GREENSVILLE COUNTY WATER AND SEWER AUTHORITY

(A Component Unit of the County of Greensville, Virginia)

FINANCIAL REPORT

FOR THE YEAR ENDED SEPTEMBER 30, 2020

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(A Component Unit of the County of Greensville, Virginia)

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Table of Contents

ROBINSON, FARMER, COX ASSOCIATES, PLLC
Certified Public Accountants

CPAs | CONSULTANTS

Independent Auditors' Report

To the Board of Directors
Greensville County Water and Sewer Authority
Emporia, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of Greensville County Water and Sewer Authority, a component unit of the County of Greensville, Virginia, as of and for the year ended September 30, 2020, and the related notes to the financial statements, which collectively comprise the 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 Greensville County Water and Sewer Authority, as of September 30, 2020, 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.

Restatement of Beginning Balances

As described in Note 13 to the financial statements, in 2020, the Authority restated beginning balances to remove an amount previously reported as due from Greensville County in the September 30, 2019 Financial Report. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the schedules related to pension and OPEB funding on pages 42-51 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.

Management has omitted management's discussion and analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing 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. Our opinion on the basic financial statements is not affected by the missing information.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated August 24, 2021, on our consideration of Greensville County Water and Sewer Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Greensville County Water and Sewer Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Greensville County Water and Sewer Authority's internal control over financial reporting and compliance.

Robinson, Farmer, Cox Associates

Charlottesville, Virginia
August 24, 2021

- Financial Statements -

GREENSVILLE COUNTY WATER AND SEWER AUTHORITY
(A Component Unit of the County of Greensville, Virginia)

Statement of Net Position
At September 30, 2020

ASSETS	**Water**	**Sewer**	**Total**
Current assets:			
Cash and cash equivalents	$ 2,719,494	$ 2,168,910	$ 4,888,404
Cash - restricted	423,067	1,334,300	1,757,367
Accounts receivable	312,718	270,389	583,107
Loans receivable, current portion	21,208	21,207	42,415
Total current assets	$ 3,476,487	$ 3,794,806	$ 7,271,293
Noncurrent assets:			
Capital assets:			
Land and land rights	$ 2,171,350	$ 681,402	$ 2,852,752
Buildings, plant and equipment, net of accumulated depreciation	29,174,411	16,832,457	46,006,868
Construction in progress	19,669,286	6,500,139	26,169,425
Total capital assets	$ 51,015,047	$ 24,013,998	$ 75,029,045
Loans receivable, long-term portion	206,634	206,635	413,269
Total noncurrent assets	$ 51,221,681	$ 24,220,633	$ 75,442,314
Total assets	$ 54,698,168	$ 28,015,439	$ 82,713,607
DEFERRED OUTFLOWS OF RESOURCES			
Pension related items	$ 115,248	$ 155,922	$ 271,170
OPEB related items	10,687	14,309	24,996
Total deferred outflows of resources	$ 125,935	$ 170,231	$ 296,166
LIABILITIES			
Current liabilities:			
Accounts payable and accrued expenses	$ 234,720	$ 491,583	$ 726,303
Current portion of long-term obligations	482,133	331,506	813,639
Total current liabilities	$ 716,853	$ 823,089	$ 1,539,942
Noncurrent liabilities:			
Noncurrent portion of long-term obligations	$ 22,071,387	$ 9,779,813	$ 31,851,200
Total liabilities	$ 22,788,240	$ 10,602,902	$ 33,391,142
DEFERRED INFLOWS OF RESOURCES			
Deferred amount on refunding	$ 109,234	$ 81,091	$ 190,325
Pension related items	35,257	47,701	82,958
OPEB related items	6,457	8,536	14,993
Total deferred inflows of resources	$ 150,948	$ 137,328	$ 288,276
NET POSITION			
Net investment in capital assets	$ 28,689,864	$ 14,256,155	$ 42,946,019
Restricted - debt service reserve	423,067	1,334,300	1,757,367
Unrestricted net position	2,771,984	1,854,985	4,626,969
Total net position	$ 31,884,915	$ 17,445,440	$ 49,330,355

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

GREENSVILLE COUNTY WATER AND SEWER AUTHORITY
(A Component Unit of the County of Greensville, Virginia)

Statement of Revenues, Expenses and Changes in Net Position
For the Year Ended September 30, 2020

	Water	Sewer	Total
Operating revenues:			
Metered sales--water	$ 2,362,298	$ -	$ 2,362,298
User fees--sewer	-	2,623,694	2,623,694
Penalties	8,440	16,740	25,180
Other operating revenues	669,790	213,389	883,179
Total operating revenues	$ 3,040,528	$ 2,853,823	$ 5,894,351
Operating expenses:			
Administration	$ 210,502	$ 270,441	$ 480,943
Authority Board	12,054	18,080	30,134
Maintenance	326,441	625,808	952,249
Water treatment-Northampton	232,641	-	232,641
Water treatment-Jarratt	818,678	-	818,678
Econo lodge well system	13,428	-	13,428
Jackson Field water system	3,762	-	3,762
Falling run sewage treatment plant	-	80,642	80,642
Three creek sewage treatment plant	-	763,969	763,969
Sewage treatment -Emporia/Northampton	-	177,759	177,759
Sewage treatment-Jarratt	-	65,007	65,007
Skippers sewage treatment plant	-	86,810	86,810
Depreciation	721,000	643,750	1,364,750
Total operating expenses	$ 2,338,506	$ 2,732,266	$ 5,070,772
Operating income	$ 702,022	$ 121,557	$ 823,579
Nonoperating revenues (expenses):			
Interest income	$ 9,948	$ 88,184	$ 98,132
Transfers	59,174	(59,174)	-
Interest expense	(479,230)	(363,087)	(842,317)
Total nonoperating revenues (expenses)	$ (410,108)	$ (334,077)	$ (744,185)
Income (loss) before grants, capital contributions and connection charges	$ 291,914	$ (212,520)	$ 79,394
Capital grants	$ 690,900	$ 2,471,540	$ 3,162,440
Connection charges	3,900	8,780	12,680
Total grants, capital contributions and connection charges	$ 694,800	$ 2,480,320	$ 3,175,120
Change in net position	$ 986,714	$ 2,267,800	$ 3,254,514
Net position - beginning of year, as restated	30,898,201	15,177,640	46,075,841
Net position - end of year	$ 31,884,915	$ 17,445,440	$ 49,330,355

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

GREENSVILLE COUNTY WATER AND SEWER AUTHORITY
(A Component Unit of the County of Greensville, Virginia)

