NELSON COUNTY SERVICE AUTHORITY

FINANCIAL REPORT

YEAR ENDED JUNE 30, 2019

NELSON COUNTY SERVICE AUTHORITY

(A governmental organization under the

Water and Sewer Authorities Act, Chapter 51,

Title 15.2 of the Code of Virginia, as amended)

MEMBERS

David S. Hight, Chairman

Gary L. Sherwood, Vice-Chairman

Ernie Q. Reed

Jesse N. Rutherford

Justin Shimp

OFFICIALS

George T. Miller, Jr., Executive Director

Jennifer Fitzgerald, Secretary / Treasurer

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Independent Auditors' Report

BOARD OF DIRECTORS
NELSON COUNTY SERVICE AUTHORITY
LOVINGSTON, VIRGINIA

Report on the Financial Statements

We have audited the accompanying financial statements of the Nelson County Service Authority, as of and for the year ended June 30, 2019, 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 Nelson County Service Authority, as of June 30, 2019, 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.

Change in Accounting Principles

As described in Note 10 to the financial statements, in 2019, the Authority adopted new accounting guidance, GASB Statement No. 88 *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements* and early implemented GASB Statement No. 89 *Accounting for Interest Cost Incurred Before the End of a Construction Period*. 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 management's discussion and analysis and schedules related to pension and OPEB funding on pages 4-8 and on pages 52-60 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.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Nelson County Service Authority's basic financial statements. The supporting schedules are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supporting schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supporting schedules are fairly stated in all material respects in relation to the basic financial statements as a whole.

Report on Summarized Comparative Information

We have previously audited the Nelson County Service Authority's 2018 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated November 30, 2018. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2018, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 19, 2019, on our consideration of the Nelson County Service 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 Nelson County Service 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 Nelson County Service Authority's internal control over financial reporting and compliance.

Robinson, Farmer, Cox Associates

Charlottesville, Virginia
November 19, 2019

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Management's Discussion and Analysis

This section presents Management's Discussion and Analysis of Nelson County Service Authority's (Authority) financial condition and activities for the year ended June 30, 2019. This information should be read in conjunction with the financial statements.

Financial Highlights

Management believes the Authority's financial position is good. The following are key financial highlights:

- The Authority treated 115 million gallons of raw water representing a 4% decrease from fiscal year 2018. In fiscal year 2018, there was a 15% decrease from 2017.

- The Authority treated 145 million gallons of wastewater representing a 27% increase from fiscal year 2018. In fiscal year 2018, the Authority treated 114 million gallons, a 1% increase from 2017.

- Total assets at year-end were $16.3 million. Total assets and deferred outflows of resources exceeded liabilities and deferred inflows in the amount of $9.0 million (i.e. net position) versus $8.6 million at June 30, 2018. Total assets decreased from fiscal year end 2018 to 2019 in the amount of $173,709. Total net position increased from fiscal year-end 2018 to 2019 in the amount of $310,731.

- Water and sewage charges of $3,538,827 decreased from fiscal year 2018 by approximately $37,000. Water and Sewage disposal charges for fiscal year 2019 were less than budget projections by 6.5%.

- Payments from Nelson County of $318,812 represented their contribution toward the fire protection costs incurred by the Authority. The payments were the same as fiscal year 2018 and 2017.

- Operating revenues excluding the County's payment for the year were $3,689,778, compared to $3,750,213 for fiscal year 2018, a 1.61% decrease.

- Operating expenses before depreciation were $2,665,219, compared to $2,825,956 for fiscal year 2018 and $2,644,482 for fiscal year 2017.

Required Financial Statements

The financial statements of the Authority report information about the Authority's use of accounting methods which are similar to those used by private sector companies. These statements offer short-term and long-term financial information about its activities.

The statement of net position includes all of the Authority's assets, liabilities, and deferred inflows/outflows of resources and provides information about the nature and amount of investments in resources (assets) and obligations to Authority creditors (liabilities). It also provides the basis for computing rate of return, evaluating the capital structure of the Authority and assessing the liquidity and financial flexibility of the Authority.

All of the current year's revenues and expenses are accounted for in the statement of revenues, expenses, and changes in net position. This statement measures the success of the Authority's operations over the past year and can be used to determine whether the Authority has successfully recovered all its costs through its water and sewage disposal rates and other fees. The Authority's rates are based on projected operating costs and are adjusted as needed to meet operating expenses and the required debt ratio.

The final required financial statement is the statement of cash flows. The primary purpose of this statement is to provide information about the Authority's cash receipts and cash payments during the reporting period. The statement reports cash receipts, cash payments, and net changes in cash resulting from operations, investing, and financing activities, and the change in cash during the reporting period.

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

Summary of Organization and Business

The Nelson County Service Authority is a public body organized and created under the Virginia Water and Waste Authorities Act of the Code of Virginia (1950), as amended. The Nelson County Board of Supervisors created the Authority in 1986. The purpose of the Authority is to "acquire, construct, improve, extend, operate and maintain a water and sewage disposal system."

The Authority is governed by five citizen members appointed by the Nelson County Board of Supervisors to four-year staggered terms.

The Authority's infrastructure assets consist of four water treatment plants, four wastewater treatment plants, approximately 85 miles of water lines, 65 miles of interceptor sewers, 31 pump stations, and a raw water reservoir. The collection system, consisting of mains and laterals, is owned and maintained by the Authority.

The Authority has no taxing power. The revenues of the Authority are derived from water and sewage disposal charges based on metered and unmetered water consumption of the Authority users of the system.

Financial Analysis

The following comparative condensed financial statements and other selected information provide key financial data and indicators for managing, monitoring and planning.

