Appomattox River Water Authority

Financial Report Year Ended June 30, 2021



S. Chesterfield, Virginia

(A Public Body chartered November 21, 1960 Under the Water and Waste Authorities Act of 1950 of the Commonwealth of Virginia)

- Board of Directors -

Douglas E. Smith, Chairman *City of Colonial Heights*

W. Kevin Massengill, Vice Chairman *Dinwiddie County*

Frank Haltom, Secretary-Treasurer (alternate) Prince George County

> Dr. Joseph Casey, Member Chesterfield County

Lionel Lyons, Member *City of Petersburg*

Percy Ashcraft, Member Prince George County

- Officials -

Robert B. Wilson, P.E., Executive Director

James C. Gordon, Assistant Executive Director

USBank, Trustee

McGuire Woods, Counsel

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ROBINSON, FARMER, COX ASSOCIATES, PLLC

Certified Public Accountants

Independent Auditors' Report

To the Honorable Members of Appomattox River Water Authority S. Chesterfield, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of Appomattox River Water Authority, as of and for the year ended June 30, 2021, and the related notes to the financial statements, which collectively comprise the Appomattox River Water Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities of Appomattox River Water Authority, as of June 30, 2021, 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.

Other Matters

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 on pages 3-8 and 39-46 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Report on Summarized Comparative Information

We have previously audited Appomattox River Water Authority's 2020 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated October 30, 2020. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2020, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated November 5, 2021, on our consideration of Appomattox River Water 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 Appomattox River Water 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 Appomattox River Water Authority's internal control over financial reporting and compliance.

Hobinson, Jarmer, Car Associates

Charlottesville, Virginia November 5, 2021

To the Honorable Board of Directors Appomattox River Water Authority S. Chesterfield, Virginia

As management of Appomattox River Water 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 ending June 30, 2021.

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, deferred inflows and liabilities. Equity of the Authority is reported as net position. Net position is the difference between assets and deferred outflows of resources and liabilities and deferred inflows of resources. Net investment in capital assets represents capital assets, reduced by accumulated depreciation and by any outstanding debt, deferred outflows of resources and deferred inflows of resources related to the acquisition, construction or improvement of those assets. Restricted net position represents restricted assets reduced by liabilities and deferred inflows of resources related to those assets. 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).

Refer to the table of contents for the basic enterprise fund financial statements.

Notes to financial statements. The notes provide additional information that is essential to a full understanding of the data provided in the financial statements. Refer to the table of contents for the notes to the financial statements. Required supplementary information presents the Authority's progress in funding its obligation to provide pension benefits to its employees.

Financial Highlights

- -- The assets and deferred outflows of resources of the Authority exceeded its liabilities and deferred inflows of resources at the close of the most recent fiscal year by \$50,466,377 (net position). Of this amount \$10,466,008 is reported as unrestricted net position.
- -- The Authority's total net position increased by \$3,853,977.
- -- The Authority's total long-term obligations (including premium amortization, compensated absences, OPEB liability and net pension liability) decreased by \$1,547,998 during the current fiscal year. Details of the change in long-term obligations can be found under the heading "*Capital Asset and Debt Administration*."

Financial Analysis

As noted earlier, net position may serve over time as a useful indicator of an Authority's financial position. In the case of the Authority, assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$50,466,377 at the close of the most recent fiscal year.

By far the largest portion of the Authority's net position (57 percent) reflects its net investment in capital 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 net investment in capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities.

The following table provides a summary of the statement of net position.

		Net Position		
		2021	2020	
Current and other assets Capital assets	\$	23,082,913 \$ 47,687,816	5 20,638,988 48,451,915	
Total assets	\$	70,770,729	69,090,903	
Deferred charge on refunding OPEB related items Pension related items Total deferred outflows	\$	91,617 \$ 86,159 <u>282,504</u> 460,280 \$	30,377 165,477	
Total deferred outnows	φ	400,200	5529,550	
Long-term liabilities Other liabilities	\$	20,264,401 \$ 215,816	5 21,812,399 586,089	
Total liabilities	\$	20,480,217	22,398,488	
OPEB related items Pension related items	\$	23,291 \$ 261,124	5 29,790 <u>379,581</u>	
Total deferred inflows	\$	284,415	409,371	
Net investment in capital assets Restricted Unrestricted Total net position	\$	11,288,184 10,466,008	28,725,207 11,428,780 6,458,413 46,612,400	
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Financial Analysis (continued)

At the end of the current fiscal year, the Authority is able to report positive balances in all categories of net position.

	_	Change in Net Position			
		2021		2020	
Revenues:					
Operating revenues	\$	12,753,688	\$	11,072,811	
Gain (loss) on disposal of capital assets		15,189		-	
Investment income		5,549		224,629	
Litigation proceeds	_	438,692		855,277	
Total revenues	\$_	13,213,118	\$	12,152,717	
Expenses:					
Operating expenses (excluding depreciation)	\$	6,479,240	\$	6,328,484	
Depreciation expense		1,917,229		2,359,129	
Payout of litigation proceeds to localities		438,692		997,050	
Bond issuance costs		-		105,084	
Interest expense	_	523,980		631,431	
Total expenses	\$_	9,359,141	\$	10,421,178	
Increase (decrease) in net position	\$	3,853,977	\$	1,731,539	
Net position-July 1	_	46,612,400		44,880,861	
Net position-June 30	\$_	50,466,377	\$	46,612,400	

The Authority's net position increased by \$3,853,977 during the current fiscal year. Operating revenues increased by \$1,680,877, reflecting an increase in consumption. Operating expenses (excluding depreciation) increased by \$150,756 over fiscal year 2020 totals. Key elements of these changes are explained in greater detail under the Review of Operations section.

Capital Asset and Debt Administration

<u>Capital Assets</u> - The Authority's investment in capital assets as of June 30, 2021 amounts to \$47,687,816 (net of accumulated depreciation). Investment in capital assets decreased by approximately 1.58% during the year. Below is a comparison of the items that make up capital assets as of June 30, 2021 with that of June 30, 2020.

	_	2021	2020
Land and land rights	\$	1,044,167 \$	1,044,167
Water systems		85,582,831	85,599,031
Equipment		1,738,287	1,708,459
Hydro costs incurred		34,873	34,873
Accumulated depreciation		(53,485,892)	(51,655,169)
Construction in progress	_	12,773,550	11,720,554
Total capital assets	\$	47,687,816 \$	48,451,915

More detailed information on the Authority's capital assets is presented in Note 3 of the notes to the financial statements.

Capital Asset and Debt Administration (continued)

<u>Long-Term Debt</u> - At the end of the current fiscal year, the Authority had \$19,823,000 in bonds outstanding versus \$21,381,000 in the prior year. The decrease represents payment of principal in accordance with the bond documents.

Other long-term obligations of the Authority include accrued vacation pay. More detailed information on the Authority's long-term obligations is presented in the notes to the financial statements.

Review of Operations

Operating Revenues. Operating Revenues increased by \$1,680,877 from 2020 or 15.18%. Four of the five members' consumption increased from 2020. The largest customer experienced catastrophic failure at one of its sources, leading to a consumption increase of 18% for that customer.

Operating Expenses. Operating Expenses (excluding depreciation) increased by \$150,756 from 2020 or 2.4%. The majority of this increase can be attributed to higher process chemical costs, utilities, and heating fuel costs.

Long-Term Issues. The Federal Safe Drinking Water Act and regulations that derive from this Act mandate the water quality that the Authority must meet for its customers. The regulations require the Authority to constantly improve operations and treatment techniques. The Authority has met the federal and state requirements for drinking water quality in the past and will continue to do so in the future.