Statement of Cash Flows
For the Year Ended September 30, 2020

	Water	Sewer	Total
Cash flows from operating activities:			
Receipts from customers and users	$ 2,944,487	$ 2,815,258	$ 5,759,745
Payments to suppliers of goods and services	(2,393,487)	(990,711)	(3,384,198)
Payments to and on behalf of employees	(748,423)	(917,966)	(1,666,389)
Net cash provided by (used for) operating activities	$ (197,423)	$ 906,581	$ 709,158
Cash flows from noncapital financing activities:			
Transfers	$ 59,174	$ (59,174)	$ -
Cash flows from capital and related financing activities:			
Interest paid on debt	$ (443,589)	$ (395,310)	$ (838,899)
Connection charges	3,900	8,780	12,680
Capital grants and federal water grants received	690,900	2,471,540	3,162,440
Additions to capital assets and construction in progress	(1,961,866)	(8,085,313)	(10,047,179)
Loan proceeds received	11,522,535	1,444,000	12,966,535
Retirement of indebtedness	(7,628,053)	(1,689,222)	(9,317,275)
Net cash provided by (used for) capital and related financing activities	$ 2,183,827	$ (6,245,525)	$ (4,061,698)
Cash flows from investing activities:			
Interest earned	$ 9,948	$ 88,184	$ 98,132
Principal payments received on loans receivable	20,420	20,420	40,840
Net cash provided by (used for) investing activities	$ 30,368	$ 108,604	$ 138,972
Increase (decrease) in cash and cash equivalents for the year	$ 2,075,946	$ (5,289,514)	$ (3,213,568)
Cash and cash equivalents at beginning of year, including $7,410,201 of cash in hands of trustee	1,066,615	8,792,724	9,859,339
Cash and cash equivalents at end of year, including $1,757,367 of cash in hands of trustee	$ 3,142,561	$ 3,503,210	$ 6,645,771
Reconciliation of operating income (loss) to net cash provided by (used for) operating activities:			
Operating income	$ 702,022	$ 121,557	$ 823,579
Adjustments to reconcile net income (loss) to net cash provided by (used for) operating activities:			
Depreciation	721,000	643,750	1,364,750
Changes in assets, deferred outflows of resources, liabilities and deferred inflows of resources:			
(Increase) decrease in accounts receivable	(96,041)	(38,565)	(134,606)
Increase (decrease) in accounts payable and other accrued liabilities	(1,540,177)	146,319	(1,393,858)
Increase (decrease) in compensated absences	(8,517)	775	(7,742)
Increase (decrease) in net pension liability	93,583	126,609	220,192
(Increase) decrease in deferred outflows of resources - pension related	(54,655)	(73,941)	(128,596)
(Increase) decrease in deferred outflows of resources - OPEB related	(5,368)	(7,279)	(12,647)
Increase (decrease) in deferred inflows of resources - pension related	(12,342)	(16,702)	(29,044)
Increase (decrease) in deferred inflows of resources - OPEB related	(980)	(1,297)	(2,277)
Increase (decrease) in net OPEB liabilities	4,052	5,355	9,407
Net cash provided by (used for) operating activities	$ (197,423)	$ 906,581	$ 709,158

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

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

A. Organization and Purpose:

The Greensville County Water and Sewer Authority was created by the Greensville County Board of Supervisors on February 21, 1978, pursuant to the provisions of the Virginia Water and Sewer Authorities Act, Section 15.2-5100 through Section 15.2-5158 of the Code of Virginia, 1950, as amended. The County of Greensville, Virginia serves as the fiscal agent for the Authority.

The bylaws and rules for the business transactions of the Greensville County Water and Sewer Authority are made pursuant to the authority vested in this Authority by Section 15.2-5114(b), Code of Virginia, 1950, as amended and in accordance with the general provisions of the Virginia Water and Sewer Authorities Act.

B. Financial Reporting Entity:

The Greensville County Water and Sewer Authority is reported as a blended component unit of the County of Greensville, Virginia. The Authority is governed by a Board comprised of the County's elected supervisors.

The financial statements of the Authority are prepared as an "enterprise" commercial unit to conform to financial reporting practices as recommended in *Water Utility Accounting* published jointly by the Governmental Finance Officers Association and The American Water Works Association.

C. Basic Financial Statements:

For the Authority, the basic financial statements and required supplementary information consist of:

- Management's discussion and analysis (management has elected to omit this from report)

- 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 Liability (Asset) and Related Ratios
  - Schedule of Employer Contributions – Pension Plan
  - Notes to Required Supplementary Information - Pension Plan
  - Schedule of Changes in the Authority's Net OPEB Liability and Related Ratios – Health Insurance Credit (HIC) Plan
  - Schedule of Employer Contributions – Health Insurance Credit (HIC) Plan
  - Notes to Required Supplementary Information – Health Insurance Credit (HIC) Plan
  - Schedule of Authority's Share of Net OPEB Liability - Group Life Insurance (GLI) Plan
  - Schedule of Employer Contributions – Group Life Insurance (GLI) Plan
  - Notes to Required Supplementary Information – Group Life Insurance (GLI) Plan

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

D. Basis of Accounting:

The accounts of the Authority are accounted for using the economic resources measurement focus and utilize the accrual basis of accounting. Under this method, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred. The accompanying financial statements are prepared in accordance with pronouncements issued by the Governmental Accounting Standards Board. The principles prescribed by GASB represent generally accepted accounting principles applicable to governmental units.

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. The Authority also recognizes as operating revenue the portion of availability charges intended to recover the cost of connecting new customers to the system. 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.

E. 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 from the date of purchase to be cash equivalents.

F. Allowance for Uncollectible Accounts:

The Authority calculates its allowance for specific accounts using historical collection data and, in certain cases, specific account analysis. Historical collection data indicates that any uncollectible amounts would be negligible. Accordingly, no allowance for uncollectible accounts has been established.

G. Capital Assets and Depreciation:

The Authority's capital assets consist of office and computer equipment, transportation equipment and utility plant in service. Capital assets are defined by the Authority as assets with an initial individual cost of more than $5,000 and an estimated useful life in excess of one year. All additions to utility lines are capitalized. Depreciation expense is computed by the straight—line method using the following estimated useful lives as a basis:

Items	Years
Source of supply structures	50
Water pumping equipment	20
Transmission mains and accessories	50 to 66-2/3
Meters	66-2/3
Hydrant and accessories	5
Other general equipment	3
Motor vehicles	5

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

G. Capital Assets and Depreciation: (Continued)

No depreciation is taken on assets until the first year following the date placed in service.

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 expensed.

H. 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.

I. Compensated Absences:

The Authority has a policy which allows for the accumulation and vesting of limited amounts of vacation leave until termination or retirement.

J. Deferred Outflows/Inflows of Resources:

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net 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 one item that qualifies for reporting in this category. It is comprised of certain items related to the measurement of the net pension liability and net OPEB liabilities and contributions to the net pension and OPEB plans made during the current year and subsequent to the net pension liability and net OPEB liability measurement date. For more detailed information on these items, reference the related notes.

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. Certain items related to the measurement of the net pension liability and net OPEB liability(ies) are reported as deferred inflows of resources. For more detailed information on these items, reference the related notes.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

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. Net Position Flow Assumption:

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. Pensions

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

N. Other Postemployment Benefits (OPEB):

Group Life Insurance

The Virginia Retirement System (VRS) Group Life Insurance Program provides coverage to state employees, teachers, and employees of participating political subdivisions. The Group Life Insurance Program was established pursuant to §51.1-500 et seq. of the Code of Virginia, as amended, and which provides the authority under which benefit terms are established or may be amended. The Group Life Insurance Program is a defined benefit plan that provides a basic group life insurance benefit for employees of participating employers. For purposes of measuring the net Group Life Insurance Program OPEB liability, deferred outflows of resources and deferred inflows of resources related to the Group Life Insurance Program OPEB, and Group Life Insurance Program OPEB expense, information about the fiduciary net position of the Virginia Retirement System (VRS) Group Life Insurance program OPEB and the additions to/deductions from the VRS Group Life Insurance Program OPEB's net fiduciary 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.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

N. Other Postemployment Benefits (OPEB): (Continued)

Health Insurance Credit Program

The Authority Health Insurance Credit (HIC) Program was established pursuant to §51.1-1400 et seq. of the Code of Virginia, as amended, and which provides the authority under which benefit terms are established or may be amended. For purposes of measuring the net HIC OPEB liability, deferred outflows of resources and deferred inflows of resources related to the HIC OPEB, and the related HIC OPEB expense, information about the fiduciary net position of the Virginia Retirement System (VRS) Political Subdivision HIC Program, and the additions to/deductions from the VRS Political Subdivision HIC Program's net fiduciary position have been determined on the same basis as they were reported by VRS. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

NOTE 2 - DEPOSITS AND INVESTMENTS:

Deposits:

Deposits with banks are covered by the Federal Deposit Insurance Corporation (FDIC) and collateralized in accordance with the Virginia Security for Public Deposits Act (the "Act") Section 2.2-4400 et. seq. of the Code of Virginia. Under the Act, banks and savings institutions holding public deposits in excess of the amount insured by the FDIC must pledge collateral to the Commonwealth of Virginia Treasury Board. Financial Institutions may choose between two collateralization methodologies and depending upon that choice, will pledge collateral that ranges in the amounts from 50% to 130% of 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 and certain corporate notes, banker's acceptances, repurchase agreements and the State Treasurer's Local Government Investment Pool (LGIP).

