
Total capital assets not being depreciated	$ 36,256,568	$ -	$ 36,256,568	$ 24,664,245	$ 4,934,060	$ 55,986,753
Other capital assets:						
Buildings and operating equipment	$ 365,127,553	$ -	$ 365,127,553	$ 4,574,580	$ -	$ 369,702,133
Accumulated depreciation	(106,708,905)	-	(106,708,905)	(7,658,520)	-	(114,367,425)
Buildings and operating equipment, net	$ 258,418,648	$ -	$ 258,418,648	$ (3,083,940)	$ -	$ 255,334,708
Trucks and autos	$ 1,527,340	$ -	$ 1,527,340	$ 113,274	$ -	$ 1,640,614
Accumulated depreciation	(989,805)	-	(989,805)	(81,586)	-	(1,071,391)
Trucks and autos, net	$ 537,535	$ -	$ 537,535	$ 31,688	$ -	$ 569,223
Office equipment	$ 101,330	$ -	$ 101,330	$ 333,279	$ -	$ 434,609
Accumulated depreciation	(95,410)	-	(95,410)	(35,885)	-	(131,295)
Office equipment, net	$ 5,920	$ -	$ 5,920	$ 297,394	$ -	$ 303,314
Intangible right-to-use lease asset-leased land	$ -	$ 4,900,062	$ 4,900,062	$ -	$ -	$ 4,900,062
Accumulated amortization	-	-	-	(102,085)	-	(102,085)
Intangible right-to-use lease asset, net	$ -	$ 4,900,062	$ 4,900,062	$ (102,085)	$ -	$ 4,797,977
Total other capital assets, net	$ 258,962,103	$ 4,900,062	$ 263,862,165	$ (2,856,943)	$ -	$ 261,005,222
Total capital assets, net	$ 295,218,671	$ 4,900,062	$ 300,118,733	$ 21,807,302	$ 4,934,060	$ 316,991,975

Note 5−Construction in Progress:

Details of construction in progress for the year ended June 30, 2022 are as follows:

	Balance July 1, 2021	Cost of Construction	Expense/ Transfer to Capital Assets	Balance June 30, 2022
Ragged Mtn Reservoir to Observatory WTP Raw Water Line	$ -	$ 221,153	$ -	$ 221,153
Ragged Mtn Reservoir to Observatory Raw Water PS	-	121,843	-	121,843
S. Rivanna Reservoir to Ragged Mtn Reservoir Water Line R/W	1,566,796	143,495	-	1,710,291
S. Rivanna Reservoir to Ragged Mtn Reservoir -Birdwood to Old Garth	-	74,826	-	74,826
SR Reservoir to RM Reservoir Pipeline, Intake & Facilities	-	32,398	-	32,398
Observatory WTP Improvements	3,316,372	5,773,890	-	9,090,262
SH Dam-Rubber Crest Gate Replacement	1,382,264	321,573	1,703,837	-
Central Water Line	191,666	350,020	-	541,686
S. Fork Rivanna River Crossing	30,896	113,005	-	143,901
Airport Rd. Pump Stn. & N. Rivanna Transmission Main	238,847	1,727,073	-	1,965,920
Emmet Street Waterline Betterment	-	296,086	-	296,086
South Fork Rivanna Hydropower Plant Decommisioning	178,685	26,906	-	205,591
S. Rivanna WTP Improvements	9,967,058	7,670,703	-	17,637,761
North Rivanna WTP-Upgrade	56,627	19,483	-	76,110
Beaver Creek Dam Alteration	459,715	424,318	-	884,033
Crozet Ground Storage Tank Leak Repair	-	3,165	3,165	-
Crozet WTP Expansion	58,587	350,503	409,090	-
New Raw Water Pump Station & Intake (BCR)	239,508	63,384	-	302,892
Scottsville WTP Lagoon Liner Replacement	-	235,153	-	235,153
Schenks Branch Interceptor	50,787	-	-	50,787
Interceptor Sewer & Manhole Repair-Phase 1	659,970	324,448	984,418	-
Crozet Interceptor	255,190	7,060	-	262,250
Crozet Flow Equalization Tank	2,165,244	2,580,710	-	4,745,954
Crozet PS 1,2,3 Rehabilitation	42,267	-	-	42,267
Moores Creek Digester Sludge Storage Improvements	15,450	-	-	15,450
MCAWRRF Aluminum Slide Gate Replacement	284,337	269,390	-	553,727
MCAWRRF Cogeneration Upgrades	-	8,240	-	8,240
MCAWRRF In-plant Clarifier & Lime Silo Demolition	48,139	661,324	709,463	-
MCAWRRF Generator Fuel Storage Expansion	15,445	175,578	191,023	-
MCAWRRF Meter and Valve Replacements	7,549	31,048	-	38,597
MCAWRRF Lighting Upgrade	106,275	470,474	576,749	-
MCAWRRF 5kV Electrical System Upgrade	122,141	310,922	-	433,063
Scottsville Whole Plant Generator and ATS	-	5,000	-	5,000
Influent Pump & VFD Addition	30,676	257,837	-	288,513
Radio Upgrades	280,607	60,557	-	341,164
Asset Management	441,104	231,772	-	672,876
Security Enhancements	727,020	349,014	-	1,076,034
IT Master Plan-Software	207,458	148,857	356,315	-
Retainage on Construction in Progress	799,125	803,037	-	1,602,162
Total	$ 23,945,805	$ 24,664,245	$ 4,934,060	$ 43,675,990

Note 6−Long-Term Obligations:

A. Changes in Long-Term Obligations

The following is a summary of long-term obligation transactions for the year ended June 30, 2022:

	Balance July 1, 2021	Adjustments	Balance July 1, 2021 As Adjusted	Add: Issuances	Less: Retirements	Balance June 30, 2022	Due Within One Year
Revenue bonds payable							
Public offerings	$ 21,395,000	$ -	$ 21,395,000	$ -	$ 695,000	$ 20,700,000	$ 725,000
Direct borrowings and direct placements	154,779,359	-	154,779,359	36,980,000	7,815,895	183,943,464	8,715,057
Subtotal	$ 176,174,359	$ -	$ 176,174,359	$ 36,980,000	$ 8,510,895	$ 204,643,464	$ 9,440,057
Add (less) amounts:							
For issuance premiums (discounts)	6,486,499	-	6,486,499	3,516,091	597,534	9,405,056	-
Total revenue bonds	$ 182,660,858	$ -	$ 182,660,858	$ 40,496,091	$ 9,108,429	$ 214,048,520	$ 9,440,057
Compensated absences	555,245	-	555,245	573,028	537,125	591,148	538,000
Lease liability	-	4,900,062	4,900,062	-	175,000	4,725,062	175,000
VERIP liability	361,248	-	361,248	83,747	180,513	264,482	119,142
Net OPEB liablity	451,754	-	451,754	120,616	247,073	325,297	-
Net pension liability	4,259,150	-	4,259,150	3,443,883	6,293,612	1,409,421	-
Totals	$ 188,288,255	$ 4,900,062	$ 193,188,317	$ 44,717,365	$ 16,541,752	$ 221,363,930	$ 10,272,199

B. Details of Long-Term Obligations

All of the Authority’s bond issues are direct placements with Virginia Resources Authority or with private banks with the exception of Series 2012B, which is a public offering. All bonds are issued in parity with one another under the 1979 Master Trust Agreement. The trust agreement does not specifically identify fixed amounts to be paid in the event of default. The Authority has no unused lines of credit, and none of its assets are pledged as collateral for any of its debt. There are no terms specified in any of the Authority’s debt agreements related to significant (a) events of default with finance-related consequences, (b) termination events with finance-related consequences, or (c) subjective acceleration clauses.

Note 6−Long-Term Obligations: (Continued)

B. Details of Long-Term Obligations (Continued)

	Total Amount	Amount Due Within One Year
Revenue Bonds		
Public Offerings		
$26,240,000 Water and Sewer System Revenue and Refunding Bonds, Series 2012B - On October 30, 2012, the Authority issued $26,240,000 in Revenue and Refunding Bonds for purposes of financing various water and sewer capital projects including the design, development and construction of a new dam; the implementation of wetlands and streambank mitigation plans and costs of issuance. The bonds were issued at a premium in the amount of $646,250.		
The bond resolution provides a redemption schedule with interest due semi-annually and principal due annually from April 1, 2013 through October 1, 2042. The bonds bear interest at an annual rate ranging from 2.125% to 4.0%. Total payments due each year range from $1,337,000 to $1,342,000. The bonds are subject to federal arbitrage regulations.	$ 20,700,000	$ 725,000
Direct Borrowings and Direct Placements		
Water and Sewer System Revenue Bonds - Series of 2005A - On November 10, 2005, the Authority issued $2,340,929 in bonds for purposes of financing the Moores Creek wastewater pre-treatment project. These bonds are secured by a supplemental trust agreement between the Authority and trustee for the bondholders. This agreement states that these obligations will be repaid from revenue generated by the Authority and are backed by a restricted cash account.		
The bond resolution provided a redemption schedule with an interest only payment due in April 2007 and semi-annual payments of principal and interest of $79,670 from October 2007 through October 2026 with interest at 3%. Effective October 1, 2020, the interest rate was reduced to 1%, which resulted in lower semi-annual payments of principal and interest ranging from $71,307 to $75,675 through October 2026.	$ 658,721	$ 144,751

Note 6−Long-Term Obligations: (Continued)

B. Details of Long-Term Obligations (Continued)

	Total Amount	Amount Due Within One Year
Revenue Bonds (Continued)		
Direct Borrowings and Direct Placements (Continued)		
$24,000,000 Regional Water and Sewer System Revenue Bond - Series 2009A - On August 1, 2009 the Authority issued $24,000,000 in bonds for purposes of financing the Moores Creek Wastewater Treatment Plant upgrades, including the Enhanced Nutrient Removal project. These bonds are secured by a supplemental trust agreement between the Authority and trustee for the bondholders. This agreement states that the obligation will be repaid from revenue generated by the Authority and is backed by a restricted cash account.		
The bond resolution provided a redemption schedule with an interest only payment due in April 2011 and semi-annual payments of principal and 3.35% interest of $843,077 from October 2011 through October 2030. The interest rate was reduced to 2.65% on October 1, 2014, which reduced the semi-annual payments to $802,099.	$ 12,137,527	$ 1,291,051
$15,179,718 Regional Water and Sewer System Revenue Bond - Series 2010A - On June 29, 2010 the Authority issued $15,179,718 in bonds for purposes of financing the acquisition, construction and equipping of improvements to the Authority's water and sewer system, including the replacement of the Meadow Creek Sanitary Sewer Interceptor together with related expenses. These bonds are secured by a supplemental trust agreement between the Authority and trustee for the bondholders. This agreement states that the obligation will be repaid from revenue generated by the Authority and is backed by a restricted cash account.		
The bond resolution provided a redemption schedule with an interest only payment due in April 2012 and semi-annual payments of principal and 2.93% interest of $513,715 from October 2012 through October 2030. Effective October 1, 2016, the interest rate was reduced to 2.05%, reducing semi-annual payments to $481,261.	7,473,285	813,467