Authority Highlights

- Continued to sample, monitor, and map hydrilla emergence around the lake.
- Successful FY2019/2020 annual audit.
- Continued to provide 24/7 safe drinking water during the ongoing COVID-19 crisis while following the Commonwealth of Virginia mandates.
- Complied with all Virginia Department of Health (VDH) and U.S. EPA requirements under the Safe Drinking Water Act.
- Received the Partnership for Safe Water Directors Award for the 21st year. This award is presented to Water Treatment Plants that meet superior standards of water quality.
- Successful VDH plant inspection.
- Hired an assistant operations manager. Was successful promoting within the organization.
- Began construction and installation of a new mag meter and vault for Prince George County.
- Awarded project to install large, actuated butterfly valves in finished water pump station 1 and finished water pump station 2. Project also includes adding surge relief to both finished water pump stations.

Authority Highlights (continued)

- Several process and facility improvements were performed during FY2020/2021. The following • were reviewed and approved by the Board of Directors in the FY2020/2021 budget.
 - Replaced three venturis on filters with mag meters. Installation was in house by maintenance and IT staff.
 - Purchased a spare rapid mixer for inventory to increase reliability and resiliency.
 - o Purchased a 200 Hp, 450 Hp, and 600 Hp motor for inventory to increase reliability and resiliency.
 - Replaced the atomic absorption spectrometer for the laboratory.
 - o Began the host software replacement project to replace the Supervisory Control and Data Acquisition (SCADA) system that assists operators with running the plant.
 - Added a solar powered camera to the south side of the dam to improve surveillance.
 - o Constructed an additional, secure laydown yard for material storage.
 - o Installed a new HMI (human machine interface) on the raw water pump station 2 control cabinet.
 - Added grating around filter actuated control valves to allow IT staff to work on actuators and remove safety concerns.
 - Purchased a side by side ranger for transmission easement access and maintenance.
 - o Added lightening protection to the filter building to protect the administration servers and SCADA system.
 - Performed thermal scanning of all MCC's to identify trouble spots. Trouble spots that were identified were addressed.
 - Purchased portable generators to maintain communications and control at key remote meter locations in the event of power failures.
 - o Built a new structural steel platform to provide access to the sampling site behind the waste lagoons. This removed a safety issue for laboratory staff.
 - o Brought in divers to inspect the wet well at the dam for raw water intake pump station 1 and the underwater screens for raw water pump station 2. No significant issues identified.
 - Replaced the roof on the ammonia caustic building.
 - Ordered a new 1,500 amp 4160 volt transformer to replace an authority owned transformer.

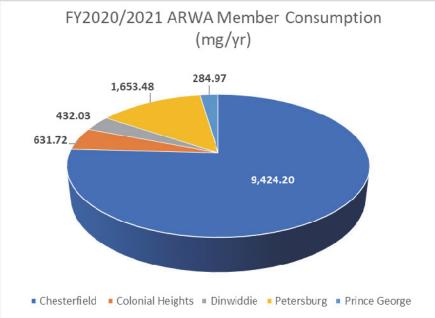
A flow summary for the last two years is shown below:

	2020/2021	2019/2020
Total raw water withdrawal (BG)	14.211	12.337
Average raw water daily withdrawal (mgd)	38.93	33.80

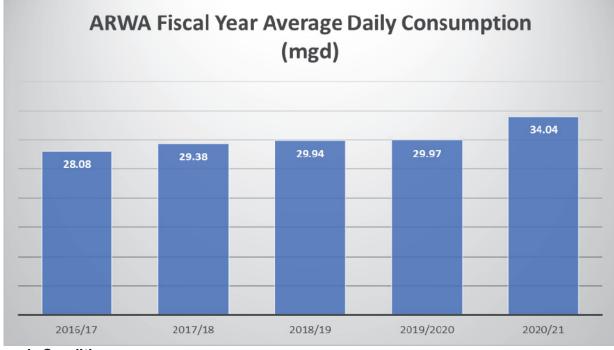
The peak month withdrawal was in July at 1.425 BG. The limitations in the Virginia Water Protection Permit, VWP #: 01-1719, is a maximum day withdrawal of 86.24 mgd, a maximum monthly withdrawal of 2.289 BG and a maximum annual withdrawal of 17.934 BG. The current VWP permit expires on October 31, 2028. The process to renew the VWP will start in 2025.

	2020/2021	2019/2020
Total finished water sold (BG)	12.426	10.941
Average day finished water sold (mgd)	34.04	29.97

Authority Highlights (continued)



Consumption by the localities continues to change over time with annual variation generally based on the weather, with dry years being higher than wet years. Water consumption increased more than expected in FY2020/2021 due to a catastrophic event at one of our member's alternate water sources. During the 2020/2021 fiscal year, the Authority did not issue any formal permit related water conservation restrictions.



Economic Conditions

The Authority continues to operate under sound effective management with total net position increasing during fiscal year 2021. Overall, finances for the Authority for fiscal year 2020-2021 as viewed by management are considered sound.

Contacting the Authority

Questions concerning this financial report or requests for additional information should be directed to the Executive Director, Appomattox River Water Authority, 21300 Chesdin Road, S. Chesterfield, Virginia 23803, telephone (804) 590-1145.

- Financial Statements -

Statement of Net Position June 30, 2021 (With Comparative Totals for the Prior Year)

	_	2021		2020
Assets				
Current Assets				
Cash and cash equivalents	\$	6,687,447	\$	4,354,040
Accrued interest receivable		222		515
Accounts receivable - water service		3,337,981		2,456,073
Inventory Other receivables		831,667 10,556		296,179 7,036
Other receivables	—	10,550	-	7,030
Total Current Assets	\$	10,867,873	\$	7,113,843
Noncurrent Assets				
Restricted Assets:				
Cash and cash equivalents	\$	11,879,918	\$	13,047,883
Net pension asset	—	335,122		477,262
Total Restricted Assets	\$	12,215,040	\$	13,525,145
Capital Assets:				
Land and land rights	\$	1,044,167	\$	1,044,167
Water system		85,582,831		85,599,031
Equipment		1,738,287		1,708,459
Hydro costs incurred		34,873		34,873
Accumulated depreciation	_	(53,485,892)		(51,655,169)
Sub-total net capital assets	\$	34,914,266	\$	36,731,361
Construction in progress	_	12,773,550	_	11,720,554
Net capital assets	\$	47,687,816	\$	48,451,915
Total Noncurrent Assets	\$	59,902,856	\$	61,977,060
Total Assets	\$	70,770,729	\$	69,090,903
Deferred Outflows of Resources				
Deferred charge on refunding	\$	91,617	\$	133,502
OPEB related items		86,159		30,377
Pension related items	_	282,504		165,477
Total Deferred Outflows of Resources	\$	460,280	\$	329,356

Statement of Net Position June 30, 2021 (continued) (With Comparative Totals for the Prior Year)