	Net Position		
	2019	2018	2017
Assets:			
Current and other assets	$ 3,350,821	$ 2,843,527	$ 2,542,201
Capital assets	12,904,899	13,585,902	14,106,592
Total assets	$ 16,255,720	$ 16,429,429	$ 16,648,793
Deferred outflows of resources	$ 92,264	$ 84,128	$ 167,859
Liabilities:			
Current liabilities	$ 448,845	$ 536,956	$ 901,006
Noncurrent liabilities	6,824,990	7,155,467	7,349,646
Total liabilities	$ 7,273,835	$ 7,692,423	$ 8,250,652
Deferred inflows of resources	$ 114,410	$ 172,126	$ 59,245
Net position:			
Net investment in capital assets	$ 6,034,351	$ 6,358,658	$ 6,242,649
Restricted	353,078	333,380	307,409
Unrestricted	2,572,310	1,956,970	1,956,697
Total net position	$ 8,959,739	$ 8,649,008	$ 8,506,755

	Change in Net Position		
	2019	2018	2017
Revenues:			
Operating revenues	$ 3,689,778	$ 3,750,213	$ 3,677,548
Fire protection-Nelson County	318,812	318,812	318,812
Other revenue	7,521	5,663	5,356
Total revenues	$ 4,016,111	$ 4,074,688	$ 4,001,716
Expenses:			
Operating expenses	$ 2,665,219	$ 2,825,956	$ 2,644,482
Depreciation expenses	816,921	818,972	794,758
Interest expense	235,730	314,708	343,914
Total expenses	$ 3,717,870	$ 3,959,636	$ 3,783,154
Increase in net position before capital contributions	$ 298,241	$ 115,052	$ 218,562
Capital Contributions	12,490	63,486	308,836
Increase in net position	$ 310,731	$ 178,538	$ 527,398
Net position—July 1, restated as of July 1, 2017	8,649,008	8,470,470	7,979,357
Net position—June 30	$ 8,959,739	$ 8,649,008	$ 8,506,755

General Trends and Significant Events

Other Selected Information

		2019		2018		2017
Employees at year-end		20		20		21
Raw water treated (millions of gallons)		115.33		119.98		141.29
Average daily water consumption (millions of gallons)		0.32		0.33		0.39
Wastewater treated (millions of gallons)		145.33		114.05		113.26
Average daily sewage flow (millions of gallons)		0.40		0.31		0.31
Number water connections		2,935		2,932		2,927
Number sewer connections		2,547		2,545		2,540
Rates for normal water customers:						
Minimum charges for 0-4,000 gallons:						
Lovingston, Schuyler Gladstone	$	38.20	$	38.20	$	38.20
Wintergreen	$	41.85	$	41.85	$	41.85
Each additional 1,000 gallons	$	10.50	$	10.50	$	10.50
Rates for normal sewer customers:						
Lovingston, Schuyler Gladstone	$	47.05	$	47.05	$	47.05
Wintergreen	$	47.05	$	47.05	$	47.05
Each additional 1,000 gallons	$	9.90	$	9.90	$	9.90

The Authority’s service area in Nelson County has the potential for growth. The County is over two hundred years old and has available land that continues to be developed. Growth from the new development is not expected to significantly increase the Authority’s water and sewage disposal revenues in any given year.

The number of the Authority’s combined water and sewer connections increased by 5 in fiscal year 2019 versus 10 in fiscal year 2018. The current number of combined connections is 5,482 versus 5,477 at June 30, 2018.

It is anticipated that the Authority's growth in the near future will be limited by the current state of the economy.

Financial Condition

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

Total assets decreased $173,709, and net position increased by $310,731 from FY2018.

Capital Asset and Debt Administration

Capital Assets - The Authority's investment in capital assets as of June 30, 2019 amounts to $12,904,899 (net of accumulated depreciation). Investment in Capital Assets decreased 5.01% during the year. Below is a comparison of the items that make up Capital Assets as of June 30, 2019 with that of June 30, 2018 and 2017. More detailed information about the Authority's capital assets is presented in Note 3 to the financial statements.

	2019	2018	2017
Land and improvements	$ 279,551	$ 279,551	$ 279,551
Utility system and equipment	12,382,773	13,099,515	13,762,100
Construction in Progress	242,575	206,836	64,941
Total Capital Assets	$ 12,904,899	$ 13,585,902	$ 14,106,592

At year-end the Authority had $6.87 million in long-term debt with $265,862 coming due in 2020. More detailed information about the Authority's long-term debt is presented in Note 5 to the financial statements.

Results of Operations

The Authority's revenues from operations fall into three main categories: 1) Water and Sewage disposal charges to customers in Nelson County which are based upon metered and unmetered water consumption which is billed monthly. 2) Miscellaneous revenue including penalties, Nelson County shared expense reimbursements, and other revenue. 3) Nonoperating revenues including interest, gain on sale of assets and other revenue. Revenues from the three main categories total $4,016,111 for fiscal year 2019. Fiscal year 2018 totaled $4,074,688.

Operating expenses before depreciation were $2.67 million, compared to $2.83 and $2.64 million for fiscal years 2018 and 2017.

Future

Fiscal year 2019 continued the trend of improved financial performance by the Authority. This improvement is needed in order for the Authority to maintain flexibility in future borrowing decisions, ensuring that there is an appropriate reserve for operating expenses, expansion, and that resources are available to provide for the effects of time and usage on the significant investment in equipment.

Contacting the Authority's Financial Manager

This financial report is designed to provide our citizens, customers, and creditors with a general overview of the Authority's finances and to demonstrate the Authority's accountability for the money it receives. If you have any questions about this report or need additional financial information, contact the Nelson County Service Authority's Executive Director, P. O. Box 249, Lovingston, VA 22949.

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Financial Statements

NELSON COUNTY SERVICE AUTHORITY

Statement of Net Position
At June 30, 2019
(With Comparative Totals for the Prior Year)