Note 6−Long-Term Obligations: (Continued)

B. Details of Long-Term Obligations (Continued)

		Total Amount		Amount Due Within One Year
Revenue Bonds (Continued)				
Direct Borrowings and Direct Placements (Continued)				
$6,982,662 Regional Water and Sewer System Revenue Bond - Series 2011A - On March 17, 2011 the Authority issued $6,982,662 in bonds for purposes of financing the acquisition, construction and equipping of improvements to the Authority's sewer system including improvements necessary to address the wet weather flows at the Moores Creek Wastewater Treatment Plant. These bonds are secured by a supplemental trust agreement between the Authority and trustee for the bondholders. This agreement states that the obligation will be repaid from revenue generated by the Authority and is backed by a restricted cash account.				
The bond resolution provides a redemption schedule with an interest only payment due in April 2012 and semi-annual payments of principal and 2.93% interest of $236,308 from October 2012 through October 2031. Effective October 1, 2016, the interest rate was reduced to 2.05%, reducing semi-annual payments to $221,804.	$	3,811,640	$	367,343
$1,017,338 Regional Water and Sewer System Revenue Bond - Series 2011B - On March 17, 2011 the Authority issued $1,017,338 in bonds for purposes of financing the acquisition, construction and equipping of improvements to the Authority's sewer system including improvements necessary to address the wet weather flows at the Moores Creek Wastewater Treatment Plant. These bonds are secured by a supplemental trust agreement between the Authority and trustee for the bondholders. This agreement states that the obligation will be repaid from revenue generated by the Authority and is backed by a restricted cash account.				
The bond resolution provided a redemption schedule with an interest only payment due in April 2012 and semi-annual payments of principal and 2.93% interest of $34,429 from October 2012 through October 2031. The interest rate was reduced to 2.05% as of October 1, 2016, reducing semi-annual payments to $31,666.		544,167		52,443

Note 6−Long-Term Obligations: (Continued)

B. Details of Long-Term Obligations (Continued)

		Total Amount		Amount Due Within One Year
Revenue Bonds (Continued)				
Direct Borrowings and Direct Placements (Continued)				
$4,241,488 Regional Water and Sewer System Revenue Bond - Series 2011D - On September 9, 2011 the Authority issued $4,241,488 in bonds for purposes of financing the acquisition, construction and equipping of improvements to the Authority's water and sewer system. These bonds are secured by a supplemental trust agreement between the Authority and trustee for the bondholders. This agreement states that the obligation will be repaid from revenue generated by the Authority and is backed by a restricted cash account. The bond resolution provided a redemption schedule with an interest only payment due in October 2012 and semi-annual payments of principal and 2.93% interest of $143,541 from April 2013 through April 2032. The interest rate was reduced to 2.05% effective October 1, 2016, and the semi-annual payments were reduced to $134,475.	$	2,420,576	$	220,452
$443,937 Regional Water and Sewer System Revenue Bond - Series 2011E - On September 9, 2011 the Authority issued $443,937 in bonds for purposes of financing the acquisition, construction and equipping of improvements to the Authority's water and sewer system. These bonds are secured by a supplemental trust agreement between the Authority and trustee for the bondholders. This agreement states that the obligation will be repaid from revenue generated by the Authority and is backed by a restricted cash account. The bond resolution provided a redemption schedule with an interest only payment due in October 2012 and semi-annual payments of principal and interest of $15,024 from April 2013 through April 2032. The interest rate was reduced to 2.05% effective October 1, 2016, and the semi-annual payments were reduced to $13,997.		251,955		22,946

Note 6−Long-Term Obligations: (Continued)

B. Details of Long-Term Obligations (Continued)

	Total Amount	Amount Due Within One Year
Revenue Bonds (Continued)		
Direct Borrowings and Direct Placements (Continued)		
$25,100,000 Water and Sewer System Revenue and Refunding Bonds, Series 2012A - On June 13, 2012, the Authority issued $25,100,000 in Revenue and Refunding Bonds for purposes of financing various water and sewer capital projects and to refund Series 2001 bond with an outstanding amount of $5,490,000 and Series 2003 bond with an outstanding amount of $4,827,000. The bonds were issued at a premium in the amount of $3,706,939.		
The bond resolution provides a redemption schedule with interest due semi-annually and principal due annually from October 1, 2012 through October 1, 2042. The bonds bear interest at an annual rate ranging from 2.125% to 5.125%. The Authority refunded the 2001 and 2003 Series bonds to reduce its total debt service payments over the next 13 years by $4.93 million and to obtain a net economic gain (difference between the present values of the debt service payments on the old and new debt) of $1,079,384 after applying existing reserve funds of $3.55 million.		
On November 20, 2019, the Authority issued Bond Series 2019 to refund $15,855,000 of Bond Series 2012A. Annual principal payments of $630,000 to $685,000 and semiannual interest payments are due through October 1, 2022.	$ 685,000	$ 685,000
$29,043,290 Water and Sewer Revenue Bonds, Series 2014A - On March 28, 2014, the Authority issued $29,043,290 in revenue bonds for purposes of financing capital improvements and capacity upgrades of the Rivanna Interceptor and pump station at Moores Creek Wastewater Treatment Plant.		
The bond resolution provided a redemption schedule with interest and principal of $941,168 due semi-annually from April 1, 2017 through April 1, 2036 with interest at 2.45%. An interest only payment was due on October 1, 2016. Effective October 1, 2020, the interest rate was reduced to 1.60%, which resulted in lower semi-annual payments of principal and interest ranging from $814,690 to $888,179 through April 1, 2036.	22,023,266	1,424,076

Note 6−Long-Term Obligations: (Continued)

B. Details of Long-Term Obligations (Continued)

	Total Amount	Amount Due Within One Year
Revenue Bonds (Continued)		
Direct Borrowings and Direct Placements (Continued)		
$1,189,672 Water and Sewer Revenue Bonds, Series 2015A - On June 17, 2015, the Authority issued $1,189,672 in revenue bonds for purposes of financing capital improvements including replacing the final phase of the Schenks Branch Interceptor.		
The bond resolution provides a redemption schedule with an interest payment due October 1, 2016 and interest and principal payments of $35,296 due semi-annually from April 1, 2017 through April 1, 2036. The bonds bear interest at an annual rate of 1.5%.	$ 885,327	$ 57,528
$44,495,000 Taxable Water and Sewer System Revenue and Refunding Bonds, Series 2015B - On November 18, 2015, the Authority issued $44,495,000 in Revenue and Refunding Bonds for purposes of financing various water capital projects and to refund Series 2005B bond with an outstanding amount of $20,455,000. The bonds were issued at a premium in the amount of $5,329,294.		
The bond resolution provides a redemption schedule with interest due semi-annually and principal due annually from April 1, 2016 through October 1, 2045 for total payments of $1.7 to $3.3 million per year. The bonds bear interest at an annual rate ranging from 3.094% to 5.125%. The Authority refunded the 2005B Series bonds to reduce its total debt service payments over the next 20 years by $4.45 million and to obtain a net economic gain (difference between the present values of the debt service payments on the old and new debt) of $3.51 million.	35,820,000	1,705,000
$10,000,000 Taxable Regional Water and Sewer Revenue Bonds, Series 2016 - On December 8, 2016, the Authority issued $10,000,000 in revenue bonds for purposes of financing various capital improvements.		
The bond resolution provides a redemption schedule with interest due semi-annually and principal due annually from April 1, 2017 through October 1, 2036. The bonds bear interest at an annual rate of 2.35%. Total debt service payments are approximately $627,000 per year.	7,922,000	446,000

Note 6−Long-Term Obligations: (Continued)

B. Details of Long-Term Obligations (Continued)

	Total Amount	Amount Due Within One Year
Revenue Bonds (Continued)		
Direct Borrowings and Direct Placements (Continued)		
$36,855,000 Taxable Regional Water and Sewer Revenue Bonds, Series 2018 - On November 14, 2018 the Authority issued $36,855,000 in revenue bonds for purposes of financing various capital improvements.		
The bond resolution provides a redemption schedule with interest due semi-annually and principal due annually from April 1, 2019 through October 1, 2048. The bonds bear interest at a variable annual rate of 4.125% to 5.125%. Total debt service payments are approximately $2.26 million per year. The bonds were issued at a premium in the amount of $2,389,821.	$ 35,085,000	$ 655,000
$17,610,000 Taxable Water and Sewer System Revenue and Refunding Bonds, Series 2019 - On November 20, 2019, the Authority issued $17,610,000 in Revenue and Refunding Bonds for purpose of partially refunding Series 2012A. The bonds were issued at a discount in the amount of $33,492.		
The bond resolution provides a redemption schedule with interest due semi-annually and principal due annually from April 1, 2020 through October 1, 2042 for total payments of $0.7 to $1.4 million per year. The bonds bear interest at an annual rate ranging from 1.952% to 3.424%. The Authority refunded $15,855,000 of the 2012A Series bonds to reduce its total debt service payments over the next 20 years by $2.28 million and to obtain a net economic gain (difference between the present values of the debt service payments on the old and new debt) of $1.64 million.	17,245,000	185,000

Note 6−Long-Term Obligations: (Continued)

B. Details of Long-Term Obligations (Continued)

	Total Amount	Amount Due Within One Year
Revenue Bonds (Continued)		
Direct Borrowings and Direct Placements (Continued)		
$36,980,000 Taxable Regional Water and Sewer System Revenue and Refunding Bonds, Series 2021 - On November 17, 2021, the Authority issued $36,980,000 in revenue bonds for purposes of financing various capital improvements. The bonds were issued at a premium in the amount of $3,516,091. The bond resolution provides a redemption schedule with interest due semi-annually and principal due annually from April 1, 2022 through October 1, 2051. The bonds bear interest at an annual rate ranging from 2.213% to 5.125%. Total debt service payments are approximately $1.9 million per year.	$ 36,980,000	$ 645,000
Total Revenue Bonds	$ 204,643,464	$ 9,440,057
Issuance premiums (discounts)	9,405,056	-
Compensated absences	591,148	538,000
Lease liability	4,725,062	175,000
VERIP liability	264,482	119,142
Net OPEB liability	325,297	-
Net pension liability	1,409,421	-
Total	$ 221,363,930	$ 10,272,199

Note 6−Long-Term Obligations: (Continued)

C. Annual Amortization of Long-Term Debt

The annual requirements to amortize all long-term debt outstanding as of June 30, 2022 are as follows:

	Revenue Bonds			
	Direct Borrowings and Direct Placements		Public Offerings	
Year Ending June 30,	Interest	Principal	Interest	Principal
2023	$ 6,108,879	$ 8,715,057	$ 616,306	$ 725,000
2024	5,822,119	9,005,117	586,706	755,000
2025	5,533,016	9,293,118	563,372	775,000
2026	5,241,529	9,303,103	546,194	795,000
2027	4,947,790	9,516,426	528,138	810,000
2028-2032	20,262,983	44,182,481	2,282,038	4,420,000
2033-2037	14,374,357	31,698,162	1,579,400	5,120,000
2038-2042	9,722,110	25,120,000	713,050	5,980,000
2043-2047	4,715,613	23,965,000	21,450	1,320,000
2048-2052	884,641	13,145,000	-	-
Total	$ 77,613,037	$ 183,943,464	$ 7,436,654	$ 20,700,000

D. Prior Year Defeasance of Debt

In prior years, the Authority defeased certain revenue bonds by placing the proceeds of new bonds in an irrevocable trust to provide for all future debt service payments on the old bonds. Accordingly, the trust account assets and the liability for the defeased bonds are not included in the Authority's financial statements.