	_	2021		2020
Liabilities				
Current Liabilities Payable from Current Assets Accounts payable	\$	44,712	\$	48,209
Total Current Liabilities Payable from Current Assets	\$	44,712	\$	48,209
Current Liabilities Payable from Restricted Assets Accounts payable Retainage payable Accrued interest payable Bonds payable - current portion	\$	31,880 12,492 126,732 1,601,000	\$	222,842 175,442 139,596 1,558,000
Total Current Liabilities Payable from Restricted Assets	\$	1,772,104	\$	2,095,880
Total Current Liabilities	\$_	1,816,816	_\$	2,144,089
Noncurrent Liabilities Bonds payable - net of current portion Net OPEB liabilities Compensated absences	\$	18,222,000 250,760 190,641	\$	19,860,695 208,447 185,257
Total Noncurrent Liabilities	\$	18,663,401	\$	20,254,399
Total Liabilities	\$	20,480,217	\$	22,398,488
Deferred Inflows of Resources OPEB related items Pension related items	\$	23,291 261,124	\$	29,790 379,581
Total Deferred Inflows of Resources	\$	284,415	\$	409,371
Net Position Net investment in capital assets Restricted for debt service and bond covenants Restricted for net pension asset Unrestricted Total Net Position	\$	28,712,185 10,953,062 335,122 10,466,008 50,466,377	\$	28,725,207 10,951,518 477,262 6,458,413 46,612,400
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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, 2021 (With Comparative Totals for the Prior Year)

		2021	2020
Operating Revenues			
Water service	\$	12,683,083	\$ 11,024,557
Other	_	70,605	 48,254
Total Operating Revenues	\$_	12,753,688	\$ 11,072,811
Operating Expenses			
Operating and maintenance			
Salaries	\$	1,620,369	\$ 1,691,846
Employee benefits		513,005	504,607
Contractual services		902,470	893,464
Materials, supplies and other costs		2,409,528	2,280,337
Other charges		1,033,868	958,230
Depreciation		1,917,229	 2,359,129
Total Operating Expenses	\$_	8,396,469	\$ 8,687,613
Net Operating Income (Loss)	\$	4,357,219	\$ 2,385,198
Nonoperating Revenues (Expenses)			
Income from investments	\$	5,549	\$ 224,629
Litigation proceeds		438,692	855,277
Gain (loss) of disposal of capital assets		15,189	-
Payout of litigation proceeds to localities		(438,692)	(997,050)
Bond issuance costs		-	(105,084)
Interest expense	_	(523,980)	 (631,431)
Total Nonoperating Revenues (Expenses)	\$_	(503,242)	\$ (653,659)
Change in net position	\$	3,853,977	\$ 1,731,539
Net position, beginning of year	_	46,612,400	 44,880,861
Net position, end of year	\$_	50,466,377	\$ 46,612,400

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

Statement of Cash Flows Year Ended June 30, 2021 (With Comparative Totals for the Prior Year)

	_	2021	2020
Cash flows from operating activities: Receipts from customers and users Payments to suppliers and vendors Payments to and on behalf of employees	\$	11,868,260 \$ (4,884,851) (2,241,302)	11,491,809 (4,423,562) (2,349,475)
Net cash provided by (used for) operating activities	\$	4,742,107 \$	4,718,772
Cash flows from noncapital financing activities: Litigation proceeds Payout of litigation proceeds to localities	\$	438,692 \$ (438,692)	855,277 (997,050)
Net cash provided by (used for) noncapital financing activities	\$_	\$_	(141,773)
Cash flows from capital and related financing activities: Acquisition of utility plant in service Principal paid on bonds Interest paid on bonds Sale of capital assets Bond issuance costs Proceeds from indebtedness	\$	(1,541,750) \$ (1,558,000) (532,655) 49,898 - -	(4,639,656) (7,891,000) (689,076) - (105,084) 6,659,145
Net cash provided by (used for) capital and related financing activities	\$	(3,582,507) \$	(6,665,671)
Cash flows from investing activities: Interest received	\$_	5,842 \$	239,278
Net cash provided by (used for) investing activities	\$_	5,842 \$	239,278
Net increase (decrease) in cash and cash equivalents	\$_	1,165,442 \$	(1,849,394)
Cash and cash equivalents at beginning of year (including \$13,047,883 and \$16,752,344 in restricted accounts)	\$_	17,401,923 \$	19,251,317
Cash and cash equivalents at end of year (including \$11,879,918 and \$13,047,883 in restricted accounts)	\$_	18,567,365 \$	17,401,923
Reconciliation of operating income (loss) to net cash provided by (used for) operating activities: Operating income (loss) Adjustments to reconcile operating income (loss) to net cash provided by (used for) operating activities:	\$	4,357,219 \$	2,385,198
Depreciation Changes in operating assets, deferred outflows of resources, liabilities, and deferred inflows of resources:		1,917,229	2,359,129
(Increase) decrease in receivables (Increase) decrease in inventories Increase (decrease) in operating accounts payable Increase (decrease) in compensated absences (Increase) decrease in pension deferred outflow of resources (Increase) decrease in OPEB deferred outflow of resources Increase (decrease) in pension deferred inflow of resources Increase (decrease) in OPEB deferred inflow of resources (Increase) decrease in net pension asset Increase (decrease) in net OPEB liabilities	_	(885,428) (535,488) (3,497) 5,384 (117,027) (55,782) (118,457) (6,499) 142,140 42,313	418,998 (31,256) (260,275) 4,552 (101,557) (16,271) 155,359 (10,137) (197,972) 13,004
Net cash provided by (used for) operating activities	\$_	4,742,107 \$	4,718,772

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

NOTE 1 - NATURE OF ENTITY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

Nature of Entity:

The Appomattox River Water Authority (Authority) is a body politic and corporate organized under the laws of the Commonwealth of Virginia whose address is 21300 Chesdin Road, South Chesterfield, Virginia 23803. The Authority provides wholesale potable water to five participating jurisdictions: County of Chesterfield, City of Colonial Heights, County of Dinwiddie, City of Petersburg and County of Prince George. The requirements and billing structure for providing water to the five participating jurisdictions is outlined in the 1964 Service Agreement and subsequent amendments. The current plant's rated capacity is 96 million gallons per day.

Summary of Significant Accounting Policies:

A. Basis of Accounting:

Appomattox River Water 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 follows Governmental Accounting Standards Board (GASB) pronouncements.

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.

B. Basic Financial Statements:

The financial statements include a Management's Discussion and Analysis (MD&A) section providing an analysis of the Authority's overall financial position and results of operations.

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 Financial Statements

- Required Supplementary Information

- Schedule of Changes in Net Pension (Asset) Liability and Related Ratios
- Schedule of Employer Contributions-Pension Plan
- Notes to Required Supplementary Information-Pension Plan
- Schedule of Changes in Total OPEB Liability (Asset) and Related Ratios Health Insurance
- Notes to Required Supplementary Information Health Insurance
- 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

NOTE 1 - NATURE OF ENTITY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (continued)

C. Cash and Cash Equivalents:

For purposes of the statement of cash flows, the Authority considers all highly liquid investments (including restricted assets) with an original maturity of three months or less when purchased to be cash equivalents.

D. Accounts Receivable:

Accounts receivable is recorded at face value. Since substantially all of the Authority's receivables are from the participating jurisdictions, no allowance for uncollectible accounts is deemed necessary.

E. Capital Assets:

Capital assets, which include property, plant, equipment, and infrastructure assets are reported in the financial statements. Capital assets are defined by the Authority as assets with an initial, individual cost of more than \$5,000 (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. Donated capital assets are recorded at acquisition value at the date of donation.

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

Major outlays for capital assets and improvements are capitalized as projects are constructed. Interest incurred during the construction phase of capital assets of business-type activities is included as part of the capitalized value of the assets constructed. No interest was capitalized during the current or previous fiscal year.

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

Assets	Years
Structures, lines and accessories	50
Equipment	3 to 10

F. Investments:

Money market investments, participating interest-earning investment contracts (repurchase agreements) that have a remaining maturity at time of purchase of one year or less, nonparticipating interest-earning investment contracts (nonnegotiable certificates of deposit (CDs)) and external investment pools are measured at amortized cost. All other investments are reported at fair value.