	At June 30, 2019			At June 30,
	Water	Sewer	Total	2018
ASSETS				
Current Assets:				
Cash and cash equivalents	$ -	$ 2,092,319	$ 2,092,319	$ 1,571,522
Accounts receivable (net of allowance for uncollectibles)	235,110	223,395	458,505	502,655
Internal balances	(185,645)	185,645	-	-
Inventory of materials and supplies, at cost	31,287	112,676	143,963	135,093
Prepaid expenses	6,118	6,118	12,236	11,536
Total current assets	$ 86,870	$ 2,620,153	$ 2,707,023	$ 2,220,806
Noncurrent Assets:				
Restricted Assets:				
Cash and cash equivalents	$ 254,506	$ 98,572	$ 353,078	$ 333,380
Other Assets:				
Net pension asset	$ 145,360	$ 145,360	$ 290,720	$ 289,341
Capital Assets:				
Land and improvements	$ 276,431	$ 3,120	$ 279,551	$ 279,551
Water and sewer systems	16,173,216	10,205,529	26,378,745	26,298,864
Equipment	803,970	1,564,130	2,368,100	2,347,802
Accumulated depreciation	(8,331,497)	(8,032,575)	(16,364,072)	(15,547,151)
Sub-total	$ 8,922,120	$ 3,740,204	$ 12,662,324	$ 13,379,066
Construction work in progress	12,083	230,492	242,575	206,836
Total net capital assets	$ 8,934,203	$ 3,970,696	$ 12,904,899	$ 13,585,902
Total noncurrent assets	$ 9,334,069	$ 4,214,628	$ 13,548,697	$ 14,208,623
Total assets	$ 9,420,939	$ 6,834,781	$ 16,255,720	$ 16,429,429
DEFERRED OUTFLOWS OF RESOURCES				
OPEB related items	$ 17,910	$ 17,910	$ 35,820	$ 28,716
Pension related items	28,222	28,222	56,444	55,412
Total deferred outflows of resources	$ 46,132	$ 46,132	$ 92,264	$ 84,128
LIABILITIES				
Current Liabilities:				
Accounts payable	$ 41,320	$ 20,094	$ 61,414	$ 139,528
Compensated absences	29,844	32,364	62,208	59,794
Accrued expenses	22,989	17,705	40,694	39,441
Accrued interest payable	2,910	1,457	4,367	4,968
Unearned revenue	14,300	-	14,300	16,000
Revenue bonds-current portion	184,217	81,645	265,862	277,225
Total current liabilities	$ 295,580	$ 153,265	$ 448,845	$ 536,956
Noncurrent Liabilities:				
Revenue bonds-net of current portion	$ 5,099,020	$ 1,505,666	$ 6,604,686	$ 6,950,019
Net OPEB liabilities	110,152	110,152	220,304	205,448
Total noncurrent liabilities	$ 5,209,172	$ 1,615,818	$ 6,824,990	$ 7,155,467
Total liabilities	$ 5,504,752	$ 1,769,083	$ 7,273,835	$ 7,692,423
DEFERRED INFLOWS OF RESOURCES				
Pension related items	$ 53,705	$ 53,705	$ 107,410	$ 164,126
OPEB related items	3,500	3,500	7,000	8,000
Total deferred inflows of resources	$ 57,205	$ 57,205	$ 114,410	$ 172,126
NET POSITION				
Net investment in capital assets	$ 3,650,966	$ 2,383,385	$ 6,034,351	$ 6,358,658
Restricted for debt service	254,506	98,572	353,078	333,380
Unrestricted	(358)	2,572,668	2,572,310	1,956,970
Total net position	$ 3,905,114	$ 5,054,625	$ 8,959,739	$ 8,649,008

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

NELSON COUNTY SERVICE AUTHORITY

Statement of Revenues, Expenses and Changes in Net Position
Year Ended June 30, 2019
(With Comparative Totals for the Prior Year)

	Year Ended June 30, 2019			Year Ended June 30, 2018
	Water	**Sewer**	**Total**	
Operating Revenues:				
Water and sewer charges	$ 1,700,428	$ 1,838,499	$ 3,538,927	$ 3,575,687
Availability fees	15,719	22,110	37,829	36,932
Fire protection fees-Nelson County	318,812	-	318,812	318,812
Connection fees	14,000	12,000	26,000	56,000
Other fees	34,941	52,081	87,022	81,594
Total operating revenues	$ 2,083,900	$ 1,924,690	$ 4,008,590	$ 4,069,025
Operating Expenses:				
Personnel	$ 556,380	$ 437,917	$ 994,297	$ 1,010,862
Depreciation	470,315	346,606	816,921	818,972
Maintenance	131,614	79,184	210,798	283,365
Fringe benefits	115,650	108,540	224,190	253,421
Operations	104,334	137,290	241,624	328,485
Power pumping	73,175	143,049	216,224	151,289
Raw water	334,281	-	334,281	350,802
General and administrative	57,443	44,926	102,369	119,356
Insurance	23,139	23,139	46,278	40,743
Contractual services	118,737	37,503	156,240	139,854
Grinder pump parts	-	135,281	135,281	142,307
Uniforms	1,080	1,080	2,160	3,759
Small tools	744	733	1,477	1,713
Total operating expenses	$ 1,986,892	$ 1,495,248	$ 3,482,140	$ 3,644,928
Operating income (loss)	$ 97,008	$ 429,442	$ 526,450	$ 424,097
Nonoperating Revenues (Expenses):				
Interest income	$ 6,408	$ 973	$ 7,381	$ 5,109
Gain (loss) on sale of assets	70	70	140	554
Interest expense	(182,596)	(53,134)	(235,730)	(314,708)
Total nonoperating revenues (expenses)	$ (176,118)	$ (52,091)	$ (228,209)	$ (309,045)
Income (loss) before contributions and grants	$ (79,110)	$ 377,351	$ 298,241	$ 115,052
Capital contributions and construction grants	5,367	7,123	12,490	63,486
Change in net position	$ (73,743)	$ 384,474	$ 310,731	$ 178,538
Net position, beginning of year	3,978,857	4,670,151	8,649,008	8,470,470
Net position, end of year	$ 3,905,114	$ 5,054,625	$ 8,959,739	$ 8,649,008

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

NELSON COUNTY SERVICE AUTHORITY

Statement of Cash Flows
Year Ended June 30, 2019
(With Comparative Totals for the Prior Year)