Note 7−Compensated Absences:

Authority employees earn vacation leave each month at a scheduled rate in accordance with the years of service and sick leave at the rate of eight hours per month. Accumulated unpaid vacation leave amounts are accrued when incurred. The liability for accrued vacation leave was $591,148 at June 30, 2022.

Note 8−Pension Plan:

Plan Description

All full-time, salaried permanent employees of the Authority are automatically covered by a VRS Retirement Plan upon employment. This is an agent multiple-employer plan administered by the Virginia Retirement System (the System) 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.

Benefit Structures

The System administers three different benefit structures for covered employees – Plan 1, Plan 2 and Hybrid. Each of these benefit structures has different eligibility criteria, as detailed below.

a. Employees with a membership date before July 1, 2010, vested as of January 1, 2013, and have not taken a refund, are covered under Plan 1, a defined benefit plan. Non-hazardous duty employees are eligible for an unreduced retirement benefit beginning at age 65 with at least 5 years of service credit or age 50 with at least 30 years of service credit. Non-hazardous duty employees may retire with a reduced benefit as early as age 55 with at least 5 years of service credit or age 50 with at least 10 years of service credit.

b. Employees with a membership date from July 1, 2010 to December 31, 2013, that have not taken a refund or employees with a membership date prior to July 1, 2010 and not vested before January 1, 2013, are covered under Plan 2, a defined benefit plan. Non-hazardous duty employees are eligible for an unreduced benefit beginning at their normal social security retirement age with at least 5 years of service credit or when the sum of their age plus service credit equals 90. Non-hazardous duty employees may retire with a reduced benefit as early as age 60 with at least 5 years of service credit.

c. Non-hazardous duty employees with a membership date on or after January 1, 2014 are covered by the Hybrid Plan combining the features of a defined benefit plan and a defined contribution plan. Plan 1 and Plan 2 members also had the option of opting into this plan during the election window held January 1 – April 30, 2014 with an effective date of July 1, 2014. Employees covered by this plan are eligible for an unreduced benefit beginning at their normal social security retirement age with at least 5 years of service credit, or when the sum of their age plus service credit equals 90. Employees may retire with a reduced benefit as early as age 60 with at least 5 years of service credit. For the defined contribution component, members are eligible to receive distributions upon leaving employment, subject to restrictions.

Note 8−Pension Plan: (Continued)

Average Final Compensation and Service Retirement Multiplier

The VRS defined benefit is a lifetime monthly benefit based on a retirement multiplier as a percentage of the employee's average final compensation multiplied by the employee's total service credit. Under Plan 1, average final compensation is the average of the employee's 36 consecutive months of highest compensation and the multiplier is 1.70% for non-hazardous duty employees. Under Plan 2, average final compensation is the average of the employee's 60 consecutive months of highest compensation and the retirement multiplier is 1.65% for non-hazardous duty employees. Under the Hybrid Plan, average final compensation is the average of the employee's 60 consecutive months of highest compensation and the multiplier 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.

Cost-of-Living Adjustment (COLA) in Retirement and Death and Disability Benefits

Retirees with an unreduced benefit or with a reduced benefit with at least 20 years of service credit are eligible for an annual COLA beginning July 1 after one full calendar year from the retirement date. Retirees with a reduced benefit and who have less than 20 years of service credit are eligible for an annual COLA beginning on July 1 after one calendar year following the unreduced retirement eligibility date. Under Plan 1, the COLA cannot exceed 5.00%. Under Plan 2 and the Hybrid Plan, the COLA cannot exceed 3.00%. The VRS also provides death and disability benefits. Title 51.1 of the Code of Virginia as amended, assigns the authority to establish and amend benefit provisions to the General Assembly of Virginia.

Employees Covered by Benefit Terms

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

Inactive members or their beneficiaries currently receiving benefits	74
Inactive members:	
Vested inactive members	21
Non-vested inactive members	27
Long-term disability (LTD)	0
Inactive members active elsewhere in VRS	41
Total inactive members	89
Active members	91
Total covered employees	254

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.

Note 8−Pension Plan: (Continued)

Contributions (Continued)

The Authority's contractually required employer contribution rate for the year ended June 30, 2022 was 8.30% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2019.

This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Authority were $455,293 and $419,777 for the years ended June 30, 2022 and June 30, 2021, respectively.

Net Pension Liability

The net pension liability (NPL) is calculated separately for each employer and represents that particular employer's total pension liability determined in accordance with GASB Statement No. 68, less that employer's fiduciary net position. For the Authority, the net pension liability was measured as of June 30, 2021. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2020 rolled forward to the measurement date of June 30, 2021.

Actuarial Assumptions – General Employees

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

Inflation	2.5%
Salary increases, including inflation	3.5% – 5.35%
Investment rate of return	6.75%, net of pension plan investment expenses, including inflation

Mortality rates:

All Others (Non 10 Largest) – Non-Hazardous Duty: 15% of deaths are assumed to be service related

Pre-Retirement:
Pub-2010 Amount Weighted Safety Employee Rates projected generationally; 95% of rates for males; 105% of rates for females set forward 2 years

Post-Retirement:
Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected generationally; 110% of rates for males; 105% of rates for females set forward 3 years

Note 8−Pension Plan: (Continued)

Actuarial Assumptions – General Employees: (Continued)

Mortality rates: (Continued)

Post-Disablement:
Pub-2010 Amount Weighted General Disabled Rates projected generationally; 95% of rates for males set back 3 years; 90% of rates for females set back 3 years

Beneficiaries and Survivors:
Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected generationally; 110% of rates for males and females set forward 2 years

Mortality Improvement:
Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates

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

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

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

Note 8−Pension Plan: (Continued)

Long-Term Expected Rate of Return

The long-term expected rate of return on pension System investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension System investment expense and inflation) are developed for each major asset class. 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)	Long-Term Target Asset Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return*
Public Equity	34.00%	5.00%	1.70%
Fixed Income	15.00%	0.57%	0.09%
Credit Strategies	14.00%	4.49%	0.63%
Real Assets	14.00%	4.76%	0.67%
Private Equity	14.00%	9.94%	1.39%
MAPS - Multi-Asset Public Strategies	6.00%	3.29%	0.20%
PIP - Private Investment Partnership	3.00%	6.84%	0.21%
Total	100.00%		4.89%
		Inflation	2.50%
		*Expected arithmetic nominal return	7.39%

* The above allocation provides a one-year expected return of 7.39%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the System, stochastic projections are employed to model future returns under various economic conditions. These results provide a range of returns over various time periods that ultimately provide a median return of 6.94%, including expected inflation of 2.50%. On October 10, 2019, the VRS Board elected a long-term rate of return of 6.75%, which was roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation at that time, providing a median return of 7.11%, including expected inflation of 2.50%.

Note 8−Pension Plan: (Continued)

Discount Rate

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

Changes in Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at June 30, 2020	$ 24,919,702	$ 20,660,552	$ 4,259,150
Changes for the year:			
Service cost	$ 445,281	$ -	$ 445,281
Interest	1,639,131	-	1,639,131
Differences between expected and actual experience	403,391	-	403,391
Assumption changes	941,917		941,917
Contributions - employer	-	419,778	(419,778)
Contributions - employee	-	262,120	(262,120)
Net investment income	-	5,611,187	(5,611,187)
Benefit payments, including refunds	(1,272,555)	(1,272,555)	-
Administrative expenses	-	(14,163)	14,163
Other changes	-	527	(527)
Net changes	$ 2,157,165	$ 5,006,894	$ (2,849,729)
Balances at June 30, 2021	$ 27,076,867	$ 25,667,446	$ 1,409,421

Note 8−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 6.75%, as well as what the Authority's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (5.75%) or one percentage point higher (7.75%) than the current rate:

	Rate		
	1% Decrease (5.75%)	**Current Discount (6.75%)**	**1% Increase (7.75%)**
Rivanna Water & Sewer Authority's Net Pension Liability	$ 4,728,672	$ 1,409,421	$ (1,349,564)

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended June 30, 2022, the Authority recognized pension expense of $383,207. At June 30, 2022, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	**Deferred Inflows of Resources**
Differences between expected and actual experience	$ 240,733	$ 19,301
Changes in assumptions	562,112	-
Net difference between projected and actual earnings on pension plan investments	-	2,787,400
Employer contributions subsequent to the measurement date	455,293	-
Total	$ 1,258,138	$ 2,806,701

$455,293 reported as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the fiscal year ending June 30, 2023. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future reporting periods as follows:

Year ended June 30	
2023	$ (130,055)
2024	(377,056)
2025	(649,346)
2026	(847,399)
2027	-
Thereafter	-

Note 8−Pension Plan: (Continued)

Pension Plan Data

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

Note 9−Voluntary Early Retirement Incentive Program:

Rivanna Water and Sewer Authority has a Voluntary Early Retirement Incentive Program (VERIP) which provides for monthly payments to eligible employees for a period of up to five years after early retirement or until age 65, whichever comes first. Participants in the VERIP must be regular full-time employees eligible for early or full retirement under the provisions of the Virginia Retirement System (VRS) who have been employed by the Authority for 10 of the last 13 years prior to retirement. Employees retiring under the disability provisions of VRS and/or Social Security are not eligible for the VERIP. VERIP participants receive a stipend equal to the difference between (1) the annual VRS retirement benefit amount as reduced for early VRS retirement if appropriate and (2) the recomputed annual VRS benefit with the addition of the lesser of five more years of service or the number of additional years needed to reach age 65. The stipend is paid on a monthly basis. The participant may also receive a monthly payment equal to the amount of the Board's contribution toward an employee's health insurance, for as long as the employee is covered by VERIP benefits. Applications for the VERIP must be submitted to the Executive Director for approval. The Authority's estimated VERIP liability as of June 30, 2022 was $264,482. The amount payable within the next year is $119,142.