The Authority has not adopted a formal investment policy as of September 30, 2020.

NOTE 2 - DEPOSITS AND INVESTMENTS: (CONTINUED)

Credit Risk of Debt Securities

The Authority's rated debt investments as of September 30, 2020 were rated by Standard & Poor's and the ratings are presented below using Standard & Poor's rating scale.

Authority's Rated Debt Investment Value

Rated Debt Investments		Fair Quality Ratings
		AAAm
Local Government Investment Pool	$	126,614
Virginia State Non-Arbitrage Pool		1,736,078
First American Government Obligations		21,289
Total	$	1,883,981

Interest Rate Risk

Investment Maturities (in years)

Investment Type		Fair Value		Less Than 1 Year
Local Government Investment Pool	$	126,614	$	126,614
Virginia State Non-Arbitrage Pool		1,736,078		1,736,078
First American Government Obligations		21,289		21,289
Total	$	1,862,692	$	1,862,692

External Investment Pools

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

NOTE 3 - CAPITAL ASSETS:

A summary of changes in capital assets for the year is presented as follows:

	Balance October 1, 2019	Additions	Deletions	Balance September 30, 2020
Capital assets not being depreciated:				
Land and land rights	$ 2,852,752	$ -	$ -	$ 2,852,752
Construction in progress	25,774,640	9,967,402	9,572,617	26,169,425
Total capital assets not being depreciated	$ 28,627,392	$ 9,967,402	$ 9,572,617	$ 29,022,177
Capital assets being depreciated:				
Buildings and plant	$ 57,314,540	$ 9,572,617	$ -	$ 66,887,157
Equipment	1,046,198	79,777	110,729	1,015,246
Total capital assets being depreciated	$ 58,360,738	$ 9,652,394	$ 110,729	$ 67,902,403
Accumulated depreciation:				
Buildings, plant, and equipment	$ (20,641,514)	$ (1,364,750)	$ (110,729)	$ (21,895,535)
Total capital assets being depreciated, net	$ 37,719,224	$ 8,287,644	$ -	$ 46,006,868
Capital assets, net	$ 66,346,616	$ 18,255,046	$ 9,572,617	$ 75,029,045

Depreciation expense for the year totaled $1,364,750.

NOTE 4 - CONSTRUCTION IN PROGRESS:

Details of construction work in progress for the fiscal year ended September 30, 2020 are as follows:

Project	Balance October 1, 2019	Additions	Deletions	Balance September 30, 2020
Exit 4 Potable Well Integration	$ 180,765	$ -	$ 180,765	$ -
Skippers Waste Water Treatment	377,547	5,166,319	-	5,543,866
Social Services Waste Water Pump Station	133,572	10,821	144,393	-
Dominion VA Power Water	24,343,872	1,882,088	6,556,674	19,669,286
MAMAC Off-Site Waste Water	427,983	2,212,736	2,640,719	-
Moores Ferry Road	50,066	-	50,066	-
Exit 4 Pump Station and Force Main	260,835	695,438	-	956,273
Total	$ 25,774,640	$ 9,967,402	$ 9,572,617	$ 26,169,425

NOTE 5 - COMPENSATED ABSENCES:

The Authority has accrued the liability arising from outstanding compensated absences. Authority employees earn vacation and sick leave at the rate of one day for each per month. All accumulated vacation is paid upon termination. 25% of sick leave up to $5,000 is paid upon termination if employed by the Authority for at least five years. The Authority has outstanding accrued vacation and sick pay totaling $213,797.

NOTE 6 - LONG-TERM OBLIGATIONS:

The following is a summary of long-term obligation transactions of the Authority for the fiscal year ended September 30, 2020:

	Balance Beginning of Year	Issuances/ Increases	Retirements/ Decreases	Balance End of Year	Current Portion
Direct borrowings and direct placements:					
Loan payable	$ 62,550	$ -	$ 14,723	$ 47,827	$ 15,242
Interim Financing	2,791,017	2,346,535	5,137,552	-	-
Rural development loan	9,800,000	7,000,000	-	16,800,000	165,090
2010 Revenue Refunding Bonds	2,785,000	-	2,785,000	-	-
2014 Revenue Refunding Bonds	1,670,000	-	80,000	1,590,000	80,000
2020 Revenue Refunding Bonds	-	3,620,000	65,000	3,555,000	240,000
2011 Revenue Bonds	1,160,000	-	1,085,000	75,000	75,000
2012 Revenue Bonds	205,000	-	5,000	200,000	10,000
2016 Revenue Bonds	1,915,000	-	40,000	1,875,000	40,000
2019 Revenue Bonds	6,790,000	-	105,000	6,685,000	110,000
Premiums on bonds payable	1,251,781	189,588	376,495	1,064,874	56,927
Net OPEB liabilities	108,420	36,538	27,131	117,827	-
Net Pension Liability	220,322	642,238	422,046	440,514	-
Compensated absences	221,539	-	7,742	213,797	21,380
Total	$ 28,980,629	$ 13,834,899	$ 10,150,689	$ 32,664,839	$ 813,639

NOTE 6 - LONG-TERM OBLIGATIONS: (CONTINUED)

Annual requirements to amortize long-term obligations and related interest are as follows:

	Direct Borrowings and Direct Placements: Water and Sewer Revenue Bonds									
Year Ended	2016B		2019B		2014		2012B		2011B	
September 30,	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
2021	$ 40,000	$ 71,931	$ 110,000	$ 270,306	$ 80,000	$ 75,388	$ 10,000	$ 7,938	$ 75,000	$ 3,844
2022	45,000	70,131	120,000	264,669	85,000	71,288	10,000	7,425	-	-
2023	45,000	67,825	125,000	258,519	95,000	66,931	10,000	6,913	-	-
2024	50,000	65,519	130,000	252,113	100,000	62,063	10,000	6,400	-	-
2025	50,000	63,156	140,000	245,450	100,000	56,938	10,000	5,938	-	-
2026	50,000	61,094	145,000	238,275	105,000	51,813	10,000	5,475	-	-
2027	55,000	59,031	155,000	230,844	110,000	46,781	10,000	5,038	-	-
2028	55,000	56,363	160,000	222,900	110,000	41,494	10,000	4,650	-	-
2029	60,000	53,994	170,000	214,700	115,000	36,156	10,000	4,263	-	-
2030	60,000	51,369	180,000	205,988	125,000	32,213	10,000	3,875	-	-
2031	65,000	49,156	185,000	196,763	130,000	26,206	10,000	3,550	-	-
2032	65,000	46,825	195,000	187,281	140,000	19,944	15,000	3,225	-	-
2033	70,000	44,469	205,000	177,288	145,000	13,169	15,000	2,719	-	-
2034	70,000	41,956	220,000	166,781	150,000	6,188	15,000	2,175	-	-
2035	75,000	39,369	225,000	155,506	-	-	15,000	1,631	-	-
2036	75,000	37,338	235,000	147,775	-	-	15,000	1,088	-	-
2037	80,000	35,231	245,000	139,731	-	-	15,000	544	-	-
2038	80,000	31,806	255,000	131,325	-	-	-	-	-	-
2039	85,000	28,269	265,000	120,806	-	-	-	-	-	-
2040	90,000	24,475	275,000	109,875	-	-	-	-	-	-
2041	95,000	20,363	285,000	100,488	-	-	-	-	-	-
2042	95,000	16,094	295,000	90,763	-	-	-	-	-	-
2043	100,000	13,125	305,000	80,700	-	-	-	-	-	-
2044	105,000	10,000	315,000	70,294	-	-	-	-	-	-
2045	105,000	6,719	325,000	59,550	-	-	-	-	-	-
2046	110,000	3,438	335,000	48,456	-	-	-	-	-	-
2047	-	-	350,000	37,025	-	-	-	-	-	-
2048	-	-	360,000	25,081	-	-	-	-	-	-
2049	-	-	375,000	12,794	-	-	-	-	-	-
Total	$ 1,875,000	$ 1,069,046	$ 6,685,000	$ 4,462,046	$ 1,590,000	$ 606,572	$ 200,000	$ 72,847	$ 75,000	$ 3,844