G. Premiums/Discount on Bonds Held for Investment:

The premium/discounts paid on bonds held for investment are being amortized over the life of investment using the effective interest method.

H. Budgets:

The Authority adopts annual budgets for water service revenues and Operating Fund expenditures. The budgets are prepared on the basis of expected cash receipts and disbursements rather than on the accrual basis.

NOTE 1 - NATURE OF ENTITY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (continued)

I. Unamortized Deferred Charge on Refunding:

The deferred charge on refunding, resulting from the refunding of the Series 2002C and Series 2010 Revenue Bonds is being amortized using the bonds outstanding method over the life of the Series 2010 and Series 2019 Revenue Refunding Bonds, which is not materially different from the effective interest method. The current year amortization is included in interest expense.

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:

Net position is the difference between a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources. Net investment in capital assets represents capital assets, less accumulated depreciation, less any outstanding debt related to the acquisition, construction or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are also included in this component of net position.

L. <u>Net Position Flow Assumption:</u>

Sometimes the Authority will fund outlays for a particular purpose from both restricted (e.g., restricted bond) and unrestricted resources. In order to calculate the amounts to report as restricted - net position and unrestricted - net position, 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. <u>Deferred Outflows/Inflows of Resources:</u>

In addition to assets, the statement of financial 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 position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense) until then. The Authority has multiple items that qualify for reporting in this category. One item is the deferred charge on refunding reported in the government-wide statement of net position. A deferred charge on refunding results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. The other item is comprised of certain items related to the measurement of the net pension asset and net OPEB liabilities and contributions to the pension and OPEB plans made during the current year and subsequent to the net pension asset and net OPEB liability measurement date. For more detailed information on these items, reference the related notes.

NOTE 1 - NATURE OF ENTITY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (continued)

M. Deferred Outflows/Inflows of Resources: (continued)

In addition to liabilities, the statement of financial 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 position 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 one type of item that qualifies for reporting in this category. Certain items related to the measurement of the net pension asset and net OPEB liabilities are reported as deferred inflows of resources. For more detailed information on these items, reference the related notes.

N. <u>Restricted Assets:</u>

Certain proceeds of the Authority's revenue bonds, as well as 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.

O. Inventories:

Inventories are reported at cost, and cost is determined on the first-in, first-out basis.

P. <u>Prepaid Expenses:</u>

Certain payments to vendors represent costs applicable to future accounting periods and are recorded as prepaid items in both the government-wide and fund financial statements. The cost of prepaid items is recorded as expenses when consumed rather than when purchased.

Q. <u>Pensions:</u>

For purposes of measuring the net pension asset, 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 benefit terms. Investments are reported at fair value.

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.

Notes to Financial Statements June 30, 2021 (continued)

NOTE 2 - DEPOSITS AND INVESTMENTS:

Deposits:

Deposits with banks are covered by the Federal Deposit Insurance Corporation (FDIC) and collateralized in accordance with the Virginia Security for Public Deposits Act (the "Act") Section 2.2-4400 et. seq. of the <u>Code of Virginia</u>. 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.

Investments:

Statutes authorize the Authority to invest in obligations of the United States or agencies thereof, obligations of the Commonwealth of Virginia or political subdivisions thereof, obligations of the International Bank for Reconstruction and Development (World Bank), the Asian Development Bank, the African Development Bank, "prime quality" commercial paper that has received at least two of the following ratings: P-1 by Moody's Investors Service, Inc.; A-1 by Standard & Poor's; or F-1 by Fitch Ratings, Inc., banker's acceptances, repurchase agreements and the State Treasurer's Local Government Investment Pool (LGIP).

The Authority has not implemented a formal investment policy.

Credit Risk of Debt Securities:

The Authority's rated debt investments as of June 30, 2021 were rated by <u>Standard & Poor's</u> and the ratings are presented below using the <u>Standard & Poor's</u> rating scale.

Authority's Rated Debt Investments' Values					
Rated Debt Investments		Fair Quality Ratings			
		AAAm			
Money market fund - U.S. Treasury	-				
Securities	\$	15,640,306			
Total	\$	15,640,306			

Interest Rate Risk:

	nvestr rities (nent (in years)	
		Fair Value	Less Than 1 Year
Money market fund - U.S. Trea Securities	sury \$	<u> 15,640,306 </u> \$	15,640,306
	\$	15,640,306 \$	15,640,306

Notes to Financial Statements June 30, 2021 (continued)

NOTE 3 - CAPITAL ASSETS:

A summary of the Authority's capital assets and the changes therein for the year ended June 30, 2021, follows:

	_	Beginning Balance		Increases	_	Decreases	_	Ending Balance
Capital assets not being depreciated: Land and land rights Construction in progress	\$	1,044,167 11,720,554	_	1,081,686	\$	- 28,690	_	1,044,167 12,773,550
Total capital assets not being depreciated	\$_	12,764,721	\$_	1,081,686	\$_	28,690	\$_	13,817,717
Other capital assets, being depreciated: Water system Equipment Hydro costs incurred	\$	85,599,031 1,708,459 34,873	\$	- 134,843 -	\$	16,200 105,015 -	\$	85,582,831 1,738,287 34,873
Total other capital assets being depreciated Accumulated depreciation:	\$_	87,342,363	\$_	134,843	\$_	121,215	\$_	87,355,991
Water system Equipment Hydro costs incurred	\$	(50,762,802) (857,494) (34,873)	\$	(1,738,230) (178,999) -	\$ -	(5,311) (81,195) -	\$ _	(52,495,721) (955,298) (34,873)
Total accumulated depreciation	\$_	(51,655,169)	\$	(1,917,229)	\$_	(86,506)	\$_	(53,485,892)
Other capital assets being depreciated, net	\$	35,687,194	\$	(1,782,386)	\$_	34,709	\$_	33,870,099
Capital assets, net	\$_	48,451,915	\$	(700,700)	\$_	63,399	\$_	47,687,816

Depreciation expense for the fiscal year totaled \$1,917,229.

NOTE 4 - LONG-TERM OBLIGATIONS:

A. Changes in Long-Term Obligations:

The following is a summary of long-term obligations transactions for the year ended June 30, 2021:

	Balance July 1, 2020	Issuances	Retirements	Balance June 30, 2021	Due Within One Year
Direct borrowings and direct placements Revenue and revenue refunding bonds Add (less) amounts:	\$ 21,381,000 \$	- \$	6 (1,558,000) \$	19,823,000 \$	5 1,601,000
For issuance premiums	37,695	-	(37,695)	-	
Total direct borrowings and direct placements	\$ 21,418,695 \$	9	<u>(1,595,695)</u> \$	19,823,000 \$	1,601,000
Net OPEB liability	\$ 208,447 \$	95,083	<u>(52,770)</u> \$	250,760 \$	i
Compensated absences	\$ 185,257 \$	5,384 \$	5\$_	190,641 \$	
Totals	\$ 21,812,399 \$	100,467 \$	<u>(1,648,465)</u> \$	20,264,401 \$	1,601,000

Notes to Financial Statements June 30, 2021 (continued)

NOTE 4 - LONG-TERM OBLIGATIONS: (continued)

B. Annual Amortization of Long-Term Obligations:

The annual requirements to amortize all long-term obligations outstanding at June 30, 2021 are as follows:

		Direct Borrowings			
	_	and Direct	Pla	cements	
Year	-	Rever	านe	and	
Ended		Revenue Ref	fune	ding Bonds	
June 30,		Principal		Interest	
2022	\$	1,601,000	\$	487,456	
2023		1,640,000		447,876	
2024		1,679,000		406,952	
2025		1,723,000		364,483	
2026		1,770,000		320,106	
2027		1,821,000		273,831	
2028		1,858,000		225,855	
2029		1,605,000		180,777	
2030		1,644,000		138,753	
2031		1,685,000		95,220	
2032		1,730,000		49,950	
2033	-	1,067,000		13,423	
Total	\$	19,823,000	\$	3,004,682	