Note 10−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. The Authority joined together with other local governments in the Commonwealth to form the Virginia Risk Sharing Association, a public entity risk pool currently operating as a common risk management and insurance program for member governments. The Authority pays an annual premium to the pool for its workers compensation coverage, property and liability insurance. The Agreement for Formation of the association provides that the association will be self-sustaining through member premiums. Settled claims have not exceeded pool coverage in any of the past three fiscal years.

Note 11−Other Postemployment Benefits−Health Insurance:

The Authority previously provided post-retirement healthcare benefits for employees who were eligible under a single employer defined benefit plan. The Plan and benefits have been terminated. Therefore, the Authority has no assets or liabilities to report as of June 30, 2017 or subsequent years.

Note 12−Group Life Insurance (GLI) Plan (OPEB Plan):

Plan Description

The Group Life Insurance (GLI) Plan was established pursuant to §51.1-500 et seq. of the Code of Virginia, as amended, and which provides the authority under which benefit terms are established or may be amended. All full-time, salaried permanent employees of the state agencies, teachers, and employees of participating political subdivisions are automatically covered by the VRS GLI Plan upon employment. This is a cost-sharing multiple-employer plan administered by the Virginia Retirement System (the System), along with pensions and other OPEB plans, for public employer groups in the Commonwealth of Virginia.

In addition to the Basic GLI benefit, members are also eligible to elect additional coverage for themselves as well as a spouse or dependent children through the Optional GLI Plan. For members who elect the optional group life insurance coverage, the insurer bills employers directly for the premiums. Employers deduct these premiums from members' paychecks and pay the premiums to the insurer. Since this is a separate and fully insured plan, it is not included as part of the GLI Plan OPEB.

The specific information for GLI OPEB, including eligibility, coverage and benefits is described below:

Eligible Employees

The GLI Plan was established July 1, 1960, for state employees, teachers, and employees of political subdivisions that elect the Plan. Basic GLI coverage is automatic upon employment. Coverage ends for employees who leave their position before retirement eligibility or who take a refund of their accumulated retirement member contributions and accrued interest.

Benefit Amounts

The GLI Plan is a defined benefit plan with several components. The natural death benefit is equal to the employee's covered compensation rounded to the next highest thousand and then doubled. The accidental death benefit is double the natural death benefit. In addition to basic natural and accidental death benefits, the plan provides additional benefits provided under specific circumstances that include the following: accidental dismemberment benefit, seatbelt benefit, repatriation benefit, felonious assault benefit, and accelerated death benefit option. The benefit amounts are subject to a reduction factor. The benefit amount reduces by 25% on January 1 following one calendar year of separation. The benefit amount reduces by an additional 25% on each subsequent January 1 until it reaches 25% of its original value. For covered members with at least 30 years of service credit, the minimum benefit payable was set at $8,000 by statute in 2015. This will be increased annually based on the VRS Plan 2 cost-of-living adjustment calculation. The minimum benefit adjusted for the COLA was $8,722 as of June 30, 2022.

Note 12−Group Life Insurance (GLI) Plan (OPEB Plan): (Continued)

Contributions

The contribution requirements for the GLI Plan are governed by §51.1-506 and §51.1-508 of the Code of Virginia, as amended, but may be impacted as a result of funding provided to state agencies and school divisions by the Virginia General Assembly. The total rate for the GLI Plan was 1.34% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.80% (1.34% x 60%) and the employer component was 0.54% (1.34% x 40%). Employers may elect to pay all or part of the employee contribution; however, the employer must pay all of the employer contribution. Each employer's contractually required employer contribution rate for the year ended June 30, 2022 was 0.54% of covered employee compensation, based on an actuarially determined rate from an actuarial valuation as of June 30, 2019. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the GLI Plan from the entity were $33,670 and $30,919 for the years ended June 30, 2022 and June 30, 2021, respectively.

GLI OPEB Liabilities, GLI OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the GLI Plan OPEB

At June 30, 2022, the entity reported a liability of $325,297 for its proportionate share of the Net GLI OPEB Liability. The Net GLI OPEB Liability was measured as of June 30, 2021 and the total GLI OPEB liability used to calculate the Net GLI OPEB Liability was determined by an actuarial valuation performed as of June 30, 2020 and rolled forward to the measurement date of June 30, 2021. The covered employer's proportion of the Net GLI OPEB Liability was based on the covered employer's actuarially determined employer contributions to the GLI Program Plan for the year ended June 30, 2021, relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2021, the participating employer's proportion was 0.02794% as compared to 0.02707% at June 30, 2020.

For the year ended June 30, 2022, the participating employer recognized GLI OPEB expense of $21,978. Since there was a change in proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

Note 12−Group Life Insurance (GLI) Plan (OPEB Plan): (Continued)

GLI OPEB Liabilities, GLI OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the GLI Plan OPEB: (Continued)

At June 30, 2022, the employer reported deferred outflows of resources and deferred inflows of resources related to the GLI OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 37,101	$ 2,479
Net difference between projected and actual earnings on GLI OPEB plan investments	-	77,642
Change in assumptions	17,934	44,508
Changes in proportion	30,113	-
Employer contributions subsequent to the measurement date	33,670	-
Total	$ 118,818	$ 124,629

$33,670 reported as deferred outflows of resources related to the GLI OPEB resulting from the employer's contributions subsequent to the measurement date will be recognized as a reduction of the Net GLI OPEB Liability in the fiscal year ending June 30, 2023. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the GLI OPEB will be recognized in the GLI OPEB expense in future reporting periods as follows:

Year Ended June 30	
2023	$ (7,374)
2024	(4,629)
2025	(6,099)
2026	(19,399)
2027	(1,980)
Thereafter	-

Note 12−Group Life Insurance (GLI) Plan (OPEB Plan): (Continued)

Actuarial Assumptions

The total GLI OPEB liability was based on an actuarial valuation as of June 30, 2020, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2021. The assumptions include several employer groups. Salary increases and mortality rates included herein are for relevant employer groups. Information for other groups can be referenced in the VRS Annual Report.

Inflation	2.5%
Salary increases, including inflation	3.5%–5.35%
Investment rate of return	6.75%, net of investment expenses, including inflation

Mortality Rates – Non-Largest Ten Locality Employers – General Employees

Pre-Retirement:
Pub-2010 Amount Weighted Safety Employee Rates projected generationally; males set forward 2 years; 105% of rates for females set forward 3 years

Post-Retirement:
Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected generationally; 95% of rates for males set forward 2 years; 95% of rates for females set forward 1 year

Post-Disablement:
Pub-2010 Amount Weighted General Disabled Rates projected generationally; 110% of rates for males set forward 3 years; 110% of rates for females set forward 2 years

Beneficiaries and Survivors:
Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected generationally

Mortality Improvement Scale:
Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates

Note 12−Group Life Insurance (GLI) Plan (OPEB Plan): (Continued)

Actuarial Assumptions: (Continued)

Mortality Rates – Non-Largest Ten Locality Employers – General Employees (Continued)

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

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Update to Pub-2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age from 75 to 80 for all
Withdrawal Rates	Adjusted rates to better fit experience at each age and service decrement through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

Net GLI OPEB Liability

The net OPEB liability (NOL) for the GLI Plan represents the plan's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of the measurement date of June 30, 2021, NOL amounts for the GLI Plan are as follows (amounts expressed in thousands):

		GLI OPEB Plan
Total GLI OPEB Liability	$	3,577,346
Plan Fiduciary Net Position		2,413,074
GLI Net OPEB Liability (Asset)	$	1,164,272
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability		67.45%

The total GLI OPEB liability is calculated by the System's actuary, and each plan's fiduciary net position is reported in the System's financial statements. The net GLI OPEB liability is disclosed in accordance with the requirements of GASB Statement No. 74 in the System's notes to the financial statements and required supplementary information.

Note 12−Group Life Insurance (GLI) Plan (OPEB Plan): (Continued)

Long-Term Expected Rate of Return

The long-term expected rate of return on the System's investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of System's 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)	Long-Term Target Asset Allocation	Arithmetic Long-term Expected Rate of Return	Weighted Average Long-term Expected Rate of Return*
Public Equity	34.00%	5.00%	1.70%
Fixed Income	15.00%	0.57%	0.09%
Credit Strategies	14.00%	4.49%	0.63%
Real Assets	14.00%	4.76%	0.67%
Private Equity	14.00%	9.94%	1.39%
MAPS - Multi-Asset Public Strategies	6.00%	3.29%	0.20%
PIP - Private Investment Partnership	3.00%	6.84%	0.21%
Total	100.00%		4.89%
		Inflation	2.50%
		Expected arithmetic nominal return*	7.39%

*The above allocation provides a one-year return of 7.39%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the System, stochastic projections are employed to model future returns under various economic conditions. These results provide a range of returns over various time periods that ultimately provide a median return of 6.94%, including expected inflation of 2.50%. On October 10, 2019, the VRS Board elected a long-term rate of return of 6.75% which was roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation at the time, providing a median return of 7.11%, including expected inflation of 2.50%.

Note 12−Group Life Insurance (GLI) Plan (OPEB Plan): (Continued)

Discount Rate

The discount rate used to measure the total GLI OPEB liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that contributions will be made per the VRS guidance and the employer contributions will be made in accordance with the VRS funding policy and at rates equal to the actuarially determined contribution rates adopted by the VRS Board of Trustees. Through the fiscal year ended June 30, 2021, the rate contributed by the entity for the GLI OPEB will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly which was 100% of the actuarially determined contribution rate. From July 1, 2021 on, employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the GLI OPEB's fiduciary net position was projected to be available to make all projected future benefit payments of eligible employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total GLI OPEB liability.

Sensitivity of the Employer's Proportionate Share of the Net GLI OPEB Liability to Changes in the Discount Rate as of June 30, 2021

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

	Rate		
	1% Decrease (5.75%)	Current Discount (6.75%)	1% Increase (7.75%)
Authority's proportionate share of the GLI Plan Net OPEB Liability	$ 475,271	$ 325,297	$ 204,187

GLI Plan Fiduciary Net Position

Detailed information about the GLI Plan's Fiduciary Net Position is available in the separately issued VRS 2021 Annual Comprehensive Financial Report (Annual Report). A copy of the 2021 VRS Annual Report may be downloaded from the VRS website at https://www.varetire.org/pdf/publications/2021-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

Note 13−Related Parties:

Rivanna Solid Waste Authority (RSWA) and Rivanna Water and Sewer Authority (RWSA) share office space and administrative staff. Procedures are in place to ensure proper segregation of funds, purchasing activity, personnel and similar matters. RSWA pays RWSA monthly for its share of joint administrative expenses, which totaled $554,004 this fiscal year and $1,305 for leachate acceptance and treatment. Rivanna Solid Waste Authority billed Rivanna Water & Sewer Authority $28,027 for hauling and tipping fees. RSWA owed RWSA $69,424 as of June 30, 2022.