NOTE 6 - LONG-TERM OBLIGATIONS: (CONTINUED)

Annual requirements to amortize long-term obligations and related interest are as follows: (continued)

	Direct Borrowings and Direct Placements:							
Year Ended	2018 Rural Development		2020 Rural Development		2020 Refunding		Loan Payable	
September 30,	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
2021	$ 165,090	$ 222,788	$ -	$ 131,250	$ 240,000	$ 75,544	$ 15,242	$ 1,525
2022	168,843	219,035	-	131,250	335,000	70,444	15,780	987
2023	172,682	215,197	128,030	131,250	335,000	63,325	16,806	372
2024	176,607	211,271	130,431	128,849	340,000	56,206	-	-
2025	180,622	207,256	132,876	126,404	350,000	48,981	-	-
2026	184,729	203,150	135,368	123,912	360,000	41,544	-	-
2027	188,928	198,950	137,906	121,374	360,000	33,894	-	-
2028	193,223	194,655	140,491	118,789	365,000	26,244	-	-
2029	197,616	190,263	143,126	116,154	375,000	18,487	-	-
2030	202,108	185,770	145,809	113,471	385,000	10,519	-	-
2031	206,703	181,176	148,543	110,737	110,000	2,337	-	-
2032	211,402	176,477	151,328	107,952	-	-	-	-
2033	216,208	171,671	154,166	105,114	-	-	-	-
2034	221,123	166,756	157,056	102,224	-	-	-	-
2035	226,150	161,729	160,001	99,279	-	-	-	-
2036	231,291	156,587	163,001	96,279	-	-	-	-
2037	236,549	151,329	166,058	93,223	-	-	-	-
2038	241,927	145,952	169,171	90,109	-	-	-	-
2039	247,426	140,452	172,343	86,937	-	-	-	-
2040	253,051	134,827	175,574	83,706	-	-	-	-
2041	258,804	129,074	178,867	80,414	-	-	-	-
2042	264,688	123,191	182,220	77,060	-	-	-	-
2043	270,705	117,174	185,637	73,643	-	-	-	-
2044	276,859	111,020	189,118	70,162	-	-	-	-
2045	283,153	104,726	192,663	66,616	-	-	-	-
2046	289,590	98,289	196,276	63,004	-	-	-	-
2047	296,173	91,705	199,956	59,324	-	-	-	-
2048	302,906	84,972	203,705	55,575	-	-	-	-
2049	309,793	78,086	207,525	51,755	-	-	-	-
2050	316,835	71,043	211,416	47,864	-	-	-	-
2051	324,038	63,841	215,380	43,900	-	-	-	-
2052	331,404	56,474	219,418	39,862	-	-	-	-
2053	338,938	48,940	223,532	35,748	-	-	-	-
2054	346,644	41,235	227,724	31,556	-	-	-	-
2055	354,524	33,354	231,993	27,286	-	-	-	-
2056	362,584	25,295	236,343	22,937	-	-	-	-
2057	370,826	17,052	240,775	18,505	-	-	-	-
2058	379,258	8,622	245,290	13,991	-	-	-	-
2059	-	-	249,888	9,391	-	-	-	-
2060	-	-	250,996	4,706	-	-	-	-
Total	$ 9,800,000	$ 4,939,384	$ 7,000,000	$ 3,111,562	$ 3,555,000	$ 447,525	$ 47,828	$ 2,884

NOTE 6 - LONG-TERM OBLIGATIONS: (CONTINUED)

Details of Long-term Obligations:

Compensated absences	$	213,797
Net OPEB liabilities	$	117,827
Net Pension Liability	$	440,514
Loan Payable:		
$235,629 Water & Sewer loan payable issued May 30, 2003, due in semi-annual payments of principal and interest of $8,387, through September 1, 2023, interest at 3.50%.	$	47,827
Revenue Bonds:		
$6,790,000 Water & Sewer Revenue Bonds series 2019B issued July 24, 2019, due in various semi-annual payments of principal and interest through October 1, 2049, interest payable semi-annually at 3.43%.	$	6,685,000
Premiums on bonds payable		1,064,874
$2,175,000 Water & Sewer Refunding Revenue Bonds series 2014C issued November 5, 2014, due in various semi-annual payments of principal and interest through October 1, 2034, interest payable semi-annually at 3.26%.		1,315,000
$365,000 Water & Sewer Refunding Revenue Bonds series 2014C issued November 5, 2014, due in various semi-annual payments of principal and interest through October 1, 2034, interest payable semi-annually at 3.50%.		275,000
$240,000 Water & Sewer Refunding Revenue Bonds series 2012B issued July 12, 2012, due in various semi-annual payments of principal and interest through October 1, 2037, interest payable semi-annually at 3.83%.		200,000
$1,640,000 Water & Sewer Refunding Revenue Bonds series 2011B issued October 15, 2011, due in various semi-annual payments of principal and interest through October 1, 2031, interest payable semi-annually at 5.5%.		75,000

NOTE 6 - LONG-TERM OBLIGATIONS: (CONTINUED)

Details of Long-term Obligations: (continued)

Revenue Bonds: (continued)

$2,025,000 Water & Sewer Revenue Bonds series 2016B issued July 27, 2016, due in various semi-annual payments of principal and interest through October 1, 2046, interest payable semi-annually at 3.17%.	$	1,875,000
$3,620,000 Water & Sewer Refunding Revenue Bonds series 2020 issued July 22, 2020, due in various semi-annual payments of principal and interest through October 1, 2031, interest payable semi-annually at 2.125%.		3,555,000
Total revenue bonds	$	15,044,874
$9,800,000 Rural development loan series 2018A issued September 20, 2018, due in annual payments of principal and interest through September 20, 2058, interest payable at 2.25%.	$	9,800,000
$7,000,000 Rural development loan series 2020A issued June 10, 2020, due in annual payments of principal and interest through June 10, 2060, interest payable at 1.875%.		7,000,000
Total long-term obligations	$	32,664,839
Less current portion		813,639
Total noncurrent obligations	$	31,851,200

NOTE 7 - PENSION PLAN:

Plan Description

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

Benefit Structures

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

a. Employees hired 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' service credit or age 50 with at least 30 years of service credit. Non-hazardous duty employees may retire with a reduced benefit as early as age 55 with at least 5 years of service credit or age 50 with at least 10 years of service credit.

b. Employees hired on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013 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 hired on or after January 1, 2014 are covered by the Hybrid Plan combining the features of a defined benefit plan and a defined contribution plan. Plan 1 and Plan 2 members also had the option of opting into this plan during the election window held January 1 – April 30, 2014 with an effective date of July 1, 2014. Employees covered by this plan are eligible for an unreduced benefit beginning at their normal social security retirement age with at least 5 years of service credit, or when the sum of their age plus service credit equals 90. Employees may retire with a reduced benefit as early as age 60 with at least 5 years of service credit. For the defined contribution component, members are eligible to receive distributions upon leaving employment, subject to restrictions.