Notes to Financial Statements June 30, 2021 (continued)

NOTE 4 - LONG-TERM OBLIGATIONS: (continued)

C. Details of Long-Term Obligations:

	_	Total Amount	_	Amount Due Within One Year
Revenue Bonds				
Direct Borrowings and Direct Placements:				
On December 21, 2017, the Authority issued \$13,500,000 of Water Revenue Bonds bearing interest at 2.516% payable semiannually through October 2032. Principal payments commence October 2018, payable annually, through October 2032.	\$	11,192,000	\$	809,000
On May 30, 2012, the Authority issued \$3,623,000 of Water Revenue Bonds bearing interest at 3.10% payable semiannually through October 2027. Principal payments commence October 2013.		1,901,000		247,000
On November 20, 2019, the Authority issued \$6,820,000 of Water Revenue Refunding Bonds, Series 2019 to provide funds to defease \$7,330,000 of Water Revenue Refunding Bonds, Series 2010. The Authority advance refunded the 2010 Series bonds to reduce its total debt service payments by \$711,115. The defeased bonds were called and retired on October 1, 2020. Bond issue costs in the amount of \$105,084 are associated with these bonds. The bonds bear interest, payable semiannually, at rates of 2.915%. Principal is payable annually on October 1, 2020 through 2031.		6,730,000		545,000
Total Revenue Bonds	- \$	19,823,000	- \$	
Net OPEB liability	÷- \$_		• - \$_	-
Compensated absences	\$_	190,641	\$_	-
Total long-term obligations	\$_	20,264,401	\$_	1,601,000

D. Pledge of Revenues and Funds

The Authority pledges and assigns to the trustee all revenues derived from the ownership or operation of the System and all monies in the Construction Account, the Revenue Account, the Operating Account, the Bond Account, the Debt Service Reserve Accounts and the Replacement Account for the payment of the principal of interest on the bonds, subject only to the right of the Authority to make application thereof to other purposes as provided in the Trust Agreement.

Notes to Financial Statements June 30, 2021 (continued)

NOTE 5 - 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 <u>Code of Virginia</u>, 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.
- 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.

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 1.7% for non-hazardous duty employees, 1.85% for sheriffs and regional jail superintendents. 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, 1.85% for sheriffs and regional jail superintendents. Under the Hybrid Plan, average final compensation is the average of the employee's 60 consecutive months of highest compensation is the average of the employee's 60 consecutive months of highest compensation is the average of the employee's 60 consecutive months of highest compensation is the average of the employee's 60 consecutive months of highest compensation and the 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 <u>Code of Virginia</u>, 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, 2019 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	18
Inactive members:	
Vested inactive members	1
Non-vested inactive members	3
Long-term disability (LTD)	-
Inactive members active elsewhere in VRS	6
Total inactive members	10
Active members	28
Total covered employees	56

Contributions

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

The Authority's contractually required employer contribution rate for the year ended June 30, 2021 was 3.57% 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 \$35,851 and \$61,836 for the years ended June 30, 2021 and June 30, 2020, respectively.

Net Pension Liability (Asset)

The net pension liability (asset) 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 (asset) was measured as of June 30, 2020. The total pension liability used to calculate the net pension liability (asset) was determined by an actuarial valuation performed as of June 30, 2019 rolled forward to the measurement date of June 30, 2020.

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, 2019, 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, 2020.

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

* Administrative expenses as a percent of the fair value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 6.75%. However, since the difference was minimal, and a more conservative 6.75% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 6.75% to simplify preparation of pension liabilities.

Mortality rates:

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

Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

Post-Disablement:

RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

The actuarial assumptions used in the June 30, 2019 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, 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-	Updated to a more current mortality table - RP-2014
retirement healthy, and disabled)	projected to 2020
Retirement Rates	Lowered rates at older ages and changed final
	retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age
	and service through 9 years of service
Disability Rates	Lowered rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14.00% to 15.00%
Discount Rate	Decreased rate from 7.00% to 6.75%

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%	4.65%	1.58%
Fixed Income	15.00%	0.46%	0.07%
Credit Strategies	14.00%	5.38%	0.75%
Real Assets	14.00%	5.01%	0.70%
Private Equity	14.00%	8.34%	1.17%
MAPS - Multi-Asset Public Strategies	6.00%	3.04%	0.18%
PIP - Private Investment Partnership	3.00%	6.49%	0.19%
Total	100.00%		4.64%
	Expected arithmet	Inflation ic nominal return*	2.50%

* The above allocation provides a one-year return of 7.14%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 7.11%, including expected inflation of 2.50%. On October 10, 2019, the VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation. More recent capital market assumptions compiled for the FY2020 actuarial valuations provide a median return of 6.81%.

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, 2020, 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, 2020 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.

Notes to Financial Statements June 30, 2021 (continued)

NOTE 5 - PENSION PLAN: (continued)

Changes in Net Pension Liability (Asset)

	Increase (Decrease)					
	_	Total Pension Liability (a)		Plan Fiduciary Net Position (b)	-	Net Pension Liability (Asset) (a) - (b)
Balances at June 30, 2019	\$	5,825,237	\$	6,302,499	\$	(477,262)
Changes for the year:						
Service cost	\$	151,219	\$	-	\$	151,219
Interest		377,352		-		377,352
Differences between expected						
and actual experience		(141,255)		-		(141,255)
Contributions - employer		-		61,655		(61,655)
Contributions - employee		-		72,432		(72,432)
Net investment income		-		115,538		(115,538)
Benefit payments, including refunds						
of employee contributions		(469,669)		(469,669)		-
Administrative expenses		-		(4,312)		4,312
Other changes		-		(137)		137
Net changes	\$	(82,353)	\$	(224,493)	\$	142,140
Balances at June 30, 2020	\$	5,742,884	\$	6,078,006	\$	(335,122)

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

The following presents the net pension liability (asset) of the Authority using the discount rate of 6.75%, as well as what the Authority's net pension liability (asset) 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				
	(5.75%)	(6.75%)	(7.75%)		
Appomattox River Water Authority					
Net Pension Liability (Asset)	\$ 331,651 \$	(335,122) \$	(895,777)		

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

For the year ended June 30, 2021, the Authority recognized pension expense of (\$57,674). At June 30, 2021, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources: Deferred Outflows Deferred Inflows

		of Resources	of Resources
Differences between expected and actual experience	\$	-	\$ 261,124
Change of assumptions		61,850	-
Net difference between projected and actual earnings on pension plan investments		184,803	-
Employer contributions subsequent to the measurement date	-	35,851	
Total	\$	282,504	\$ 261,124

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (continued)

\$35,851 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 (Asset) in the fiscal year ending June 30, 2022. 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	
2022	\$ (104,403)
2023	(6,769)
2024	37,020
2025	59,681
2026	-
Thereafter	-

Pension Plan Data

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

NOTE 6 - COMPENSATED ABSENCES:

Accumulated unpaid vacation, vested sick leave and other compensatory leave amounts are accrued when incurred. At June 30, 2021 and 2020 liabilities were as follows:

	_	2021	-	2020
Accumulated and compensatory leave	\$_	190,641	\$	185,257

Sick leave is vested and payable upon eligible retirement from the Authority and accordingly recorded as a liability in the financial statements.