Note 14−Construction Commitments:

Rivanna Water and Sewer Authority had the following significant construction contract commitments for capital projects as of June 30, 2022:

Project		Remaining Commitment
Ragged Mtn Reservoir to Observatory WTP Raw Water Line	$	529,992
Ragged Mountain Reservoir to Observatory Raw Water Pump Stn		859,491
Observatory WTP Improvements		12,571,259
Central Water Line		1,243,151
Airport Rd. Pump Stn. & N. Rivanna Transmission Main		7,345,664
Emmet Street Waterline Betterment		761,927
South Rivanna WTP Improvements		2,079,618
MCAWRRF 5kV Electrical System Upgrade		4,449,715

These contracts give the Authority the right to terminate the contract for any reason.

Note 15−Fair Value Measures:

Fair value for investments is determined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. The three-level fair value hierarchy prioritizes the inputs used to measure fair value. This hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair value are as follows:

- Level 1 — Quoted prices (unadjusted) in active markets for identical assets or liabilities.

- Level 2 — Significant observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

Note 15−Fair Value Measures: (Continued)

- Level 3 — Significant unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

The Authority is providing the following information related to its investments:

		Fair Value Measurements at Reporting Date Using		
	Total June 30, 2022	**Quoted Prices in Active Markets for Identical Assets** (Level 1)	**Significant Other Observable Inputs** (Level 2)	**Significant Unobservable Inputs** (Level 3)
U.S. Treasury & Agency Money Market Funds	$ 9,524,730	$ 9,524,730	$ -	$ -
Total by fair value level	$ 9,524,730	$ 9,524,730	$ -	$ -
Investments measured at the net asset value (NAV)				
VML/VACo Virginia Investment Pool	$ 10,585,310			
Total measured at the NAV	$ 10,585,310			

Note 16−Leases:

Lessee

The Authority leases real property from the Rector and Visitors of the University of Virginia (UVA). The property consists of approximately seven acres of land, improvements, and appurtenances in Albemarle County upon which the Observatory Water Treatment Plant, Royal Pump Station, and Stadium Road Pump Station are located. The initial lease term is a 49-year period from July 1, 2020 to June 30, 2069. The lease will renew for an additional 50-year term from July 1, 2069 through June 30, 2119 under the same terms unless either party provides notice of a desire to terminate or to amend the terms. Such notice must be provided within 36 to 48 months prior to the end of the initial term. The lease requires RWSA to pay UVA $100,000 in 2020 and $175,000 in 2021 annually thereafter, subject to increase every 10 years based on the Consumer Price Index (CPI).

Note 16−Leases: (Continued)

Lessee (Continued)

Due to the implementation of GASB Statement No. 87 on July 1, 2021, the Authority recorded an initial lease liability and a right-of-use lease asset of $4,900,062, measured at the present value of payments expected to be made during the lease term at an interest rate of 2.56%. Future rent increases based on CPI have not been considered in the initial measurement of the lease liability. The right-of-use lease asset is being amortized over 48 years on the straight-line method. As of June 30, 2022, the value of the lease liability was $4,725,062, and the value of the right-of-use lease asset net of $102,085 accumulated amortization was $4,797,977. The future principal and interest payments as of June 30, 2022 were as follows:

Year Ending June 30,	Principal	Interest	Total
2023	$ 52,609	$ 122,391	$ 175,000
2024	53,972	121,028	175,000
2025	55,370	119,630	175,000
2026	56,804	118,196	175,000
2027	58,275	116,725	175,000
2028-2032	314,816	560,184	875,000
2033-2037	357,756	517,244	875,000
2038-2042	406,553	468,447	875,000
2043-2047	462,006	412,994	875,000
2048-2052	525,023	349,977	875,000
2053-2057	596,635	278,365	875,000
2058-2062	678,015	196,985	875,000
2063-2067	770,495	104,505	875,000
2068-2069	336,733	13,267	350,000
Total	$ 4,725,062	$ 3,499,938	$ 8,225,000

Lessor

The Authority owns two parcels of real estate in Albemarle County and the two water tank structures, Crozet Water Tank and South Rivanna Water Tank, located on those sites. The Authority leases portions of the sites and structures to Milestone Development, Inc. (Milestone) under two separate leases with the same terms. The initial lease term is a ten-year period from January 28, 2021 to January 28, 2031, with up to four (4) 5-year extension terms. The term is automatically extended as of the expiration of the then current term unless the lessee provides 30 days advance written notice of its intent not to renew. Monthly rent is equal to 75% of the collected gross revenues derived from the use, leasing or occupancy of the leased property. Milestone leases space on the water tank sites and structures (the Compounds) to telecommunications or other wireless communications providers (Carriers) in compliance with these water tank site leases. The Carriers may install antennas on the structures and construct equipment platforms to support their communications equipment within the Compounds. Milestone currently has 6 Carrier leases.

Note 16−Leases: (Continued)

Lessor (Continued)

On July 1, 2021, the Authority recorded an initial lease receivable and deferred inflow of resources of $1,959,786, as the present value of the future minimum rent payments expected to be received during the lease term. In fiscal year 2022, the Authority recognized $124,235 of lease revenue and $19,058 of interest revenue under these leases.

Note 17−COVID-19 Pandemic:

On March 11, 2020, the World Health Organization declared COVID-19 a pandemic, which has caused an economic downturn on a global scale, disrupted global supply chains, and created significant uncertainty, volatility, and disruption across economies and financial markets. The full impact of the COVID-19 outbreak continues to evolve as of the release date of this report. Management is monitoring the situation and impact that it may have on its financial condition, liquidity, operations, suppliers, industry, and workforce.

Note 18−Upcoming Pronouncements:

Statement No. 96, Subscription-Based Information Technology Arrangements (SBITAs), (1) defines a SBITA; (2) establishes that a SBITA results in a right-to-use subscription asset—an intangible asset—and a corresponding subscription liability; (3) provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and (4) requires note disclosures regarding a SBITA. The requirements of this Statement are effective for reporting periods beginning after June 15, 2022.

Statement No. 99, Omnibus 2022, addresses (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees. The effective dates differ based on the requirements of the Statement, ranging from April 2022 to for fiscal years beginning after June 15, 2023.

Statement No. 100, Accounting Changes and Error Corrections – an amendment of GASB Statement No. 62, provides more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability for accounting changes and error corrections. The requirements of this Statement are effective for fiscal years beginning after June 15, 2023.

Statement No. 101, Compensated Absences, updates the recognition and measurement guidance for compensated absences. It aligns the recognition and measurement guidance under a unified model and amends certain previously required disclosures. The requirements of this Statement are effective for fiscal years beginning after December 15, 2023.

Management is currently evaluating the impact these standards will have on the financial statements when adopted.

Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios
Pension Plan
For the Measurement Dates of June 30, 2014 through June 30, 2021

	2021	2020	2019	2018
Total pension liability				
Service cost	$ 445,281	$ 449,134	$ 416,525	$ 414,140
Interest	1,639,131	1,588,668	1,542,498	1,501,555
Changes in benefit terms	-	-	-	-
Differences between expected and actual experience	403,391	(56,781)	75,270	(211,755)
Changes of assumptions	941,917	-	655,287	-
Benefit payments	(1,272,555)	(1,194,287)	(1,184,605)	(1,053,473)
Net change in total pension liability	$ 2,157,165	$ 786,734	$ 1,504,975	$ 650,467
Total pension liability - beginning	24,919,702	24,132,968	22,627,993	21,977,526
Total pension liability - ending (a)	$ 27,076,867	$ 24,919,702	$ 24,132,968	$ 22,627,993
Plan fiduciary net position				
Contributions - employer	$ 419,778	$ 405,038	$ 388,000	$ 438,811
Contributions - employee	262,120	260,592	239,360	227,140
Net investment income	5,611,187	395,913	1,321,667	1,404,233
Benefit payments	(1,272,555)	(1,194,287)	(1,184,605)	(1,053,473)
Administrator charges	(14,163)	(13,678)	(13,329)	(12,231)
Other	527	(466)	(831)	(1,245)
Net change in plan fiduciary net position	$ 5,006,894	$ (146,888)	$ 750,262	$ 1,003,235
Plan fiduciary net position - beginning	20,660,552	20,807,440	20,057,178	19,053,943
Plan fiduciary net position - ending (b)	$ 25,667,446	$ 20,660,552	$ 20,807,440	$ 20,057,178
Authority's net pension liability - ending (a) - (b)	$ 1,409,421	$ 4,259,150	$ 3,325,528	$ 2,570,815
Plan fiduciary net position as a percentage of the total pension liability	94.79%	82.91%	86.22%	88.64%
Covered payroll	$ 5,768,536	$ 5,571,372	$ 5,175,437	$ 4,868,672
Authority's net pension liability as a percentage of covered payroll	24.43%	76.45%	64.26%	52.80%

This schedule is intended to report information for 10 years. Information prior to the 2014 valuation is not available. However, additional years will be included as they become available.

Schedule of Changes in Net Pension Liability and Related Ratios
Pension Plan
For the Measurement Dates of June 30, 2014 through June 30, 2021

	2017	2016	2015	2014
Total pension liability				
Service cost	$ 398,833	$ 420,980	$ 397,302	$ 408,618
Interest	1,465,426	1,376,398	1,308,253	1,243,939
Changes in benefit terms	-	-	-	-
Differences between expected and actual experience	(123,760)	343,405	43,130	-
Changes of assumptions	(241,172)	-	-	-
Benefit payments	(912,902)	(825,031)	(725,341)	(742,220)
Net change in total pension liability	$ 586,425	$ 1,315,752	$ 1,023,344	$ 910,337
Total pension liability - beginning	21,391,101	20,075,349	19,052,005	18,141,668
Total pension liability - ending (a)	$ 21,977,526	$ 21,391,101	$ 20,075,349	$ 19,052,005
Plan fiduciary net position				
Contributions - employer	$ 423,473	$ 448,728	$ 434,762	$ 428,309
Contributions - employee	237,015	216,819	230,505	204,334
Net investment income	2,098,047	298,454	754,877	2,256,556
Benefit payments	(912,902)	(825,031)	(725,341)	(742,220)
Administrator charges	(12,137)	(10,631)	(10,246)	(12,143)
Other	(1,862)	(126)	(160)	119
Net change in plan fiduciary net position	$ 1,831,634	$ 128,213	$ 684,397	$ 2,134,955
Plan fiduciary net position - beginning	17,222,309	17,094,096	16,409,699	14,274,744
Plan fiduciary net position - ending (b)	$ 19,053,943	$ 17,222,309	$ 17,094,096	$ 16,409,699
Authority's net pension liability - ending (a) - (b)	$ 2,923,583	$ 4,168,792	$ 2,981,253	$ 2,642,306
Plan fiduciary net position as a percentage of the total pension liability	86.70%	80.51%	85.15%	86.13%
Covered payroll	$ 4,613,774	$ 4,403,235	$ 4,232,146	$ 4,087,133
Authority's net pension liability as a percentage of covered payroll	63.37%	94.68%	70.44%	64.65%

This schedule is intended to report information for 10 years. Information prior to the 2014 valuation is not available. However, additional years will be included as they become available.