NOTE 7 - PENSION PLAN: (CONTINUED)

Average Final Compensation and Service Retirement Multiplier

The VRS defined benefit is a lifetime monthly benefit based on a retirement multiplier as a percentage of the employee's average final compensation multiplied by the employee's total service credit. Under Plan 1, average final compensation is the average of the employee's 36 consecutive months of highest compensation, and the multiplier is 1.70% for non-hazardous duty employees. Under Plan 2, average final compensation is the average of the employee's 60 consecutive months of highest compensation, and the retirement multiplier is 1.65% for non-hazardous duty employees. Under the Hybrid Plan, average final compensation is the average of the employee's 60 consecutive months of highest compensation, and the multiplier is 1.00%. For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans.

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

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

Employees Covered by Benefit Terms

As of the June 30, 2018 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	10
Inactive members:	
Vested inactive members	3
Non-vested inactive members	1
Inactive members active elsewhere in VRS	7
Total inactive members	11
Active members	23
Total covered employees	44

NOTE 7 - PENSION PLAN: (CONTINUED)

Contributions

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

The Authority's contractually required employer contribution rate for the year ended June 30, 2020 was 5.74% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017.

This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Authority were $65,997 and $66,065 for the years ended June 30, 2020 and June 30, 2019, respectively.

Net Pension Liability

The net pension liability (NPL) is calculated separately for each employer and represents that particular employer's total pension liability determined in accordance with GASB Statement No. 68, less that employer's fiduciary net position. For the Authority, the net pension liability was measured as of June 30, 2019. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2018, rolled forward to the measurement date of June 30, 2019.

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, 2018, 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, 2019.

Inflation	2.50%
Salary increases, including inflation	3.50% – 5.35%
Investment rate of return	6.75%, net of pension plan investment expenses, including inflation*

* Administrative expenses as a percent of the market 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.

NOTE 7 - PENSION PLAN: (CONTINUED)

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, 2018 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-retirement healthy, and disabled)	Updated to a more current mortality table - RP-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%

NOTE 7 – PENSION PLAN: (Continued)

Long-Term Expected Rate of Return

The long-term expected rate of return on pension System investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension System investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class (Strategy)	Target Allocation	Arithmetic Long-term Expected Rate of Return	Weighted Average Long-term Expected Rate of Return*
Public Equity	34.00%	5.61%	1.91%
Fixed Income	15.00%	0.88%	0.13%
Credit Strategies	14.00%	5.13%	0.72%
Real Assets	14.00%	5.27%	0.74%
Private Equity	14.00%	8.77%	1.23%
MAPS - Multi-Asset Public Strategies	6.00%	3.52%	0.21%
PIP - Private Investment Partnership	3.00%	6.29%	0.19%
Total	100.00%		5.13%
		Inflation	2.50%
		Expected arithmetic nominal return*	7.63%

* The above allocation provides a one-year return of 7.63%. 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%. 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.

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, 2019, the alternate rate was the employer

NOTE 7 – PENSION PLAN: (Continued)

Discount Rate: (Continued)

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, 2019, on, participating employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

Changes in Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (Asset) (a) - (b)
Balances at June 30, 2018	$ 4,636,686	$ 4,416,364	$ 220,322
Changes for the year:			
Service cost	$ 96,918	$ -	$ 96,918
Interest	319,623	-	319,623
Differences between expected and actual experience	56,309	-	56,309
Assumption changes	166,324	-	166,324
Contributions - employer	-	66,066	(66,066)
Contributions - employee	-	59,117	(59,117)
Net investment income	-	296,863	(296,863)
Benefit payments, including refunds	(141,280)	(141,280)	-
Administrative expenses	-	(2,877)	2,877
Other changes	-	(187)	187
Net changes	$ 497,894	$ 277,702	$ 220,192
Balances at June 30, 2019	$ 5,134,580	$ 4,694,066	$ 440,514

NOTE 7 – PENSION PLAN: (Continued)

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

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

	Rate		
	1% Decrease (5.75%)	Current Discount (6.75%)	1% Increase (7.75%)
Greensville County Water and Sewer Authority's Net Pension Liability (Asset)	$ 1,198,613	$ 440,514	$ (160,961)

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

For the year ended June 30, 2020, the Authority recognized pension expense of $128,551. At June 30, 2020, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 78,831	$ -
Change in assumptions	126,342	41,090
Net difference between projected and actual earnings on pension plan investments	-	41,868
Employer contributions subsequent to the measurement date	65,997	-
Total	$ 271,170	$ 82,958

NOTE 7 – PENSION PLAN: (Continued)

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

$65,997 reported as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the fiscal year ending June 30, 2021. 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		
2021	$	39,521
2022		15,895
2023		55,915
2024		10,884
2025		-
Thereafter		-

Pension Plan Data

Information about the VRS Political Subdivision Retirement Plan is also available in the separately issued VRS 2019 Comprehensive Annual Financial Report (CAFR). A copy of the 2019 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/pdf/publications/2019-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA 23218-2500.

NOTE 8 - RISK MANAGEMENT:

The Authority is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. 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. The Agreement for Formation of the association provides that the association will be self-sustaining through member premiums.

The Authority continues to carry commercial insurance for all other risks of loss, including general liability and 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 9 - ECONOMIC DEPENDENCY:

For the fiscal year ended September 30, 2020, the Commonwealth of Virginia-Department of Corrections was billed $1,965,086 for services, which constitutes approximately 33% of total operating revenues. Boar's Head Provisions Company, Inc. was billed $731,379 for services, which constitutes approximately 12% of total operating revenues.

NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS:

Health Insurance Credit (HIC) Plan (OPEB Plan):

Plan Description

The Political Subdivision Health Insurance Credit (HIC) Plan was established pursuant to §51.1-1400 et seq. of the Code of Virginia, as amended, and which provides the authority under which benefit terms are established or may be amended. All full-time, salaried permanent employees of participating political subdivisions are automatically covered by the VRS Political Subdivision HIC Plan upon employment. This is an agent multiple-employer plan administered by the Virginia Retirement System (the System), along with pension and other OPEB plans, for public employer groups in the Commonwealth of Virginia. Members earn one month of service credit toward the benefit for each month they are employed and for which their employer pays contributions to VRS. The HIC is a tax-free reimbursement in an amount set by the General Assembly for each year of service credit against qualified health insurance premiums retirees pay for single coverage, excluding any portion covering the spouse or dependents. The credit cannot exceed the amount of the premiums and ends upon the retiree's death.

The specific information about the Political Subdivision HIC Plan OPEB, including eligibility, coverage and benefits is described below:

Eligible Employees

The Political Subdivision Retiree HIC Plan was established July 1, 1993 for retired political subdivision employees of employers who elect the benefit and retire with at least 15 years of service credit. Eligible employees include full-time permanent salaried employees of the participating political subdivision who are covered under the VRS pension plan. These employees are enrolled automatically upon employment.

Benefit Amounts

The Political Subdivision Retiree HIC Plan is a defined benefit plan that provides a credit toward the cost of health insurance coverage for retired political subdivision employees of participating employers. For employees who retire, the monthly benefit is $1.50 per year of service per month with a maximum benefit of $45.00 per month. For employees who retire on disability or go on long-term disability under the Virginia Local Disability Program (VLDP), the monthly benefit is $45.00 per month.

NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Health Insurance Credit (HIC) Plan (OPEB Plan): (Continued)

HIC Plan Notes

The monthly HIC benefit cannot exceed the individual premium amount. There is no HIC for premiums paid and qualified under LODA; however, the employee may receive the credit for premiums paid for other qualified health plans. Employees who retire after being on long-term disability under VLDP must have at least 15 years of service credit to qualify for the HIC as a retiree.

Employees Covered by Benefit Terms

As of the June 30, 2018 actuarial valuation, the following employees were covered by the benefit terms of the HIC OPEB plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	7
Inactive members:	
Vested inactive members	-
Non-vested inactive members	-
Inactive members active elsewhere in VRS	-
Total inactive members	7
Active members	23
Total covered employees	30

Contributions

The contribution requirements for active employees is governed by §51.1-1402(E) of the Code of Virginia, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. The Authority's contractually required employer contribution rate for the year ended June 30, 2020 was 0.17% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. The actuarially determined rate 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 from the Authority to the HIC Plan were $2,086 and $2,057 for the years ended June 30, 2020 and June 30, 2019, respectively.

NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Health Insurance Credit (HIC) Plan (OPEB Plan): (Continued)

Net HIC OPEB Liability

The Authority's net HIC OPEB liability was measured as of June 30, 2019. The total HIC OPEB liability was determined by an actuarial valuation performed as of June 30, 2018, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2019.

Actuarial Assumptions

The total HIC OPEB liability was based on an actuarial valuation as of June 30, 2018, 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, 2019.

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 market 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 the OPEB liabilities.

NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Health Insurance Credit (HIC) 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 Life Mortality Table 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, 2018 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%

NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Health Insurance Credit (HIC) Plan (OPEB Plan): (Continued)

Long-Term Expected Rate of Return

The long-term expected rate of return on the System's investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of System's investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class (Strategy)	Target Allocation	Arithmetic Long-term Expected Rate of Return	Weighted Average Long-term Expected Rate of Return*
Public Equity	34.00%	5.61%	1.91%
Fixed Income	15.00%	0.88%	0.13%
Credit Strategies	14.00%	5.13%	0.72%
Real Assets	14.00%	5.27%	0.74%
Private Equity	14.00%	8.77%	1.23%
MAPS - Multi-Asset Public Strategies	6.00%	3.52%	0.21%
PIP - Private Investement Partnership	3.00%	6.29%	0.19%
Total	100.00%		5.13%
		Inflation	2.50%
		Expected arithmetic nominal return*	7.63%

*The above allocation provides a one-year return of 7.63%. 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%. 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.

Discount Rate

The discount rate used to measure the total HIC OPEB liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that 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 ended June 30, 2019, the rate contributed by the entity for the HIC OPEB will be subject to the portion of the VRS Board-certified

NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Health Insurance Credit (HIC) Plan (OPEB Plan): (Continued)

Discount Rate: (Continued)

rates that are funded by the Virginia General Assembly, which was 100% of the actuarially determined contribution rate. From July 1, 2019 on, employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the HIC 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 HIC OPEB liability.

Changes in Net HIC OPEB Liability

	Increase (Decrease)		
	Total HIC OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net HIC OPEB Liability (Asset) (a) - (b)
Balances at June 30, 2018	$ 62,303	$ 44,883	$ 17,420
Changes for the year:			
Service cost	$ 777	$ -	$ 777
Interest	4,310	-	4,310
Differences between expected and actual experience	(1,814)	-	(1,814)
Assumption changes	1,649	-	1,649
Contributions - employer	-	2,057	(2,057)
Net investment income	-	2,928	(2,928)
Benefit payments	(1,473)	(1,473)	-
Administrative expenses	-	(64)	64
Other changes	-	(3)	3
Net changes	$ 3,449	$ 3,445	$ 4
Balances at June 30, 2019	$ 65,752	$ 48,328	$ 17,424

Sensitivity of the Authority's HIC Net OPEB Liability to Changes in the Discount Rate

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

	Rate		
	1% Decrease (5.75%)	Current Discount (6.75%)	1% Increase (7.75%)
Greensville County Water and Sewer Authority's Net HIC OPEB Liability	$ 24,751	$ 17,424	$ 11,210

NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Health Insurance Credit (HIC) Plan (OPEB Plan): (Continued)

HIC Plan OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to HIC Plan OPEB

For the year ended June 30, 2020, the Authority recognized HIC Plan OPEB expense of $942. At June 30, 2020, the Authority reported deferred outflows of resources and deferred inflows of resources related to the Authority's HIC Plan from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ -	$ 2,380
Net difference between projected and actual earnings on HIC OPEB plan investments	-	526
Change in assumptions	1,379	1,624
Changes in proportion	-	-
Employer contributions subsequent to the measurement date	2,086	-
Total	$ 3,465	$ 4,530

$2,086 reported as deferred outflows of resources related to the HIC OPEB resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the Net HIC OPEB Liability in the fiscal year ending June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the HIC OPEB will be recognized in the HIC OPEB expense in future reporting periods as follows:

Year Ended June 30	
2021	$ (1,052)
2022	(1,054)
2023	(715)
2024	(277)
2025	(50)
Thereafter	(3)

NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Health Insurance Credit (HIC) Plan (OPEB Plan): (Continued)

HIC Plan Data

Information about the VRS Political Subdivision HIC Plan is available in the separately issued VRS 2019 Comprehensive Annual Financial Report (CAFR). A copy of the 2019 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/pdf/publications/2019-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

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

Plan Description

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

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

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

Eligible Employees

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

Benefit Amounts

The GLI Plan is a defined benefit plan with several components. The natural death benefit is equal to the employee's covered compensation rounded to the next highest thousand and then doubled. The accidental death benefit is double the natural death benefit. In addition to basic natural and accidental death benefits, the plan provides additional benefits provided under specific circumstances that include the following: accidental dismemberment benefit, 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 $8,463 as of June 30, 2020.

NOTE 10 – 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 Code of Virginia, as amended, but may be impacted as a result of funding provided to state agencies and school divisions by the Virginia General Assembly. The total rate for the GLI Plan was 1.31% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.79% (1.31% x 60%) and the employer component was 0.52% (1.31% 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, 2020 was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. 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 Group Life Insurance Plan from the entity were $6,380 and $6,292 for the years ended June 30, 2020 and June 30, 2019, 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, 2020, the entity reported a liability of $100,403 for its proportionate share of the Net GLI OPEB Liability. The Net GLI OPEB Liability was measured as of June 30, 2019 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, 2018, and rolled forward to the measurement date of June 30, 2019. 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, 2019 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2019, the participating employer's proportion was 0.00617% as compared to 0.00601% at June 30, 2018.

For the year ended June 30, 2020, the participating employer recognized GLI OPEB expense of $1,796. Since there was a change in proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

NOTE 10 – OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Group Life Insurance (GLI) Plan (OPEB Plan): (Continued)

At June 30, 2020, 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	$ 6,677	$ 1,302
Net difference between projected and actual earnings on GLI OPEB plan investments	-	2,062
Change in assumptions	6,339	3,028
Changes in proportion	2,135	4,071
Employer contributions subsequent to the measurement date	6,380	-
Total	$ 21,531	$ 10,463

$6,380 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, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the GLI OPEB will be recognized in the GLI OPEB expense in future reporting periods as follows:

Year Ended June 30	
2021	$ (169)
2022	(169)
2023	704
2024	1,501
2025	2,111
Thereafter	710

NOTE 10 – OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Group Life Insurance (GLI) Plan (OPEB Plan): (Continued)

Actuarial Assumptions

The total GLI OPEB liability was based on an actuarial valuation as of June 30, 2018, 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, 2019. The assumptions include several employer groups as noted below. Salary increases and mortality rates included herein are for relevant employer groups. Information for other groups can be referenced in the VRS CAFR.