	Year Ended June 30, 2019			Year Ended June 30, 2018
	Water	**Sewer**	**Total**	
Cash flows from operating activities:				
Receipts from customers and users	$ 2,101,158	$ 1,951,582	$ 4,052,740	$ 4,012,384
Payments to suppliers	(913,616)	(638,492)	(1,552,108)	(1,541,751)
Payments to employees	(679,780)	(571,438)	(1,251,218)	(1,262,752)
Net cash provided by (used for) operating activities	$ 507,762	$ 741,652	$ 1,249,414	$ 1,207,881
Noncapital financing activities:				
(Increase) decrease in internal balances	$ 10,750	$ (10,750)	$ -	$ -
Cash flows from capital and related financing activities:				
Additions to utility plant	$ (52,364)	$ (83,554)	$ (135,918)	$ (298,283)
Proceeds from the sale of assets	70	70	140	554
Principal payments on bonds	(276,848)	(79,848)	(356,696)	(702,026)
Contributions in aid of construction	5,367	7,123	12,490	63,486
Interest payments	(183,136)	(53,180)	(236,316)	(250,467)
Net cash provided by (used for) capital and related financing activities	$ (506,911)	$ (209,389)	$ (716,300)	$ (1,186,736)
Cash flows from investing activities:				
Interest income	$ 6,408	$ 973	$ 7,381	$ 5,109
Increase (decrease) in cash and cash equivalents	$ 18,009	$ 522,486	$ 540,495	$ 26,254
Cash and cash equivalents at beginning of year (including $236,497 and $96,883, respectively reported in restricted accounts)	236,497	1,668,405	1,904,902	1,878,648
Cash and cash equivalents at end of year (including $254,506 and $98,572, respectively reported in restricted accounts)	$ 254,506	$ 2,190,891	$ 2,445,397	$ 1,904,902
Reconciliation of operating income (loss) to net cash provided by (used for) operating activities:				
Operating income (loss)	$ 97,008	$ 429,442	$ 526,450	$ 424,097
Adjustments to reconcile operating income (loss) to net cash provided by (used for) operating activities:				
Depreciation	470,315	346,606	816,921	818,972
Changes in operating assets, liabilities, and deferred outflows/inflows:				
(Increase) decrease in accounts receivable	17,258	26,892	44,150	(56,641)
(Increase) decrease in inventories	(2,001)	(6,869)	(8,870)	3,740
(Increase) decrease in prepaid expenses	(350)	(350)	(700)	(11,536)
(Increase) decrease in net pension asset	(690)	(689)	(1,379)	(210,635)
(Increase) decrease in pension deferred outflows of resources	(516)	(516)	(1,032)	47,117
(Increase) decrease in OPEB deferred outflows of resources	(3,551)	(3,553)	(7,104)	(28,716)
Increase (decrease) in accounts payable	(58,711)	(19,418)	(78,129)	89,102
Increase (decrease) in accrued expenses	423	830	1,253	(2,400)
Increase (decrease) in compensated absences	1,207	1,207	2,414	(2,198)
Increase (decrease) in unearned revenue	8,800	(10,500)	(1,700)	(22,699)
Increase (decrease) in pension deferred inflows of resources	(28,358)	(28,358)	(56,716)	104,881
Increase (decrease) in OPEB deferred inflows of resources	(500)	(500)	(1,000)	8,000
Increase (decrease) in net OPEB liabilities	7,428	7,428	14,856	46,797
Net cash provided by (used for) operating activities	$ 507,762	$ 741,652	$ 1,249,414	$ 1,207,881

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

NOTE 1—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

The Nelson County Service Authority was established by Nelson County under the Water and Sewer Authorities Act of 1950 of the Commonwealth of Virginia. The Authority provides water and sewer services to the Lovingston, Schuyler, Gladstone and Wintergreen Communities in Nelson County.

Financial Reporting Entity - The Nelson County Service Authority is a related organization to the County of Nelson. The Authority is a legally separate entity from the County. The County appoints the Authority's board of directors; however, the Authority is essentially fiscally independent.

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

- Management’s discussion and analysis
- Enterprise fund financial statements
  - Statement of Net Position
  - Statement of Revenues, Expenses, and Changes in Net Position
  - Statement of Cash Flows
  - Notes to 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 Nelson County Service Authority's Share of Net OPEB Liability-Group Life Insurance Program
  - Schedule of Employer Contributions-Group Life Insurance Program
  - Notes to Required Supplementary Information-Group Life Insurance Program
  - Schedule of Changes in Total OPEB Liability (Asset) and Related Ratios – Health Insurance
  - Notes to Required Supplementary Information – Health Insurance

Basis of Accounting - The Nelson County Service Authority operates as an enterprise fund and its accounts are maintained on the accrual basis of accounting. Under this method, revenues are recognized when earned, and expenses are recorded as liabilities when incurred, without regard to receipt or payment of cash. The Authority accrues revenue for services rendered but not yet billed at the end of the fiscal year. The Authority follows all applicable GASB pronouncements.

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

Basis of Accounting: (Continued)

The Authority distinguishes *operating* revenues and expenses from *nonoperating* items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the Authority's principal ongoing operations. The principal operating revenues of the Authority are charges to customers for sales and services. 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.

Restricted Assets - Certain proceeds of the Authority's revenue bonds, as well as certain resources set aside for their repayment, are classified as restricted assets on the statement of net position because they are maintained in separate bank accounts and their use is limited by applicable bond covenants. The amount reported as "restricted for debt service" represents resources set aside to make up potential future deficiencies in the revenue bond payment account.

Revenue – The Authority records water and sewer revenue as billed to its customers principally on a quarterly cycle basis. At year end the Authority accrues a pro-rata portion of the unbilled cycle. The Authority has established an allowance for uncollectible accounts equal to $98,398 at June 30, 2019.

Cash and Cash Equivalents – The Authority's cash and cash equivalents are considered to be cash on hand, demand deposits, and short-term investments with original maturities of three months or less from the date of acquisition.

Inventory – Inventory consists of grinder pumps, parts, and supplies on hand at year-end and is reported at actual cost determined on first-in, first-out basis. Inventory is generally used for construction and for operation and maintenance work, and is not held for resale. Components are charged to construction or operations as they are removed from inventory.

Capital Assets - Capital assets, which include property, plant, equipment, and infrastructure assets (e.g., roads, bridges, sidewalks, and similar items), are reported in the financial statements. Capital assets are defined by the Authority as assets with an initial, individual cost of more than $5,000 (amount not rounded) and an estimated useful life in excess of one year. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at acquisition value at the date of donation.

The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend the asset's life are not capitalized. Major outlays for capital assets and improvements are capitalized as projects are constructed.

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

Capital Assets: (Continued)

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

Assets	Years
General equipment	3-5
Wells	10
Water pumping and treatment equipment	35
Water distribution equipment, meters and hydrants	35-40
Sewage collection and treatment	35

Compensated Absences – The vacation policy of the Authority provides for the accumulation of up to 66 hours per year of earned vacation leave, depending on years of service. Employees may carry over a maximum of 40 hours vacation leave to the succeeding year. Vacation leave is payable upon termination of employment, limited to the current year accumulation plus leave carried over from the prior year. At June 30, 2019, the accrued liability for accumulated vacation leave amounted to $62,208.

The Authority's sick leave policy provides for a maximum accumulation of 160 sick days earned, at the rate of one day per month of service; however, sick leave does not vest. Since the Authority has no obligation for unvested accumulated sick leave until it is actually taken no accrual for such leave has been made.