RIVANNA WATER & SEWER AUTHORITY

Schedule of Employer Contributions
Pension Plan
For the Years Ended June 30, 2013 through June 30, 2022

Fiscal Year	Contractually Required Contribution (1)*	Contributions in Relation to Contractually Required Contribution (2)*	Contribution Deficiency (Excess) (3)	Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (5)
2022	$ 455,293	$ 455,293	$ -	$ 6,281,607	7.25%
2021	419,777	419,777	-	5,768,536	7.28%
2020	403,941	403,941	-	5,571,372	7.25%
2019	389,097	389,097	-	5,175,437	7.52%
2018	438,760	438,760	-	4,868,672	9.01%
2017	423,477	423,477	-	4,613,774	9.18%
2016	451,771	451,771	-	4,403,235	10.26%
2015	435,295	435,295	-	4,232,146	10.29%
2014	428,317	428,317	-	4,087,133	10.48%
2013	426,490	426,490	-	4,078,576	10.46%

* Excludes contributions (mandatory and match on voluntary) to the defined contribution portion of the Hybrid plan.

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

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

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

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Update to Pub-2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age
Withdrawal Rates	Adjusted rates to better fit experience at each age and service decrement through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

RIVANNA WATER & SEWER AUTHORITY

Schedule of Authority's Share of Net OPEB Liability
Group Life Insurance (GLI) Plan
For the Measurement Dates of June 30, 2017 through June 30, 2021

Date (1)	Employer's Proportion of the Net GLI OPEB Liability (Asset) (2)	Employer's Proportionate Share of the Net GLI OPEB Liability (Asset) (3)	Employer's Covered Payroll (4)	Employer's Proportionate Share of the Net GLI OPEB Liability (Asset) as a Percentage of Covered Payroll (3)/(4) (5)	Plan Fiduciary Net Position as a Percentage of Total GLI OPEB Liability (6)
2021	0.02794%	$ 325,297	$ 5,768,536	5.64%	67.45%
2020	0.02707%	451,754	5,571,372	8.11%	52.64%
2019	0.02636%	428,948	5,175,437	8.29%	52.00%
2018	0.02561%	389,000	4,868,672	7.99%	51.22%
2017	0.02503%	376,000	4,613,774	8.15%	48.86%

Schedule is intended to show information for 10 years. Information prior to the 2017 valuation is not available. However, additional years will be included as they become available.

RIVANNA WATER & SEWER AUTHORITY

Schedule of Employer Contributions
Group Life Insurance (GLI) Plan
For the Years Ended June 30, 2017 through June 30, 2022

Date	Contractually Required Contribution (1)	Contributions in Relation to Contractually Required Contribution (2)	Contribution Deficiency (Excess) (3)	Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (5)
2022	$ 33,670	$ 33,670	$ -	$ 6,281,607	0.54%
2021	30,919	30,919	-	5,768,536	0.54%
2020	29,203	29,203	-	5,571,372	0.52%
2019	27,074	27,074	-	5,175,437	0.52%
2018	25,512	25,512	-	4,868,672	0.52%
2017	24,197	24,197	-	4,613,774	0.52%

Schedule is intended to show information for 10 years. Information prior to 2017 is unavailable.
However, additional years will be included as they become available.

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

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

Non-Largest Ten Locality Employers - General Employees:

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Update to Pub-2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age from 75 to 80 for all
Withdrawal Rates	Adjusted rates to better fit experience at each age and service decrement through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

Statistical Section

Sources: Unless otherwise noted, the information in these tables is derived from the annual comprehensive financial reports for the relevant year.

RIVANNA WATER & SEWER AUTHORITY **Table 1**

Net Position by Component
Last Ten Fiscal Years

	Fiscal Years Ended June 30,									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Net investment in capital assets	$ 127,517,995	$ 126,518,011	$ 117,610,026	$ 111,443,845	$ 112,898,791	$ 103,493,259	$ 97,972,502	$ 97,345,270	$ 90,167,529	$ 85,187,524
Restricted	4,581,454	4,726,258	4,552,818	4,278,445	3,794,293	3,729,350	3,335,539	2,940,314	2,870,788	2,782,090
Unrestricted	32,759,523	28,925,839	34,534,991	36,545,939	30,379,882	34,540,998	34,346,555	30,488,358	35,760,052	33,625,558
Total net position	$ 164,858,972	$ 160,170,108	$ 156,697,835	$ 152,268,229	$ 147,072,966	$ 141,763,607	$ 135,654,596	$ 130,773,942	$ 128,798,369	$ 121,595,172

RIVANNA WATER & SEWER AUTHORITY **Table 2**

Changes in Net Position
Last Ten Fiscal Years

	Fiscal Years Ended June 30,									
	2022	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
Operating revenues:										
Metered water sales	$ 19,279,042	$ 16,395,335	$ 16,196,450	$ 15,216,180	$ 14,034,080	$ 13,753,977	$ 13,014,328	$ 12,555,666	$ 11,353,630	$ 11,728,840
Wastewater service charges	18,694,954	18,887,091	17,999,007	18,821,857	14,858,101	14,444,159	14,799,741	13,625,855	14,620,353	13,889,105
Total operating revenues	$ 37,973,996	$ 35,282,426	$ 34,195,457	$ 34,038,037	$ 28,892,181	$ 28,198,136	$ 27,814,069	$ 26,181,521	$ 25,973,983	$ 25,617,945
Operating expenses:										
Personnel costs	$ 9,478,916	$ 9,315,313	$ 8,693,477	$ 7,728,340	$ 7,385,978	$ 7,483,807	$ 6,155,243	$ 5,878,175	$ 5,756,273	$ 5,928,994
Professional services	925,766	1,062,473	1,048,839	994,207	738,823	885,072	602,891	473,193	418,858	282,427
Other services and charges	4,275,419	3,812,208	3,676,790	3,770,051	3,341,421	2,764,905	2,607,118	2,532,408	2,683,136	2,430,718
Operations and maintenance	5,579,336	5,825,420	5,423,447	5,799,962	4,169,065	4,214,246	4,710,701	3,991,590	3,543,311	3,383,574
Depreciation and amortization	7,878,076	7,620,209	7,330,242	6,704,908	5,773,757	5,411,996	5,396,029	4,983,753	4,662,094	3,601,730
Total operating expenses	$ 28,137,513	$ 27,635,623	$ 26,172,795	$ 24,997,468	$ 21,409,044	$ 20,760,026	$ 19,471,982	$ 17,859,119	$ 17,063,672	$ 15,627,443
Operating income	$ 9,836,483	$ 7,646,803	$ 8,022,662	$ 9,040,569	$ 7,483,137	$ 7,438,110	$ 8,342,087	$ 8,322,402	$ 8,910,311	$ 9,990,502
Nonoperating revenues (expenses):										
Investment earnings	$ 222,088	$ 125,631	$ 1,243,884	$ 1,599,486	$ 525,039	$ 296,433	$ 369,675	$ 82,083	$ 92,839	$ 157,526
Interest revenue - leases	19,058									
Buck Mountain revenue	-	-	57,100	111,700	125,900	115,700	84,000	74,900	89,000	78,000
Administrative reimbursement	557,071	561,473	471,937	474,246	436,329	328,000	299,000	265,000	257,000	257,000
Lease revenue	143,451	100,804	114,826	105,206	94,609	75,461	61,545	71,934	70,242	67,522
Other revenues	245,766	546,217	473,320	275,531	208,311	230,212	308,628	265,214	181,131	157,512
Interest expense	(6,132,303)	(5,495,857)	(5,733,428)	(5,947,988)	(2,643,801)	(2,248,229)	(4,027,843)	(3,608,072)	(2,336,245)	(2,552,331)
Debt issuance costs	(518,307)	(90,298)	(220,695)	(463,487)	-	(126,766)	(556,438)	(59,273)	(61,081)	(580,404)
Total nonoperating revenues (expenses)	$ (5,463,176)	$ (4,252,030)	$ (3,593,056)	$ (3,845,306)	$ (1,253,613)	$ (1,329,189)	$ (3,461,433)	$ (2,908,214)	$ (1,707,114)	$ (2,415,175)
Income before capital grants and contributions	$ 4,373,307	$ 3,394,773	$ 4,429,606	$ 5,195,263	$ 6,229,524	$ 6,108,921	$ 4,880,654	$ 5,414,188	$ 7,203,197	$ 7,575,327
Capital grants	315,557	77,500	-	-	-	-	-	-	-	226,265
Change in net position	$ 4,688,864	$ 3,472,273	$ 4,429,606	$ 5,195,263	$ 6,229,524	$ 6,108,921	$ 4,880,654	$ 5,414,188	$ 7,203,197	$ 7,801,592