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 market 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.

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.

NOTE 10 – OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Group Life Insurance (GLI) Plan (OPEB Plan): (Continued)

Actuarial Assumptions (Continued)

The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, 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, 2019, NOL amounts for the GLI Plan are as follows (amounts expressed in thousands):

		GLI OPEB Plan
Total GLI OPEB Liability	$	3,390,238
Plan Fiduciary Net Position		1,762,972
GLI Net OPEB Liability (Asset)	$	1,627,266
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability		52.00%

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

NOTE 10 – OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Group Life Insurance (GLI) Plan (OPEB Plan): (Continued)

Long-Term Expected Rate of Return

The long-term expected rate of return on the System's investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of System's investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class (Strategy)	Target Allocation	Arithmetic Long-term Expected Rate of Return	Weighted Average Long-term Expected Rate of Return*
Public Equity	34.00%	5.61%	1.91%
Fixed Income	15.00%	0.88%	0.13%
Credit Strategies	14.00%	5.13%	0.72%
Real Assets	14.00%	5.27%	0.74%
Private Equity	14.00%	8.77%	1.23%
MAPS - Multi-Asset Public Strategies	6.00%	3.52%	0.21%
PIP - Private Investment Partnership	3.00%	6.29%	0.19%
Total	100.00%		5.13%
		Inflation	2.50%
		Expected arithmetic nominal return*	7.63%

*The above allocation provides a one-year return of 7.63%. 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%. 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.

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 ended June 30, 2019, 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

NOTE 10 – OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Group Life Insurance (GLI) Plan (OPEB Plan): (Continued)

Discount Rate: (Continued)

Assembly which was 100% of the actuarially determined contribution rate. From July 1, 2019 on, employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the GLI OPEB's fiduciary net position was projected to be available to make all projected future benefit payments of eligible employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total GLI OPEB liability.

Sensitivity of the Employer's Proportionate Share of the Net GLI OPEB Liability to Changes in the Discount Rate

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

	Rate		
	1% Decrease (5.75%)	Current Discount (6.75%)	1% Increase (7.75%)
Authority's proportionate share of the GLI Plan Net OPEB Liability	$ 131,901	$ 100,403	$ 74,858

GLI Plan Fiduciary Net Position

Detailed information about the GLI Plan's Fiduciary Net Position is available in the separately issued VRS 2019 Comprehensive Annual Financial Report (CAFR). A copy of the 2019 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/pdf/publications/2019-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

OPEB Aggregate Totals

	Greensville County Water and Sewer Authority			
	Deferred Outflows	Deferred Inflows	Net OPEB Liability	OPEB Expense
VRS OPEB Plans:				
Health Insurance Credit (HIC) Plan:	$ 3,465	$ 4,530	$ 17,424	$ 942
Group Life Insurance (GLI) Plan:	21,531	10,463	100,403	1,796
Totals	$ 24,996	$ 14,993	$ 117,827	$ 2,738

NOTE 11 - LOAN TO IDA OF GREENSVILLE, VIRGINIA:

The Authority has made the following loan to the Greensville County Industrial Development Authority:

On July 19, 2010, the Authority entered into a note receivable agreement in the amount of $825,000 with the Greensville County IDA. The proceeds were used to refinance the note payable agreement dated February 11, 2005 with an outstanding balance of $820,594. Payments are due monthly in the amount of $4,913 through November 15, 2029, interest at 3.80%. The outstanding balance of this note at September 30, 2020 was $455,684.

Annual repayments of principal and interest are as follows:

	IDA Refinance	
	Principal	Interest
2021	$ 42,415	$ 16,539
2022	44,051	14,903
2023	45,750	13,204
2024	47,514	11,440
2025	49,347	9,607
2026	51,250	7,704
2027	53,226	5,728
2028	53,279	3,675
2029	59,411	1,543
2030	9,441	44
Total	$ 455,684	$ 84,387

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. 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.

NOTE 12 - UPCOMING PRONOUNCEMENTS: (CONTINUED)

Statement No. 93, *Replacement of Interbank Offered Rates*, establishes accounting and financial reporting requirements related to the replacement of Interbank Offered Rates (IBORs) in hedging derivative instruments and leases. It also identifies appropriate benchmark interest rates for hedging derivative instruments. The requirements of this Statement, except for removal of London Interbank Offered Rate (LIBOR) as an appropriate benchmark interest rate and the requirements related to lease modifications, are effective for reporting periods beginning after June 15, 2020. The removal of LIBOR as an appropriate benchmark interest rate is effective for reporting periods ending after December 31, 2021. All requirements related to lease modifications in this Statement are effective for reporting periods beginning after June 15, 2021.

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

NOTE 13 – RESTATEMENT OF BEGINNING NET POSITION:

The Authority restated beginning net position to remove an amount not reported as due from Greensville County in the September 30, 2019 Financial Report.

	Water	Sewer	Total
Net Position as of September 30, 2019, as previously reported	$ 30,898,201	$ 15,524,492	$ 46,422,693
Less amount reported as due from Greensville County	-	(346,852)	(346,852)
Net Position as of October 1, 2019, as restated	$ 30,898,201	$ 15,177,640	$ 46,075,841

- Required Supplementary Information -

Schedule of Changes in Net Pension Liability (Asset) and Related Ratios
Pension Plan
For the Measurement Dates of June 30, 2014 through June 30, 2019

	2019	2018	2017
Total pension liability:			
Service cost	$ 96,918	$ 105,214	$ 104,118
Interest	319,623	297,855	284,667
Changes in benefit terms	-	-	-
Differences between expected and actual experience	56,309	43,856	36,682
Changes of assumptions	166,324	-	(131,732)
Benefit payments	(141,280)	(130,631)	(80,026)
Net change in total pension liability	$ 497,894	$ 316,294	$ 213,709
Total pension liability - beginning	4,636,686	4,320,392	4,106,683
Total pension liability - ending (a)	$ 5,134,580	$ 4,636,686	$ 4,320,392
Plan fiduciary net position:			
Contributions - employer	$ 66,066	$ 78,019	$ 81,262
Contributions - employee	59,117	55,485	57,533
Net investment income	296,863	305,916	446,980
Benefit payments	(141,280)	(130,631)	(80,026)
Administrator charges	(2,877)	(2,589)	(2,477)
Other	(187)	(274)	(402)
Net change in plan fiduciary net position	$ 277,702	$ 305,926	$ 502,870
Plan fiduciary net position - beginning	4,416,364	4,110,438	3,607,568
Plan fiduciary net position - ending (b)	$ 4,694,066	$ 4,416,364	$ 4,110,438
Authority's net pension liability (asset) - ending (a) - (b)	$ 440,514	$ 220,322	$ 209,954
Plan fiduciary net position as a percentage of the total pension liability	91.42%	95.25%	95.14%
Covered payroll	$ 1,210,019	$ 1,142,430	$ 1,168,444
Authority's net pension liability (asset) as a percentage of covered payroll	36.41%	19.29%	17.97%

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

Schedule of Changes in Net Pension Liability (Asset) and Related Ratios
Pension Plan
For the Measurement Dates of June 30, 2014 through June 30, 2019