Use of Estimates - The preparation of financial statements in conformity with U.S. 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.

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.

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.

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

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

Other Postemployment Benefits (OPEB) – For purposes of measuring the net VRS related OPEB liabilities, deferred outflows of resources and deferred inflows of resources related to the OPEB, and OPEB expense, information about the fiduciary net position of the VRS GLI OPEB Plans and the additions to/deductions from the VRS OPEB Plans' 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.

Deferred Outflows/Inflows of Resources - In addition to assets, the statement of financial position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense) until then. The Authority has several items that qualify for reporting in this category. These items are comprised of certain items related to the measurement of the net pension asset and the net OPEB liabilities and contributions to the pension and OPEB plans made during the current year and subsequent to the net pension asset and net OPEB liability measurement date. For more detailed information on these items, reference the related notes.

In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The Authority has one type of item that qualifies for reporting in this category. Certain items related to the measurement of the net pension asset and net OPEB liabilities are reported as deferred inflows of resources. For more detailed information on these items, reference the related notes.

Restatement – Certain amounts in previously issued financial statements have been restated to conform to current year classifications.

Budgets – The Authority adopts an annual budget for informative and fiscal planning purposes only. The budget is not intended to be a legal control on expenses. Budgets are adopted on the accrual basis of accounting with the exception that contributed capital, depreciation, and amortization are not budgeted.

Long-Term Obligations – Bond premiums and discounts are deferred and amortized over the life of the bonds. Bonds payable are reported net of the applicable bond premium or discount. Bond issuance costs are reported as an expense in the period incurred.

Prepaid Expenses – Certain payments to vendors represent costs applicable to future accounting periods and are recorded as prepaid items. The cost of prepaid items is recorded as expenses when consumed rather than when purchased.

NOTE 2—DEPOSITS:

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.

The Authority has no formal deposit and investment policy.

NOTE 3—CAPITAL ASSETS:

A summary of changes in capital assets for the year ended June 30, 2019 follows:

	Beginning Balance	Increases	Decreases	Ending Balance
Water:				
Capital assets not being depreciated:				
Land and improvements	$ 276,431	$ -	$ -	$ 276,431
Construction work in progress	53,042	12,083	53,042	12,083
Total capital assets not being depreciated	$ 329,473	$ 12,083	$ 53,042	$ 288,514
Other Capital Assets:				
Water and sewer systems	$ 16,093,335	$ 79,881	$ -	$ 16,173,216
Accumulated depreciation	(7,308,588)	(424,581)	-	(7,733,169)
Equipment	790,528	13,442	-	803,970
Accumulated depreciation	(552,594)	(45,734)	-	(598,328)
Other capital assets, net	$ 9,022,681	$ (376,992)	$ -	$ 8,645,689
Total Water	$ 9,352,154	$ (364,909)	$ 53,042	$ 8,934,203

NOTE 3—CAPITAL ASSETS: (CONTINUED)

	Beginning Balance	Increases	Decreases	Ending Balance
Sewer:				
Capital assets not being depreciated:				
Land and improvements	$ 3,120	$ -	$ -	$ 3,120
Construction work in progress	153,794	76,698	-	230,492
Total capital assets not being depreciated	$ 156,914	$ 76,698	$ -	$ 233,612
Other Capital Assets:				
Water and sewer systems	$ 10,205,529	$ -	$ -	$ 10,205,529
Accumulated depreciation	(6,679,302)	(270,087)	-	(6,949,389)
Equipment	1,557,274	6,856	-	1,564,130
Accumulated depreciation	(1,006,667)	(76,519)	-	(1,083,186)
Other capital assets, net	$ 4,076,834	$ (339,750)	$ -	$ 3,737,084
Total Sewer	$ 4,233,748	$ (263,052)	$ -	$ 3,970,696
Grand Totals	$ 13,585,902	$ (627,961)	$ 53,042	$ 12,904,899

Construction Work in Progress

The Authority has several uncompleted construction projects shown as an asset, Construction Work in Progress, at June 30, 2019. Presented below is a list of the major projects showing the expenditures, transfers of completed projects to asset accounts and the ending balances of each project during the last year:

Water Projects:

Description	Balance July 1, 2018	Expenditures	Transfers	Balance June 30, 2019
Wintergreen Chlorine Changeout	$ 53,042	$ -	$ 53,042	$ -
Wintergreen 11th Green/Fairway	-	12,083	-	12,083
Totals	$ 53,042	$ 12,083	$ 53,042	$ 12,083

Sewer Projects:

Description	Balance July 1, 2018	Expenditures	Transfers	Balance June 30, 2019
Wintergreen Wastewater Treatment Plant	$ 153,794	$ 34,615	$ -	$ 188,409
Wintergreen 11th Green/Fairway	-	12,083	-	12,083
Schuyler Wastewater Treatment Plant Project	-	30,000	-	30,000
Totals	$ 153,794	$ 76,698	$ -	$ 230,492

NOTE 4—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 of creditable service or age 50 with at least 30 years of creditable service. Non-hazardous duty employees may retire with a reduced benefit as early as age 55 with at least 5 years of creditable service or age 50 with at least 10 years of creditable service. Hazardous duty employees (law enforcement officers, firefighters, and sheriffs) are eligible for an unreduced benefit beginning at age 60 with at least 5 years of creditable service or age 50 with at least 25 years of creditable service. Hazardous duty employees may retire with a reduced benefit as early as age 50 with at least 5 years of creditable service.

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 creditable service or when the sum of their age and service equals 90. Non-hazardous duty employees may retire with a reduced benefit as early as age 60 with at least 5 years of creditable service. Hazardous duty employees are eligible for an unreduced benefit beginning at age 60 with at least 5 years of creditable service or age 50 with at least 25 years of creditable service. Hazardous duty employees may retire with a reduced benefit as early as age 50 with at least 5 years of creditable service.

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 creditable service, or when the sum of their age and service equal 90. Employees may retire with a reduced benefit as early as age 60 with at least 5 years of creditable service. For the defined contribution component, members are eligible to receive distributions upon leaving employment, subject to restrictions.