NOTE 7 - 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 State to form the Virginia Municipal Group Self Insurance 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 and other liability insurance. The Agreement for Formation of the association provides that the association will be self-sustaining through member premiums. The Authority also participates in the VaRisk2, a group liability self insurance plan, administered by the Commonwealth of Virginia, Department of General Services, Division of Risk Management. The Authority pays an annual premium for its public officials general liability insurance to the public entity risk pool currently operating as a common risk management and insurance program for garricipating governments. Settled claims have not exceeded pool coverage in any of the past three fiscal years.

Notes to Financial Statements June 30, 2021 (continued)

NOTE 7 - RISK MANAGEMENT: (continued)

The Authority continues to carry commercial insurance for all other risks of loss, including employee health and accident insurance. Settled claims resulting from these risks have not exceeded commercial insurance coverage in any of the past three fiscal years.

NOTE 8 - OTHER POSTEMPLOYMENT BENEFITS:

Health Insurance:

Plan Description

In addition to the pension benefits described in Note 5, the Authority administers a single-employer defined benefit healthcare plan. The plan provides postemployment health care benefits to all eligible permanent employees who meet the requirements under the Authority's pension plans. The plan does not issue a publicly available financial report.

Benefits Provided

Participants who are eligible to retire from the VRS pension plan are allowed access to the plan until they reach age 65. Retirees pay the blended (employees and retirees) published rate, however as they are older than the typical employee (and thus more expensive) there is a cost to this right to purchase insurance at the blended rate.

VRS retirement eligibility is age 50 with 10 years of service or age 55 with 5 years of service for employees hired prior to July 1, 2010 who were vested in the plan prior to July 1, 2013. VRS retirement eligibility is the earlier of age 60 with 5 years of service or 90 combined age and service points for other employees.

Plan Membership

At June 30, 2020 (measurement date), the following employees were covered by the benefit terms:

Total active employees with coverage	58
Total retirees with coverage	29
Total	87

Contributions

The Authority does not pre-fund benefits; therefore, no assets are accumulated in a trust fund. The current funding policy is to pay benefits directly from general assets on a pay-as-you-go basis. The funding requirements are established and may be amended by the Authority. The amount paid by the Authority for OPEB during the year ended June 30, 2020 was \$13,173.

Total OPEB Liability

The Authority's total OPEB liability was measured as of June 30, 2020.

NOTE 8 - OTHER POSTEMPLOYMENT BENEFITS: (continued)

Health Insurance: (continued)

Actuarial Assumptions

The total OPEB liability in the January 1, 2021 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.50% per year as of June 30, 2020
Salary Increases	3.5% -5.35% including inflation
Discount Rate	3.13% for accounting and funding disclosures as of June 30, 2019
	2.45% for accounting and funding disclosures as of June 30, 2020

Discount Rate

The discount rate used to determine the liabilities under GASB 75 is based on an index rate for 20-year tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher. This rate was 3.13% as of June 30, 2019 and 2.45% as of June 30, 2020.

Changes in Total OPEB Liability

	_	Total OPEB Liability
Balances at June 30, 2019	\$	79,079
Changes for the year:		
Service cost		5,405
Interest		2,347
Difference between expected and actual experience		52,830
Changes in assumptions		609
Benefit payments	_	(15,174)
Net changes	\$	46,017
Balances at June 30, 2020	\$	125,096

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate

The following amounts present the total OPEB liability of the Authority, as well as what the total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (1.45%) or one percentage point higher (3.45%) than the current discount rate:

-	1% Decrease (1.45%)	 Current Discount Rate (2.45%)		1% Increase (3.45%)
\$	133,017	\$ 125,096	\$	117,666

NOTE 8 - OTHER POSTEMPLOYMENT BENEFITS: (continued)

Health Insurance: (continued)

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the total OPEB liability of the Authority, as well as what the total OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower (3.00%) or one percentage point higher (5.00%) than the current healthcare cost trend rates:

Healthcare Cost						
_	1% Decrease (3.00%)		Trend Rates (4.00%)		1% Increase (5.00%)	
\$	114,627	\$	125,096	\$	137,291	

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources

For the year ended June 30, 2021, the Authority recognized OPEB expense in the amount of \$12,267. At June 30, 2021, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	I	Deferred Outflows of Resouces		Deferred Inflows of Resources
Differences between expected and actual experience	\$	43,133	\$	11,985
Changes in assumptions Employer contributions subsequent to the		1,873		1,092
measurement date		13,173	_	-
Total	\$	58,179	\$	13,077

\$13,173 reported as deferred outflows of resources related to OPEB resulting from employer contributions subsequent to measurement date will be recognized as a reduction of the net OPEB liability in the hear ended June 30, 2022.

Amounts reported as deferred outflows of resources and deferred inflows of resources will be recognized in OPEB expense in future reporting periods as follows:

Year Ended June 30)	
2022	\$	4,513
2023	·	5,290
2024		11,439
2025		10,687
2026		-
Thereafter		-

Additional disclosures on changes in total OPEB liability, related ratios, and employer contributions can be found in the required supplementary information following the notes to the financial statements.

NOTE 8 - OTHER POSTEMPLOYMENT BENEFITS: (continued)

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 <u>Code of Virginia</u>, 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 Group Life Insurance 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, safety belt 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 \$8,616 as of June 30, 2021.

NOTE 8 - OTHER POSTEMPLOYMENT BENEFITS: (continued)

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 <u>Code of Virginia</u>, 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, 2021 was 0.54% of covered employee compensation. This rate was 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 \$7,801 and \$8,063 for the years ended June 30, 2021 and June 30, 2020, 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, 2021, the entity reported a liability of \$125,664 for its proportionate share of the Net GLI OPEB Liability. The Net GLI OPEB Liability was measured as of June 30, 2020 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, 2019 and rolled forward to the measurement date of June 30, 2020. 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 Plan for the year ended June 30, 2020 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2020, the participating employer's proportion was .00753% as compared to .00795% at June 30, 2019.

For the year ended June 30, 2021, the participating employer recognized GLI OPEB expense of \$3,925. 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.

At June 30, 2021, 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	\$	8,060 \$	5 1,129
Net difference between projected and actual earnings on GLI OPEB plan investments		3,775	-
Change in assumptions		6,285	2,624
Changes in proportionate share		2,059	6,461
Employer contributions subsequent to the measurement date	_	7,801	
Total	\$	27,980 \$	5 10,214

NOTE 8 - OTHER POSTEMPLOYMENT BENEFITS: (continued)

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)

\$7,801 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, 2022. 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:

\$ 1,026
2,092
3,310
3,557
142
(162)
\$

Actuarial Assumptions

The total GLI OPEB liability was based on an actuarial valuation as of June 30, 2019, 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, 2020. 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	2.50%
Salary increases, including inflation: Locality - General employees	3.50%-5.35%
Investment rate of return	6.75%, net of investment expenses, including inflation*

*Administrative expenses as a percent of the fair value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 6.75%. However, since the difference was minimal, and a more conservative 6.75% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 6.75% to simplify preparation of OPEB liabilities.

NOTE 8 - OTHER POSTEMPLOYMENT BENEFITS: (continued)

Group Life Insurance (GLI) Plan (OPEB PLAN): (continued)

Actuarial Assumptions: (continued)

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

Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

Post-Disablement:

RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

The actuarial assumptions used in the June 30, 2019 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, 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)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages and extended final retirement age from 70 to 75
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14.00% to 15.00%
Discount Rate	Decreased rate from 7.00% to 6.75%

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, 2020, NOL amounts for the GLI Plan are as follows (amounts expressed in thousands):

	 GLI OPEB Plan
Total GLI OPEB Liability	\$ 3,523,937
Plan Fiduciary Net Position	 1,855,102
GLI Net OPEB Liability (Asset)	\$ 1,668,835
Plan Fiduciary Net Position as a Percentage	
of the Total GLI OPEB Liability	52.64%

NOTE 8 - OTHER POSTEMPLOYMENT BENEFITS: (continued)

Group Life Insurance (GLI) Plan (OPEB PLAN): (continued)

NET GLI OPEB Liability: (continued)

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.