	2016	2015	2014
Total pension liability:			
Service cost	$ 103,433	$ 103,615	$ 115,718
Interest	264,821	235,966	217,736
Changes in benefit terms	-	-	-
Differences between expected and actual experience	6,359	162,821	-
Changes of assumptions	-	-	-
Benefit payments	(102,185)	(78,182)	(67,871)
Net change in total pension liability	$ 272,428	$ 424,220	$ 265,583
Total pension liability - beginning	3,834,255	3,410,035	3,144,452
Total pension liability - ending (a)	$ 4,106,683	$ 3,834,255	$ 3,410,035
Plan fiduciary net position:			
Contributions - employer	$ 78,575	$ 75,055	$ 80,168
Contributions - employee	54,998	52,633	51,522
Net investment income	63,327	154,360	450,281
Benefit payments	(102,185)	(78,182)	(67,871)
Administrator charges	(2,155)	(2,033)	(2,348)
Other	(26)	(33)	24
Net change in plan fiduciary net position	$ 92,534	$ 201,800	$ 511,776
Plan fiduciary net position - beginning	3,515,034	3,313,234	2,801,458
Plan fiduciary net position - ending (b)	$ 3,607,568	$ 3,515,034	$ 3,313,234
Authority's net pension liability (asset) - ending (a) - (b)	$ 499,115	$ 319,221	$ 96,801
Plan fiduciary net position as a percentage of the total pension liability	87.85%	91.67%	97.16%
Covered payroll	$ 1,106,867	$ 1,052,653	$ 1,030,441
Authority's net pension liability (asset) as a percentage of covered payroll	45.09%	30.33%	9.39%

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

GREENSVILLE COUNTY WATER AND SEWER AUTHORITY
(A Component Unit of the County of Greensville, Virginia)

Schedule of Employer Contributions
Pension Plan
For the Years Ended June 30, 2011 through June 30, 2020

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)
2020	$ 65,997	$ 65,997	$ -	$ 1,226,886	5.38%
2019	66,065	66,065	-	1,210,019	5.46%
2018	78,019	78,019	-	1,142,430	6.83%
2017	82,375	82,375	-	1,168,444	7.05%
2016	78,920	78,920	-	1,106,867	7.13%
2015	75,054	75,054	-	1,052,653	7.13%
2014	80,168	80,168	-	1,030,441	7.78%
2013	80,556	80,556	-	1,035,420	7.78%
2012	52,825	52,825	-	963,954	5.48%
2011	50,841	50,841	-	927,764	5.48%

Contributions are from VRS records.

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, 2018 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-retirement healthy, and disabled)	Updated to a more current mortality table - RP-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%

GREENSVILLE COUNTY WATER AND SEWER AUTHORITY
(A Component Unit of the County of Greensville, Virginia)

Schedule of Changes in the Authority's Net OPEB Liability and Related Ratios
Health Insurance Credit (HIC) Plan
For the Measurement Dates of June 30, 2017 through June 30, 2019

	2019	2018	2017
Total HIC OPEB Liability			
Service cost	$ 777	$ 877	$ 906
Interest	4,310	4,171	4,117
Changes in benefit terms	-	-	-
Differences between expected and actual experience	(1,814)	(1,283)	-
Changes of assumptions	1,649	-	(3,160)
Benefit payments	(1,473)	(2,100)	(65)
Net change in total HIC OPEB liability	$ 3,449	$ 1,665	$ 1,798
Total HIC OPEB Liability - beginning	62,303	60,638	58,840
Total HIC OPEB Liability - ending (a)	$ 65,752	$ 62,303	$ 60,638
Plan fiduciary net position			
Contributions - employer	$ 2,057	$ 2,628	$ 2,687
Net investment income	2,928	2,992	4,201
Benefit payments	(1,473)	(2,100)	(65)
Administrator charges	(64)	(72)	(72)
Other	(3)	(202)	202
Net change in plan fiduciary net position	$ 3,445	$ 3,246	$ 6,953
Plan fiduciary net position - beginning	44,883	41,637	34,684
Plan fiduciary net position - ending (b)	$ 48,328	$ 44,883	$ 41,637
Authority's net HIC OPEB liability - ending (a) - (b)	$ 17,424	$ 17,420	$ 19,001
Plan fiduciary net position as a percentage of the total HIC OPEB liability	73.50%	72.04%	68.66%
Covered payroll	$ 1,210,019	$ 1,142,430	$ 1,168,444
Authority's net HIC OPEB liability as a percentage of covered payroll	1.44%	1.52%	1.63%

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.

GREENSVILLE COUNTY WATER AND SEWER AUTHORITY
(A Component Unit of the County of Greensville, Virginia)

Schedule of Employer Contributions
Health Insurance Credit (HIC) Plan
For the Years Ended June 30, 2011 through June 30, 2020

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)
2020	$ 2,086	$ 2,086	$ -	$ 1,226,886	0.17%
2019	2,057	2,057	-	1,210,019	0.17%
2018	2,628	2,628	-	1,142,430	0.23%
2017	2,687	2,687	-	1,168,444	0.23%
2016	2,656	2,656	-	1,106,867	0.24%
2015	2,526	2,526	-	1,052,653	0.24%
2014	3,297	3,297	-	1,030,441	0.32%
2013	3,313	3,313	-	1,035,420	0.32%
2012	2,988	2,988	-	963,954	0.31%
2011	2,876	2,876	-	927,764	0.31%

Contributions are from VRS records.

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, 2018, valuation were based on the results of an actuarial experience study for the period from July 1, 2012 though 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:

Non-Largest Ten Locality Employers - General Employees

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%

GREENSVILLE COUNTY WATER AND SEWER AUTHORITY
(A Component Unit of the County of Greensville, Virginia)

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, 2019

Date (1)	Employer's Proportion of the Net GLI OPEB Liability (Asset) (2)	Employer's Proportionate Share of the Net GLI OPEB Liability (Asset) (3)	Employer's Covered Payroll (4)	Employer's Proportionate Share of the Net GLI OPEB Liability (Asset) as a Percentage of Covered Payroll (3)/(4) (5)	Plan Fiduciary Net Position as a Percentage of Total GLI OPEB Liability (6)
2019	0.00617%	$ 100,403	$ 1,210,019	8.30%	52.00%
2018	0.00601%	91,000	1,142,430	7.97%	51.22%
2017	0.00633%	95,000	1,168,444	8.13%	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.

GREENSVILLE COUNTY WATER AND SEWER AUTHORITY
(A Component Unit of the County of Greensville, Virginia)

Schedule of Employer Contributions
Group Life Insurance (GLI) Plan
For the Years Ended June 30, 2011 through June 30, 2020

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)
2020	$ 6,380	$ 6,380	$ -	$ 1,226,886	0.52%
2019	6,292	6,292	-	1,210,019	0.52%
2018	5,941	5,941	-	1,142,430	0.52%
2017	6,076	6,076	-	1,168,444	0.52%
2016	5,313	5,313	-	1,106,867	0.48%
2015	5,053	5,053	-	1,052,653	0.48%
2014	4,946	4,946	-	1,030,441	0.48%
2013	4,970	4,970	-	1,035,420	0.48%
2012	2,699	2,699	-	963,954	0.28%
2011	2,598	2,598	-	927,764	0.28%

Contributions are from VRS records.

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, 2018 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:

Non-Largest Ten Locality Employers - General Employees

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%

- Compliance -

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

To the Board of Directors
Greensville County Water and Sewer Authority
Emporia, 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 Greensville County Water and Sewer Authority as of and for the year ended September 30, 2020, and the related notes to the financial statements, which collectively comprise the Greensville County Water and Sewer Authority's basic financial statements and have issued our report thereon dated August 24, 2021.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered Greensville County Water and Sewer Authority's internal control over financial reporting (internal control) as a basis for designing the 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 Greensville County Water and Sewer Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of Greensville County Water and Sewer 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 Greensville County Water and Sewer Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

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

Robinson, Farmer, Cox Associates

Charlottesville, Virginia
August 24, 2021