NOTE 4–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 creditable service. Under Plan 1, average final compensation is the average of the employee's 36 consecutive months of highest compensation and the multiplier is 1.7% for non-hazardous duty employees, 1.85% for sheriffs and regional jail superintendents, and 1.7% or 1.85% for hazardous duty employees as elected by the employer. Under Plan 2, average final compensation is the average of the employee's 60 consecutive months of highest compensation and the retirement multiplier is 1.65% for non-hazardous duty employees, 1.85% for sheriffs and regional jail superintendents, and 1.7% or 1.85% for hazardous duty employees as elected by the employer. 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 creditable service 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 creditable service 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, 2017 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	6
Inactive members:	
Vested inactive members	4
Non-vested inactive members	5
Inactive members active elsewhere in VRS	4
Total inactive members	13
Active members	20
Total covered employees	39

NOTE 4—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, 2019 was 1.89% 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 $13,310 and $25,524 for the years ended June 30, 2019 and 2018, 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, 2018. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2017, rolled forward to the measurement date of June 30, 2018.

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, 2017, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018.

Inflation	2.5%
Salary increases, including inflation	3.5% – 5.35%
Investment rate of return	7.0%, net of pension plan investment expense, 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 7.0%. However, since the difference was minimal, and a more conservative 7.0% 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 7.0% to simplify preparation of pension liabilities.

NOTE 4—PENSION PLAN: (CONTINUED)

Actuarial Assumptions – General Employees: (Continued)

Mortality rates:

Largest 10 – Non-Hazardous Duty: 20% 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.

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.

NOTE 4—PENSION PLAN: (CONTINUED)

Actuarial Assumptions – General Employees: (Continued)

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Largest 10 – 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% to 20%

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% to 15%

NOTE 4–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	40.00%	4.54%	1.82%
Fixed Income	15.00%	0.69%	0.10%
Credit Strategies	15.00%	3.96%	0.59%
Real Assets	15.00%	5.76%	0.86%
Private Equity	15.00%	9.53%	1.43%
Total	100.00%		4.80%
		Inflation	2.50%
		*Expected arithmetic nominal return	7.30%

* The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. 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, 2018, the alternate rate was the employer contribution rate used in FY 2012 or 90% of the actuarially determined employer contribution rate from the June 30, 2015 actuarial valuations, whichever was greater. From July 1, 2018 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.

NOTE 4–PENSION PLAN: (CONTINUED)

Changes in Net Pension Liability (Asset)

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (Asset) (a) - (b)
Balances at June 30, 2017	$ 3,023,592	$ 3,312,933	$ (289,341)
Changes for the year:			
Service cost	$ 74,178	$ -	$ 74,178
Interest	209,385	-	209,385
Differences between expected and actual experience	29,459	-	29,459
Contributions - employer	-	25,549	(25,549)
Contributions - employee	-	44,352	(44,352)
Net investment income	-	246,811	(246,811)
Benefit payments, including refunds of employee contributions	(64,767)	(64,767)	-
Administrative expenses	-	(2,090)	2,090
Other changes	-	(221)	221
Net changes	$ 248,255	$ 249,634	$ (1,379)
Balances at June 30, 2018	$ 3,271,847	$ 3,562,567	$ (290,720)

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

The following presents the net pension liability (asset) of the Authority using the discount rate of 7.00%, as well as what the Authority's net pension liability (asset) would be if it were calculated using a discount rate that is one percentage point lower (6.00%) or one percentage point higher (8.00%) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Authority			
Net Pension Asset	$ 226,631	$ (290,720)	$ (711,369)

NOTE 4—PENSION PLAN: (CONTINUED)

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

For the year ended June 30, 2019, the Authority recognized pension expense of $(45,792). At June 30, 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 43,134	$ 26,067
Change in assumptions	-	48,674
Net difference between projected and actual earnings on pension plan investments	-	32,669
Employer contributions subsequent to the measurement date	13,310	-
Total	$ 56,444	$ 107,410

$13,310 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, 2020. 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	
2020	$ (14,563)
2021	(19,410)
2022	(30,019)
2023	(284)
2024	-

Pension Plan Data

Information about the VRS Political Subdivision Retirement Plan is also available in the separately issued VRS 2018 Comprehensive Annual Financial Report (CAFR). A copy of the 2018 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2018-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA 23218-2500.

NOTE 5—LONG-TERM OBLIGATIONS:

Changes in Long-Term Obligations:

	Balance July 01, 2018	Issuances/ Additions	Retirements/ Reductions	Balance June 30, 2019
Water:				
Revenue Bonds Payable:				
Direct borrowings and direct placements	$ 5,560,085	$ -	$ 276,848	$ 5,283,237
Net OPEB liabilities	102,724	7,428	-	110,152
Compensated Absences	28,637	1,207	-	29,844
Totals	$ 5,691,446	$ 8,635	$ 276,848	$ 5,423,233

	Balance July 01, 2018	Issuances/ Additions	Retirements/ Reductions	Balance June 30, 2019
Sewer:				
Revenue Bonds Payable:				
Direct borrowings and direct placements	$ 1,667,159	$ -	$ 79,848	$ 1,587,311
Net OPEB liabilities	102,724	7,428	-	110,152
Compensated Absences	31,157	1,207	-	32,364
Totals	$ 1,801,040	$ 8,635	$ 79,848	$ 1,729,827

NOTE 5—LONG-TERM OBLIGATIONS: (CONTINUED)

Details of long-term obligations:

Revenue Bonds-Direct Borrowings and Direct Placements-Water:	Total Amount	Amount Due Within One Year
$125,000 Water and Sewer Revenue Bonds for Gladstone Water Project, dated October 2, 2009, payable in monthly installments of $419 beginning November 2, 2011 including interest at 2.5% through September 2050.	$ 106,603	$ 2,378
$1,500,000 Water Revenue Bond for the Route 29 Corridor Sewer dated February 18, 2000, payable in semi-annual installments of $25,000 through March 2030. No interest.	550,000	50,000
$2,370,679 Water and Sewer Revenue Bonds for Water Treatment Plant Project, dated March 31, 2010, payable in monthly installments of $10,364 beginning April 30, 2011 including interest at 4% through March 2051.	2,147,036	39,182
$600,000 Water Revenue Bonds for Administration Building (48% payable from Water Fund) dated February 26, 2008, payable in monthly installments of $1,299 including interest at 4.375% through February 2048.	253,571	4,584
$378,777 Water Revenue Bonds for Water Tank dated April 14, 2004, payable in semi-annual installments of $12,613 including interest at 2.75% through October 2024.	114,199	20,546
$325,000 Water Revenue Bonds for Water Impoundment dated February 25, 2005, payable in monthly installments of $1,492 including interest at 4.25% through February 2045.	270,960	5,830