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%	4.65%	1.58%
Fixed Income	15.00%	0.46%	0.07%
Credit Strategies	14.00%	5.38%	0.75%
Real Assets	14.00%	5.01%	0.70%
Private Equity	14.00%	8.34%	1.17%
MAPS - Multi-Asset Public Strategies	6.00%	3.04%	0.18%
PIP - Private Investment Partnership	3.00%	6.49%	0.19%
Total	100.00%		4.64%
		Inflation	2.50%
	Expected arithme	etic nominal return*	7.14%

*The above allocation provides a one-year return of 7.14%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 7.11%, including expected inflation of 2.50%. On October 10, 2019, the VRS Board elected a long-term rate of 6.75%, which is roughly the 40th percentile of expected long-term results of the VRS fund asset allocation. More recent capital market assumptions compiled for the FY2020 actuarial valuations provide a median return of 6.81%.

NOTE 8 - OTHER POSTEMPLOYMENT BENEFITS: (continued)

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 member contributions will be made per the VRS guidance and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2020, 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. From July 1, 2020 on, employers are assumed 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

The follow 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		Current Discount	1% Increase	
	 (5.75%)		(6.75%)	(7.75%)	
Authority's proportionate share of the Group Life Insurance Plan Net OPEB Liability	\$ 165,194	\$	125,664 \$	93,561	

Group Life Insurance (GLI) Plan Fiduciary Net Position

Detailed information about the Group Life Insurance Plan's Fiduciary Net Position is available in the separately issued VRS 2020 Comprehensive Annual Financial Report (Annual Report). A copy of the 2020 VRS Annual Report may be downloaded from the VRS website at <u>http://www.varetire.org/Pdf/Publications/2020-annual-report.pdf</u>, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

OPEB Aggregate Totals

	Appomattox River Water Authority						y
	Deferred Outflows	-	Deferred Inflows	-	Net OPEB Liability		OPEB Expense
VRS OPEB Plans: Group Life Insurance Plan (Note 8):	\$ 27,980	\$	10.214	\$	125,664	\$	3,925
Authority's Stand-Alone Plan (Note 8)	58,179		13,077	,	125,096		12,267
Totals	\$ 86,159	\$	23,291	\$	250,760	\$	16,192

Notes to Financial Statements June 30, 2021 (continued)

NOTE 9 - DEFERRED COMPENSATION PLAN:

Eligible employees of the Authority may participate in a deferred compensation plan in accordance with Internal Revenue Code section 457. The plan permits participants to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination of employment, retirement, death or an unforeseen emergency. The Authority has no fiduciary responsibility for the plan, has no liability for losses incurred under the plan as the plan is administered by the U.S. Conference of Mayors and the plan is not accessible by the Authority's creditors; therefore, any related assets and liabilities are not reflected in the financial statements.

NOTE 10 - RELATED PARTY TRANSACTIONS:

The Authority is governed by a common Board of Directors with the South Central Wastewater Authority ("SCWWA"). The Authority has an agreement with SCWWA to share several key positions utilized by both the Authority and SCWWA. Accordingly the two Authorities share personnel costs necessary to fund the positions. During the current fiscal year the Authority received reimbursement in the amount of \$161,734 from SCWWA for reimbursement of salary and benefits paid to Authority employees that allocate time and duties with SCWWA. Similarly, the Authority pays a reimbursement to SCWWA for salary and benefits for SCWWA employees that allocate time and duties with the Authority. The Authority reported expenses of \$177,405 as reimbursement.

NOTE 11 - FAIR VALUE MEASUREMENTS:

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.
- 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.

NOTE 11 - FAIR VALUE MEASUREMENTS: (continued)

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

			ue Measurem orting Date Us	
	Total June 30, 2021	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs
		(Level 1)	(Level 2)	(Level 3)
U.S. Treasury & Agency Money Market Funds	\$ <u>15,640,306</u> \$	15,640,306 \$		\$ <u> </u>
Total investments measured at fair value	\$ <u>15,640,306</u> \$	15,640,306 \$		\$ <u> </u>

NOTE 12 - UPCOMING PRONOUNCEMENTS:

Statement No. 87, *Leases*, requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. The requirements of this Statement are effective for reporting periods beginning after June 15, 2021.

Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*, provides guidance for reporting capital assets and the cost of borrowing for a reporting period and simplifies accounting for interest cost incurred before the end of a construction period. The requirements of this Statement are effective for reporting periods beginning after December 15, 2020.

Statement No. 92, *Omnibus 2020*, addresses practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics such as leases, assets related to pension and postemployment benefits, and reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature. The effective dates differ by topic, ranging from January 2020 to periods beginning after June 15, 2021.

Statement No. 94, *Public-Private and Public-Public Partnerships and Availability of Payment Arrangements*, addresses issues related to public-private and public-public partnership arrangements. This Statement also provides guidance for accounting and financial reporting for availability payment arrangements. The requirements of this Statement are effective for reporting periods beginning after June 15, 2022.

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.

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

Notes to Fir	nancial S	Statements
June 30, 20	21 (con	tinued)

NOTE 13 - CHANGE IN RESTRICTIONS:

The current year report includes a change in calculations related to restricted cash and restricted net position. The prior year restricted amounts have been updated to reflect current year calculations. The changes in prior year reported amounts for both restricted cash and restricted net position are detailed below.

Changes in restricted cash:

	Restricted cash at June 30, 2020		Restricted cash at June 30, 2020
Restriction	per prior year report	Adjustment	as adjusted
Replacement fund \$	500,000	\$ - \$	500,000
Bond reserve	2,090,663	4,168	2,094,831
Bond interest	279,200	-	279,200
Bond principal fund	1,558,000	-	1,558,000
Operating fund	3,675,319	(769,186)	2,906,133
Operating reserve fund	-	3,752,950	3,752,950
Unspent bond proceeds	1,956,769	-	1,956,769
2017 bond interest	152,954	(152,954)	-
Total restricted cash \$	10,212,905	\$ 2,834,978	\$ 13,047,883

Changes in restricted net position:

Restriction	Restricted net position at June 30, 2020 per prior year report	Adjustment	Restricted net position at June 30, 2020 as adjusted
Net investment in capital assets \$ Restricted for debt service	29,695,452	\$ (970,245) \$	28,725,207
and bond covenants Restricted for net pension asset	7,963,578	2,987,940 477,262	10,951,518 477,262
Total restrected net position \$	37,659,030	\$ <u>2,494,957</u>	40,153,987

- Required Supplementary Information -

Schedule of Changes in Net Pension (Asset) Liability and Related Ratios Pension Plan For the Measurement Dates of June 30, 2014 through June 30, 2020