RIVANNA WATER & SEWER AUTHORITY **Table 3**

Revenues by Source
Last Ten Fiscal Years

Fiscal Years Ended June 30,	Operating Revenues: Water Sales	Operating Revenues: Wastewater Service Charges	Operating Revenues: Total Operating Revenues	Nonoperating Revenues: Investment Earnings	Nonoperating Revenues: Interest Revenue-Leases	Nonoperating Revenues: Buck Mountain Revenue	Nonoperating Revenues: Administrative Reimbursement	Nonoperating Revenues: Lease Revenue	Nonoperating Revenues: Other Revenue	Nonoperating Revenues: Total Nonoperating Revenues	Other: Capital Grants and Contributions	Total Revenues
2013	$ 11,728,840	$ 13,889,105	$ 25,617,945	$ 157,526	$ -	$ 78,000	$ 257,000	$ 67,522	$ 157,512	$ 717,560	$ 226,265	$ 26,561,770
2014	11,353,630	14,620,353	25,973,983	92,839	-	89,000	257,000	70,242	181,131	690,212	-	26,664,195
2015	12,555,666	13,625,855	26,181,521	82,083	-	74,900	265,000	71,934	265,214	759,131	-	26,940,652
2016	13,014,328	14,799,741	27,814,069	369,675	-	84,000	299,000	61,545	308,628	1,122,848	-	28,936,917
2017	13,753,977	14,444,159	28,198,136	296,433	-	115,700	328,000	75,461	230,302	1,045,896	-	29,244,032
2018	14,034,080	14,858,101	28,892,181	525,039	-	125,900	436,329	94,609	208,311	1,390,188	-	30,282,369
2019	15,216,180	18,821,857	34,038,037	1,599,486	-	111,700	474,246	105,206	275,531	2,566,169	-	36,604,206
2020	16,196,450	17,999,007	34,195,457	1,243,884	-	57,100	471,937	114,826	473,320	2,361,067	-	36,556,524
2021	16,395,335	18,887,091	35,282,426	125,631	-	-	561,473	100,804	546,217	1,334,125	77,500	36,694,051
2022	19,279,042	18,694,954	37,973,996	222,088	19,058	-	557,071	143,451	245,766	1,187,434	-	39,161,430

Water and Wastewater Rates and Flows
Last Ten Fiscal Years

	Fiscal Years Ended June 30,									
	2022	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
Rates:							***Note 1 (7/1-10/31/15)			
Urban Water - City (per 1,000 gallons)	***	***	***	***	***	***	$ 2.756	$ 2.663	$ 2.341	$ 2.443
Urban Water - ACSA (per 1,000 gallons)	***	***	***	***	***	***	$ 3.795	$ 3.687	$ 3.333	$ 3.465
Crozet Water (per month)	$ 242,224	$ 195,010	$ 195,010	$ 162,746	$ 133,901	$ 124,149	$ 111,330	$ 91,942	$ 84,630	$ 82,916
Scottsville Water (per month)	$ 54,466	$ 54,130	$ 54,130	$ 47,717	$ 45,140	$ 43,382	$ 49,012	$ 41,343	$ 41,047	$ 36,280
Urban Wastewater - City (per 1,000 gallons)	***	***	***	***	***	***	$ 3.954	$ 3.822	$ 3.593	$ 3.565
Urban Wastewater - ACSA (per 1,000 gallons)	***	***	***	***	***	***	$ 3.560	$ 3.435	$ 3.463	$ 3.732
Glenmore Wastewater (per month)	$ 34,287	$ 31,192	$ 31,192	$ 31,192	$ 29,494	$ 26,694	$ 25,211	$ 24,451	$ 24,189	$ 23,436
Scottsville Wastewater (per month)	$ 28,013	$ 26,536	$ 26,536	$ 25,823	$ 24,410	$ 21,941	$ 21,425	$ 28,879	$ 28,295	$ 27,619

***Note 1:
The Fiscal Year 2016 Urban Water and Urban Wastewater rates were revised from the above stated rates to the following rates, effective 11/1/15-6/30/16:
In FY 2016, the Board of Directors amended the Service Agreement to go from a rate per 1,000 gallons to a fixed monthly charge for all debt service costs.
Urban rates are stated below along with prior years' rates restated below as fixed monthly charges for comparison purposes based on estimated flows.

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
***Urban Rates:										
Urban Water:										
Operations - City & ACSA (per 1,000 gallons)	$ 2.346	$ 2.095	$ 2.070	$ 1.969	$ 1.833	$ 1.713	$ 1.683	$ 1.462	$ 1.320	$ 1.315
Debt Service - City (per month)	$ 246,188	$ 193,580	$ 181,008	$ 160,039	$ 162,968	$ 158,099	$ 148,549	$ 133,156	$ 173,354	$ 177,435
Debt Service - ACSA (per month)	$ 388,956	$ 321,303	$ 307,598	$ 285,439	$ 284,031	$ 279,864	$ 269,379	$ 251,418	$ 282,114	$ 267,054
Urban Wastewater:										
Operations - City & ACSA (per 1,000 gallons)	$ 2.517	$ 2.369	$ 2.146	$ 1.951	$ 1.835	$ 1.789	$ 1.768	$ 1.827	$ 1.869	$ 1.734
Debt Service - City (per month)	* $ 376,036	$ 407,588	$ 408,260	$ 392,841	$ 369,037	$ 333,645	$ 310,678	$ 272,220	$ 254,371	$ 224,549
Debt Service - ACSA (per month)	* $ 337,983	$ 278,174	$ 246,308	$ 222,550	$ 222,280	$ 232,493	$ 223,598	$ 214,771	$ 228,557	$ 189,209

*FY 2022 Urban Wastewater Debt Service rates above reflect mid-year rate change effective October 1, 2021

	Fiscal Years Ended June 30,									
	2022	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
Flows (in million gallons per day):										
Urban Water	9.456	9.451	9.191	8.967	9.100	9.535	9.359	9.540	9.618	9.647
Crozet Water	0.674	0.641	0.599	0.563	0.532	0.544	0.541	0.546	0.566	0.503
Scottsville Water	0.057	0.055	0.049	0.043	0.045	0.050	0.048	0.049	0.056	0.053
	10.186	10.147	9.839	9.573	9.677	10.129	9.948	10.135	10.240	10.203
Urban Wastewater	9.541	10.566	9.822	12.530	9.083	9.483	10.352	9.481	10.566	9.719
Glenmore Wastewater	0.092	0.117	0.098	0.138	0.120	0.107	0.107	0.101	0.114	0.121
Scottsville Wastewater	0.049	0.080	0.057	0.086	0.056	0.053	0.071	0.050	0.066	0.050
	9.682	10.762	9.977	12.754	9.259	9.643	10.530	9.632	10.746	9.890

RIVANNA WATER & SEWER AUTHORITY **Table 5**

Ten Largest Customers
Current Year and Nine Years Ago

	Fiscal Year 2022 (Current Year)					
	Water Revenue			Wastewater Revenue		
	Amount		%	Amount		%
Albemarle County Service Authority	$	12,403,735	64.34%	$	9,520,032	50.92%
City of Charlottesville	$	6,875,307	35.66%	$	8,578,416	45.89%
Others	$	-	0.00%	$	596,506	3.19%
	$	19,279,042	100.00%	$	18,694,954	100.00%

	Fiscal Year 2013 (Nine Years Ago)					
	Water Revenue			Wastewater Revenue		
	Amount		%	Amount		%
Albemarle County Service Authority	$	4,193,865	50.79%	$	3,332,575	45.56%
City of Charlottesville	$	4,063,593	49.21%	$	3,632,099	49.66%
Others	$	-	0.00%	$	349,854	4.78%
	$	8,257,458	100.00%	$	7,314,528	100.00%

Note: The Authority's two wholesale customers, which are both governmental entities, provided 100% of water revenue and 96.8% of wastewater revenue in FY 2022 and 95.2% in FY 2013. The remaining wastewater revenue came from septage acceptance customers. Due to lack of materiality, the number of customers by type that provide that revenue is not presented here.

RIVANNA WATER & SEWER AUTHORITY **Table 6**

Expenses by Type
Last Ten Fiscal Years

Fiscal Years Ended June 30,	Operations	Depreciation and Amortization	Interest	Debt Issuance Costs	Total
2013	$ 12,025,713	$ 3,601,730	$ 2,552,331	$ 580,404	$ 18,760,178
2014	12,401,578	4,662,094	2,336,245	61,081	19,460,998
2015	12,875,366	4,983,753	3,608,072	59,273	21,526,464
2016	14,075,953	5,396,029	4,027,843	556,438	24,056,263
2017	15,348,030	5,411,996	2,248,229	126,766	23,135,021
2018	15,635,287	5,773,757	2,643,801	-	24,052,845
2019	18,292,560	6,704,908	5,947,988	463,487	31,408,943
2020	18,842,553	7,330,242	5,733,428	220,695	32,126,918
2021	20,015,414	7,620,209	5,495,857	90,298	33,221,778
2022	20,259,437	7,878,076	6,132,303	518,307	34,788,123

RIVANNA WATER & SEWER AUTHORITY **Table 7**

Outstanding Debt by Type
Last Ten Fiscal Years

	Fiscal Years Ended June 30,									
	2022	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
Revenue bonds payable	$ 214,048,520	$ 182,660,858	$ 191,337,136	$ 200,123,490	$ 167,896,198	$ 173,020,453	$ 160,512,250	$ 124,670,205	$ 125,680,526	$ 127,548,686
Total outstanding debt	$ 214,048,520	$ 182,660,858	$ 191,337,136	$ 200,123,490	$ 167,896,198	$ 173,020,453	$ 160,512,250	$ 124,670,205	$ 125,680,526	$ 127,548,686
Debt per capita	$ 1,358	$ 1,159	$ 1,222	$ 1,284	$ 1,082	$ 1,128	$ 1,060	$ 835	$ 853	$ 873
Debt as a percentage of personal income	1.8%	1.5%	1.6%	1.7%	1.5%	1.7%	1.7%	1.4%	1.5%	1.5%

Notes:
Debt per capita was calculated based on population figures for the calendar year (CY) ending within the fiscal year (FY) obtained from U.S. Department of Commerce - Bureau of Economic Analysis for the City of Charlottesville and County of Albemarle. See Table 9.

Debt as a percentage of personal income was calculated based on personal income for the CY ending within the FY obtained from U.S. Department of Commerce - Bureau of Economic Analysis for the City of Charlottesville and County of Albemarle. See Table 9.