NOTE 5—LONG-TERM OBLIGATIONS: (CONTINUED)

Details of long-term obligations: (continued)

		Total Amount		Amount Due Within One Year
Revenue Bonds-Direct Borrowing and Direct Placements-Water: (Continued)				
$412,000 Water Revenue Bonds for Black Creek dated April 25, 2012 payable in monthly installments of $1,269, including interest at 2% through April 2050.	$	216,248	$	11,004
$1,356,000 Water Revenue Bonds for Water Impoundment dated September 28, 2004, payable in monthly installments of $6,008 including interest at 4.25% through September 2044.		1,111,590		25,362
$572,000 Water Revenue Bond for the Schuyler Water Plant Project Series 2016, dated January 5, 2016, payable in monthly installments of $3,158 including interest at 2.50% through January 5, 2036.		513,030		25,331
Total Revenue Bonds - Water	$	5,283,237	$	184,217
Net OPEB liabilities		110,152		-
Compensated absences		29,844		29,844
Total Long-Term Obligations - Water	$	5,423,233	$	214,061
Revenue Bonds-Direct Borrowing and Direct Placements-Sewer:				
$1,850,000 Water Revenue Bond for the Route 29 Corridor Sewer dated February 18, 2000, payable in monthly installments of $6,901 including interest at the rate of 3.25% through February 18, 2040.	$	1,240,206	$	43,145
$600,000 Water Revenue Bonds for Administration Building (52% payable from Sewer Fund) dated February 26, 2008, payable in monthly installments of $1,407 including interest at 4.375% through February 2048.		274,702		4,966

NOTE 5—LONG-TERM OBLIGATIONS: (CONTINUED)

Details of long-term obligations: (continued)

	Total Amount	Amount Due Within One Year
Revenue Bonds-Direct Borrowings and Direct Placements-Sewer: (Continued)		
$74,736 Water and Sewer Revenue Bond for Gladstone Sewer Project, dated March 17, 2011, payable in semi-annual installments of $1,868 beginning November 1, 2011 through May 1, 2031. No interest.	$ 42,403	$ 3,534
$600,000 Water Revenue Bond for the Route 29 Corridor Sewer dated February 18, 2000, payable in semi-annual installments of $15,000 through March 2020. No interest.	30,000	30,000
Total Revenue Bonds - Sewer	$ 1,587,311	$ 81,645
Net OPEB liabilities	110,152	-
Compensated absences	32,364	32,364
Total Long-Term Obligations - Sewer	$ 1,729,827	$ 114,009
Total Long-Term Obligations	$ 7,153,060	$ 328,070

Annual requirements to amortize the revenue bonds and the related interest are as follows:

Year Ending June 30	Direct Borrowings and Direct Placements: Water Revenue Bonds Principal	Water Revenue Bonds Interest	Sewer Revenue Bonds Principal	Sewer Revenue Bonds Interest
2020	$ 184,217	$ 177,693	$ 81,645	$ 51,643
2021	188,881	173,041	53,290	50,000
2022	193,717	168,216	54,992	48,300
2023	198,731	163,214	56,752	46,541
2024	203,932	158,026	58,574	44,722
2025-2029	985,850	712,115	322,478	194,033
2030-2034	924,417	568,254	367,873	138,098
2035-2039	860,425	401,785	427,226	71,748
2040-2044	954,586	223,582	110,017	20,434
2045-2049	586,917	52,577	54,464	4,819
2050	1,564	9	-	-
Total	$ 5,283,237	$ 2,798,512	$ 1,587,311	$ 670,338

NOTE 5—LONG-TERM OBLIGATIONS: (CONTINUED)

All of the aforementioned bonds are collateralized by a pledge of revenues from the Authority's water and sewer systems. In addition, the 2000 bonds are guaranteed by a moral obligation pledge from Nelson County in the form of a Support Agreement. In fiscal year 2019, the County paid additional fire protection fees (for debt service) to the authority in the amount of $318,812.

The bonds are governed by a number of general covenants relating to debt service requirements and other restrictions on assets including a revenue covenant. The rate covenant requires the Authority to have net revenues available for debt service in an amount at least equal to 115% of required debt service. The Authority satisfied the rate covenant in FY2019. Debt agreements do not specify remedies in the event of a default.

NOTE 6—OTHER POSTEMPLOYMENT BENEFITS (OPEB):

Plan Description

In addition to the pension benefits described in Note 4, the Authority administers a single-employer defined benefit healthcare plan. The plan provides post-employment health care benefits to all eligible permanent employees who meet the requirements under the Authority's pension plans. The plan does not issue a publicly available financial report.

Benefits Provided

The Authority administers a single-employer healthcare plan ("the Retiree Plan"). The plan provides for participation by eligible retirees of the Authority and their dependents in the health insurance programs available to Authority employees. The Retiree Health Plan will provide retiring employees the option to continue health insurance offered by the Authority. An eligible Authority retiree may receive this benefit until the retiree is eligible to receive Medicare. Participants in the Nelson County Service Authority (Authority) must meet the eligibility requirements based on service earned with the Authority to be eligible to receive benefits upon retirement. Participants must also retire directly from active employment and meet one of the following VRS retirement eligibility requirements to be eligible for benefits:

NOTE 6–OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

Medical and Dental Insurance – Pay-as-you Go: (Continued)

Benefits Provided: (Continued)

General Employees Plan 1

Plan 1 includes all members vested as of January 1, 2013.

- Attain age 50 with at least 10 years of service with VRS for a reduced pension benefit, or
- Attain age 55 with at least 5 years of service with VRS for a reduced pension benefit, or
- Attain age 65 with at least 5 years of service with VRS for an unreduced pension benefit, or
- Attain age 50 with at least 30 years of service with VRS for an unreduced pension benefit.

General Employees Plan 2 and Hybrid Plan

Plan 2 includes all members not vested as of January 1, 2013, and members hired on or after July 1, 2010. The Hybrid Plan includes members hired on or after January 1, 2014 or by member election.

- Attain age 60 with at least 5 years of service with VRS for a reduced pension benefit, or
- Attain 90 points (age plus service) with VRS for an unreduced pension benefit, or
- Attain Social Security Normal Retirement Age with at least 5 years of service with VRS for an unreduced pension benefit.