		2020	2019	2018	2017	2016	2015	2014
Total pension liability	-							
Service cost	\$	151,219 \$	133,704 \$	133,770 \$	141,274 \$	134,438 \$	128,956 \$	115,714
Interest		377,352	392,689	382,392	377,709	361,682	323,274	304,237
Differences between expected and actual experience		(141,255)	(336,850)	(114,977)	(8,307)	(28,955)	280,591	-
Changes of assumptions		-	145,432	-	(181,571)	-	-	-
Benefit payments		(469,669)	(239,153)	(269,025)	(255,396)	(221,000)	(147,277)	(148,713)
Net change in total pension liability	\$	(82,353) \$	95,822 \$	132,160 \$	73,709 \$	246,165 \$	585,544 \$	271,238
Total pension liability - beginning		5,825,237	5,729,415	5,597,255	5,523,546	5,277,381	4,691,837	4,420,599
Total pension liability - ending (a)	\$	5,742,884 \$	5,825,237 \$	5,729,415 \$	5,597,255 \$	5,523,546 \$	5,277,381 \$	4,691,837
	-							
Plan fiduciary net position								
Contributions - employer	\$	61,655 \$	63,920 \$	74,997 \$	77,470 \$	90,504 \$	84,275 \$	84,546
Contributions - employee		72,432	73,543	70,080	70,147	71,510	66,467	62,807
Net investment income		115,538	399,703	421,113	630,091	90,092	227,824	674,742
Benefit payments		(469,669)	(239,153)	(269,025)	(255,396)	(221,000)	(147,277)	(148,713)
Administrator charges		(4,312)	(3,967)	(3,668)	(3,675)	(3,223)	(3,066)	(3,607)
Other	_	(137)	(252)	(373)	(559)	(38)	(48)	35
Net change in plan fiduciary net position	\$	(224,493) \$	293,794 \$	293,124 \$	518,078 \$	27,845 \$	228,175 \$	669,810
Plan fiduciary net position - beginning	_	6,302,499	6,008,705	5,715,581	5,197,503	5,169,658	4,941,483	4,271,673
Plan fiduciary net position - ending (b)	\$	6,078,006 \$	6,302,499 \$	6,008,705 \$	5,715,581 \$	5,197,503 \$	5,169,658 \$	4,941,483
	-							
Authority's net pension (asset) liability - ending (a) - (b)	\$	(335,122) \$	(477,262) \$	(279,290) \$	(118,326) \$	326,043 \$	107,723 \$	(249,646)
Plan fiduciary net position as a percentage of the total								
pension liability		105.84%	108.19%	104.87%	102.11%	94.10%	97.96%	105.32%
Covered payroll	\$	1,550,601 \$	1,557,186 \$	1,475,042 \$	1,462,461 \$	1,467,991 \$	1,339,006 \$	1,256,141
Authority's net pension (asset) liability as a percentage								
of covered payroll		(21.61%)	(30.65%)	(18.93%)	(8.09%)	22.21%	8.04%	(19.87%)

This schedule is intended to report information for 10 years. Information prior to the 2014 valuation is not available. Additional years will be included when available.

Schedule of Employer Contributions Pension Plan For the Years Ended June 30, 2012 through June 30, 2021

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)
2012	\$ 28,190	\$ 28,190	\$ -	\$	985,675	2.86%
2013	74,118	74,118	-		1,126,410	6.58%
2014	82,654	82,654	-		1,256,141	6.58%
2015	87,660	87,660	-		1,339,006	6.55%
2016	90,504	90,504	-		1,467,991	6.17%
2017	77,470	77,470	-		1,462,461	5.30%
2018	74,997	74,997	-		1,475,042	5.08%
2019	63,920	63,920	-		1,557,186	4.10%
2020	61,836	61,836	-		1,550,601	3.99%
2021	35,851	35,851	-		1,444,682	2.48%

Notes to Required Supplementary Information Pension Plan For the Year Ended June 30, 2021

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, 2019 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, 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:

<u></u>	
Mortality Rates (pre-retirement, post-retirement	Updated to a more current mortality table - RP-
healthy, and disabled)	2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Lowered rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14.00% to 15.00%
Discount Rate	Decreased rate from 7.00% to 6.75%

Schedule of Changes in Total OPEB Liability (Asset) and Related Ratios - Health Insurance
For the Years Ended June 30, 2018 through 2021

		2021	2020	2019		2018
Total OPEB liability	-					
Service cost	\$	5,405	\$ 4,870	\$ 7,039	\$	7,411
Interest		2,347	2,655	3,760		3,037
Changes in assumptions		609	2,310	(782)		(3,882)
Differences between expected and actual experience		52,830	1,449	(29,964)		-
Benefit payments	_	(15,174)	 (9,648)	(9,648)	_	(12,200)
Net change in total OPEB liability	\$	46,017	\$ 1,636	\$ (29,595)	\$	(5,634)
Total OPEB liability – beginning		79,079	77,443	107,038		112,672
Total OPEB liability – ending	\$	125,096	\$ 79,079	\$ 77,443	\$	107,038
	-					
Covered-employee payroll	\$	N/A	\$ N/A	\$ N/A	\$	N/A
Authority's total OPEB liability (asset) as a percentage of						
covered payroll		N/A	N/A	N/A		N/A

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

Notes to Required Supplementary Information - Health Insurance For the Year Ended June 30, 2021

Valuation Date: January 1, 2021 Measurement Date: June 30, 2020

No assets are accumulated in a trust that meets the criteria in GASB 75 to pay related benefits.

Actuarial Cost Method	Entry Age Normal cost method
Discount Rate	3.13% as of June 30, 2019; 2.45% as of June 30, 2020
Inflation	2.50% per year as of June 30, 2019; 2.45% per year as of June 30, 2020
Healthcare Trend Rate	Healthcare trend rate of 4.00%. Rates are selected based on an economic model developed by a healthcare economist for the Society of Actuaries.
Salary Increase Rates	Salary increase rates of 3.5% - 5.35% including inflation
Demographic Assumptions	Assumed that 50% of employees with medical coverage would elect to retain the coverage at retirement.

Methods and	assumptions	used to	determine	OPEB liability:
moundad and	accumptionic	4004.0	00001111110	

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, 2020

Date (1)	Employer's Proportion of of the Net GLI OPEB Liability (Asset) (2)	Employer's Proportionate Share of the Net GLI OPEB Liability (Asset) (3)	1	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)
2020	0.00753% \$	125,664	\$	1,550,601	8.10%	52.64%
2019	0.00795%	129,368		1,557,186	8.31%	52.00%
2018	0.00776%	118,000		1,475,042	8.00%	51.22%
2017	0.00793%	119,000		1,462,461	8.14%	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.

Schedule of Employer Contributions Group Life Insurance (GLI) Plan For the Years Ended June 30, 2017 through June 30, 2021

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)
 Bato	 (•)	 (-)	•	(0)	• -	(')	(0)
2021	\$ 7,801	\$ 7,801	\$	-	\$	1,444,682	0.54%
2020	8,063	8,063		-		1,550,601	0.52%
2019	8,106	8,106		-		1,557,186	0.52%
2018	7,729	7,729		-		1,475,042	0.52%
2017	7,608	7,608		-		1,462,461	0.52%

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

Notes to Required Supplementary Information Group Life Insurance (GLI) Plan For the Year Ended June 30, 2021

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, 2019 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, 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)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages and extended final retirement age from 70 to 75
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14.00% to 15.00%
Discount Rate	Decreased rate from 7.00% to 6.75%

Non-Largest Ten Locality Employers - General Employees

- Compliance -



ROBINSON, FARMER, COX ASSOCIATES, PLLC

Certified Public Accountants

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 Honorable Members of Appomattox River Water Authority S. Chesterfield, 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 Appomattox River Water Authority as of and for the year ended June 30, 2021, and the related notes to the financial statements, which collectively comprise Appomattox River Water Authority's basic financial statements and have issued our report thereon dated November 5, 2021.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered Appomattox River Water 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 Appomattox River Water Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of Appomattox River Water Authority's internal control.

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

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

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Appomattox River Water 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 November 5, 2021