RIVANNA WATER & SEWER AUTHORITY **Table 8**

Revenue Bond Debt Service Coverage
Last Ten Fiscal Years

Fiscal Years Ended June 30,	Gross Revenue (1)	Direct Operating Expense (2)	Net Available	Required Debt Service Payments (3)	Coverage
2013	$ 26,335,505	$ 12,025,713	$ 14,309,792	$ 8,234,169	1.7X
2014	26,664,195	12,401,578	14,262,617	9,089,702	1.6X
2015	26,940,652	12,875,366	14,065,286	9,094,732	1.5X
2016	28,936,917	14,075,953	14,860,964	9,567,370	1.6X
2017	29,244,032	15,348,030	13,896,002	11,912,673	1.2X
2018	30,282,369	15,635,287	14,647,082	12,370,197	1.2X
2019	36,604,206	18,292,560	18,311,646	13,087,353	1.4X
2020	36,556,524	18,842,553	17,713,971	14,311,024	1.2X
2021	36,616,551	20,015,414	16,601,137	14,260,273	1.2X
2022	39,161,430	20,259,437	18,901,993	14,837,074	1.3X

(1) Excluding grant revenue
(2) Excluding depreciation expense
(3) Including payments on revenue bonds and excluding any refunding since the payments were not required to be made in that year

RIVANNA WATER AND SEWER AUTHORITY **Table 9**

Demographic Data for the Service Area
City of Charlottesville & Albemarle County, Virginia
Last Ten Calendar Years

Calendar Year	Population (2)	Personal Income (thousands of $) (2)	Per Capita Personal Income ($) (2)	Unemployment Rate (1)
2011	143,974	7,657,164	53,184	5.9%
2012	146,044	8,457,472	57,910	5.4%
2013	147,282	8,329,280	56,553	4.9%
2014	149,250	8,936,944	59,879	4.5%
2015	151,418	9,518,529	62,863	3.9%
2016	153,374	10,184,984	66,406	3.5%
2017	155,231	11,143,225	71,785	3.3%
2018	155,883	11,900,382	76,342	2.7%
2019	156,596	12,160,701	77,657	2.4%
2020	157,602	12,230,910	77,606	5.7%
2021	not available	not available	not available	3.4%

Sources:
(1) Virginia Employment Commission, Economic Information & Analytics, Quarterly Census of Employment and Wages - for Charlottesville Metropolitan Service Area (MSA)
(2) U.S. Department of Commerce - Bureau of Economic Analysis - for City of Charlottesville and Albemarle County

RIVANNA WATER & SEWER AUTHORITY

Table 10

Principal Employers in the Charlottesville Area
Current Year and Nine Years Ago

Employer	First Quarter of 2022 Number of Employees	First Quarter of 2022 Rank	Fourth Quarter of 2012 Number of Employees	Fourth Quarter of 2012 Rank
University of Virginia/ Blue Ridge Hospital	1,000 & over	1	1,000 & over	1
University of Virginia Medical Center			1,000 & over	2
County of Albemarle	1,000 & over	2	1,000 & over	3
Sentara Health Care	1,000 & over	3		
Martha Jefferson Hospital			1,000 & over	4
UVA Health Services Foundation	1,000 & over	4	1,000 & over	5
City of Charlottesville	1,000 & over	5	1,000 & over	6
State Farm Mutual Automobile Insurance			1,000 & over	7
Charlottesville City School Board	1,000 & over	6	500-999	8
U.S. Department of Defense	500-999	7	500-999	9
Wal Mart	250-499	8		
Food Lion	250-499	9		
Servicelink Management Com Inc	500-999	10		
Fluvanna County Public School Board			500-999	10

Source: Virginia Employment Commission, Economic Information & Analytics, Quarterly Census of Employment and Wages - for Charlottesville Metropolitan Service Area (MSA)

Each employer's percentage of total employment is not available.

RIVANNA WATER & SEWER AUTHORITY **Table 11**

Number of Employees by Indentifiable Activity
Last Ten Fiscal Years

	Fiscal Years Ended June 30,									
	2022	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
Number of budgeted full-time equivalent positions:										
Water (2)	26	26	26	26	25	23	23	23	22	23
Wastewater	16	16	16	16	16	17	17	17	17	18
Operations Management (2)	1	1	1	1	1	2	2	2	2	2
Administration & IT (3)	19	17	17	17	16	15	13	12	12	12
Laboratory	4	4	4	3	3	3	3	3	3	3
Director of Engineering & Maintenance	1	1	1	1						
Engineering	13	12	11	10	11	9	9	9	9	9
Maintenance (1)	16	16	17	17	16	16	17	17	17	16
Total	96	93	93	91	88	85	84	83	82	83

(1) Maintenance includes mechanics and maintenance workers for Water and Wastewater.

(2) The Water Resources Manager was reclassified from Operations Management to Engineering effective in fiscal year ended June 30, 2018.

(3) Administration staff is shared with Rivanna Solid Waste Authority.

Source: The above information is summarized from annual budgets.

RIVANNA WATER & SEWER AUTHORITY **Table 12**

Operating and Capital Indicators
Last Ten Fiscal Years

	Fiscal Years Ended June 30,									
	2022	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
Water										
Size of watershed (square miles)	766	766	766	766	766	766	766	766	766	766
Raw water safe yield (mgd)										
Urban system	18.8	18.8	18.8	18.8	18.8	18.8	18.8	12.8	12.8	12.8
Rural system	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Miles of pipelines	67.0	67.0	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3
Number of treatment plants	5	5	5	5	5	5	5	5	5	5
Number of pumping stations	7	7	7	7	7	7	7	7	7	7
Number of reservoirs	5	5	5	5	5	5	5	5	5	5
Number of finished water storage tanks	11	11	11	11	11	11	11	11	11	11
Maximum treatment capacity (mgd)	23.306	22.956	22.750	22.750	22.750	22.750	22.750	22.750	22.750	22.750
Water treated (mgd)	10.186	10.147	9.839	9.573	9.677	10.129	9.948	10.135	10.240	10.203
Unused capacity (mgd)	13.120	12.809	12.911	13.177	13.073	12.621	12.802	12.615	12.510	12.547
Percentage of capacity utilized	43.71%	44.20%	43.25%	42.08%	42.54%	44.52%	43.73%	44.55%	45.01%	44.85%
Wastewater										
Miles of pipelines	37	37	37	37	37	37	37	37	37	37
Number of treatment plants	4	4	4	4	4	4	4	4	4	4
Number of pumping stations	7	7	7	7	7	7	7	7	7	7
Maximum treatment capacity (mgd)	15.486	15.486	15.945	15.945	15.945	15.945	15.945	15.945	15.945	15.945
Wastewater treated (mgd)	9.682	10.762	9.977	12.754	9.259	9.643	10.561	9.632	10.746	9.890
Unused capacity (mgd)	5.804	4.724	5.968	3.191	6.686	6.302	5.384	6.313	5.199	6.055
Percentage of capacity utilized	62.52%	69.50%	62.57%	79.99%	58.07%	60.48%	66.23%	60.41%	67.39%	62.03%

Notes mgd = millions of gallons per day
Safe yield is a measure of raw water resources during a drought of record.

Source: Internal reports and records

RIVANNA WATER & SEWER AUTHORITY **Table 13**

Miscellaneous Statistical Data
Albemarle County Service Authority

Year of Incorporation: 1964

Type of Entity:
Independent authority created pursuant to the "Virginia Water & Waste Authorities Act",
Section 15.1-1239, Code of Virginia (1950), as amended

Number of water connections	21,595
Number of sewer connections	18,611
Miles of water lines	374
Miles of sewer lines	324
Number of fire hydrants	3,137

Rates (effective FY 2022) per 1,000 gallons metered consumption

Water

Residential Water Rates and all irrigation usage:	
Level 1 (0-3,000 gallons per month)	$4.70
Level 2 (3,001-6,000 gallons per month)	$9.43
Level 3 (6,001-9,000 gallons per month)	$14.13
Level 4 (over 9,000 gallons per month)	$18.86
Non-Residential and Multi-Family Residential Water Rate (except irrigation water)	$9.09
Wastewater	$9.94

Ten Largest Customers in FY 2022

	Water			Wastewater		
	Billed (in gallons)	**Rank**	**Percentage of Total**	**Billed (in gallons)**	**Rank**	**Percentage of Total**
University of Virginia	27,168,485	1	1.53%	26,199,487	2	1.69%
SEMF Charleston	22,579,303	2	1.27%	22,579,303	3	1.46%
Southwood Mobile Homes	21,831,000	3	1.23%	47,324,231	1	3.05%
Martha Jefferson Hospital	21,519,595	4	1.21%			
Abbington Crossing	20,913,323	5	1.18%	20,913,323	4	1.35%
Four Seasons Apts.	18,582,556	6	1.05%	18,582,556	5	1.20%
Old Salem Apts	18,313,700	7	1.03%	18,313,700	6	1.18%
Westminster Canterbury	17,623,050	8	0.99%	15,875,050	7	1.02%
County of Albemarle	16,665,097	9	0.94%			
ACRJ	16,113,290	10	0.91%	14,773,290	9	0.95%
Turtle Creek Apts.				15,459,435	8	1.00%
Westgate Apts.				14,731,875	10	0.95%
	201,309,399		11.34%	214,752,250		13.85%

Miscellaneous Statistical Data
City of Charlottesville, Virginia

Date of incorporation	1888
Date present charter adopted	1976
Form of government	Council Manager
Area	10.4 square miles
Miles of streets	159.91
Number of water customers	14,791
Number of sewer customers	14,691
Miles of water lines	184
Miles of sanitary sewer lines	173
Number of fire hydrants	1187
Bond Rating	AAA/Aaa

Rates FY 2022 per 1,000 cubic feet:

Water	
May - Sept.	$ 70.08
Oct. - Apr.	$ 53.91
Wastewater	$ 81.34

Ten Largest Customers in Fiscal Year 2022:

	Water			**Wastewater**		
	Water Consumption (in cubic feet)	**Billed Revenue**	**Percentage of Total Revenue**	**Wastewater Treated (in cubic feet)**	**Billed Revenue**	**Percentage of Total Revenue**
University of Virginia	53,635,700	$ 3,362,229	23.86%	53,632,484	$ 4,398,642	29.14%
Pepsi Cola	4,153,800	265,053	1.88%	1,387,700	114,387	0.76%
Charlottesville Redevelopment and Housing	2,459,712	154,683	1.10%	2,459,712	206,205	1.37%
Community Housing/Greenstone	1,775,057	124,056	0.88%	1,775,057	150,754	1.00%
Woodard Properties	1,754,848	126,935	0.90%	1,754,848	152,392	1.01%
Cannon Hearthwood	1,599,704	108,105	0.77%	1,599,704	132,583	0.88%
City of Charlottesville	1,571,483	117,488	0.83%	1,206,959	110,322	0.73%
Breit SH Grand Marc at the Corner	1,309,290	84,690	0.60%	1,309,290	108,134	0.72%
Management Services Corp	1,275,641	90,372	0.64%	1,220,553	103,472	0.69%
City Schools	1,245,900	88,229	0.63%	1,075,880	96,393	0.64%
	70,781,135	$ 4,521,840	32.09%	67,422,187	$ 5,573,282	36.92%

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ROBINSON, FARMER, COX ASSOCIATES, PLLC

Certified Public Accountants

CPAs | CONSULTANTS

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

To the Board of Directors
Rivanna Water & Sewer Authority
Charlottesville, Virginia

We have audited, in accordance with the auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the *Specifications for Audits of Authorities, Boards, and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia, the financial statements of the business-type activities of Rivanna Water & Sewer Authority, as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise Rivanna Water & Sewer Authority's basic financial statements and have issued our report thereon dated October 31, 2022.

Report on Internal Control over Financial Reporting

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

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

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

Report on Compliance and Other Matters

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

Purpose of This Report

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

Robinson, Farmer, Cox Associates

Charlottesville, Virginia
October 31, 2022