Health benefits are for medical, dental, and vision. Non-Medicare eligible retirees may elect one of the following medical options, with either comprehensive or preventative dental coverage.

- Anthem Local Choice 250 (PPO)
- Anthem Local Choice Expanded (PPO)

Medicare eligible retirees may only elect the following medical option:

- Anthem Advantage 65

A retiree may elect to also cover their spouse. Retiree health benefits are provided for the lifetime of the retiree and spouse. If the retiree predeceases the spouse, the spouse may elect to continue coverage.

In general, retirees are responsible for 100% of the premium cost.

Effective July 1, 2018, the Authority implemented the Retiree Health Insurance Assistance Program. Retirees with 15 or more years of service (5 or more years of service if retiring due to a disability) with the Authority or any of its predecessors receive a subsidy equal to $2.50 per year of service (up to a maximum of 30 years) toward post-65 health insurance costs.

NOTE 6–OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

Medical and Dental Insurance – Pay-as-you Go: (Continued)

Benefits Provided: (Continued)

General Employees Plan 2 and Hybrid Plan: (Continued)

There are no age or service requirements for disabled retirees. Disabled retirees are eligible for the same employer contributions as healthy retirees.

The benefits, employee contributions and the employer contributions are governed by the Board of Directors of the Nelson Country Service Authority and can be amended through Board action. The Retiree Health Plan does not issue a publicly available financial report.

Plan Membership

At July 1, 2017 (valuation date), the following employees were covered by the benefit terms:

Total active employees with coverage	20
Total retirees with coverage	1
Total	21

Contributions

The Authority does not pre-fund benefits; therefore, no assets are accumulated in a trust fund. The current funding policy is to pay benefits directly from general assets on a pay-as-you-go basis. The funding requirements are established and may be amended by the Authority Board. The amount paid by the Authority for OPEB as the benefits came due during the year ended June 30, 2019 was $2,823.

Total OPEB Liability

The Authority's Total OPEB liability was measured as of June 30, 2019. The total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of July 1, 2017.

NOTE 6—OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

Medical and Dental Insurance – Pay-as-you Go: (Continued)

Actuarial Assumptions

The total OPEB liability in the July 1, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.50% per year as of July 1, 2017
Salary Increases	The salary increase rate starts at 5.35% salary increase for 1 year of service and gradually declines to 3.50% salary increase for 20 or more years of service.
Discount Rate	3.50% for accounting and funding disclosures as of June 30, 2017 3.87% for accounting and funding disclosures as of June 30, 2018 3.50% for accounting and funding disclosures as of June 30, 2019
Investment Rate of Return	N/A

Pre-Retirement Mortality Rates

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with Scale BB to 2020; males setback 1 year, 85% of rates; females setback 1 year. 25% of deaths are assumed to be service related.

Post-Retirement Mortality Rates

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year; females setback 1 year with 1.5% increase compounded from ages 70 to 85.

The date of the most recent actuarial experience study for which significant assumptions were based is June 30, 2016.

Discount Rate

The discount rate used when OPEB plan investments are insufficient to pay for future benefit payments is selected from a range of 20-Year Municipal Bond Indices and include the Bond Buyer 11-Bond GO Index, the S&P Municipal Bond 20-Year High Grade Rate Index, and the Fidelity 20-Year GO Municipal Bond Index. The final equivalent single discount rate used for this year’s valuation is 3.50% as of the end of the fiscal year.

NOTE 6–OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

Medical and Dental Insurance - Pay-as-you Go: (Continued)

Changes in Total OPEB Liability

Balances at June 30, 2018	$	129,448
Changes for the year:		
Service cost		8,407
Interest		5,281
Changes in assumptions		5,991
Benefit payments		(2,823)
Net changes		16,856
Balances at June 30, 2019	$	146,304

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

The following amounts present the total OPEB liability of the Authority, as well as what the total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.50%) or one percentage point higher (4.50%) than the current discount rate:

Rate		
1% Decrease (2.50%)	Current Discount Rate (3.50%)	1% Increase (4.50%)
$ 163,715	$ 146,304	$ 130,662

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

The following presents the total OPEB liability of the Authority, as well as what the total OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower (4.70% decreasing annually to an ultimate rate of 3.20%) or one percentage point higher (6.70% decreasing to an ultimate rate of 5.20%) than the current healthcare cost trend rates:

Rates		
1% Decrease (4.70% decreasing to 3.20%)	Healthcare Cost Trend (5.70% decreasing to 4.20%)	1% Increase (6.70% decreasing to 5.20%)
$ 126,693	$ 146,304	$ 170,161

NOTE 6—OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

Medical and Dental Insurance – Pay-as-you Go: (Continued)

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

For the year ended June 30, 2019, the Authority recognized OPEB expense in the amount of $16,876. At June 30, 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in assumptions	$ 27,092	$ -
Total	$ 27,092	$ -

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

Year Ended June 30	
2020	$ 3,188
2021	3,188
2022	3,188
2023	3,188
2024	3,188
Thereafter	11,152

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

NOTE 6—OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

Group Life Insurance (GLI) Program (OPEB Plan)

Plan Description

The Group Life Insurance (GLI) 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. All full-time, salaried permanent employees of the state agencies, teachers, and employees of participating political subdivisions are automatically covered by the VRS GLI Program 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 Program. 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 program, it is not included as part of the GLI Program OPEB.

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

Eligible Employees

The GLI Program was established July 1, 1960, for state employees, teachers, and employees of political subdivisions that elect the program. 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 Program 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 program 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 creditable service, the minimum benefit payable was set at $8,000 by statute. This amount is increased annually based on the VRS Plan 2 cost-of-living adjustment and was increased to $8,279 effective July 1, 2018.

NOTE 6—OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

Contributions

The contribution requirements for the GLI Program 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 Program 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, 2019 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 GLI Program from the entity were $4,728 and $4,427 for the years ended June 30, 2019 and June 30, 2018, respectively.

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

At June 30, 2019, the Authority reported a liability of $74,000 for its proportionate share of the Net GLI OPEB Liability. The Net GLI OPEB Liability was measured as of June 30, 2018 and the total GLI OPEB liability used to calculate the Net GLI OPEB Liability was determined by an actuarial valuation as of that date. The covered employer's proportion of the Net GLI OPEB Liability was based on the covered employer's actuarially determined employer contributions to the GLI Program for the year ended June 30, 2018 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2018, the participating employer's proportion was 0.00488% as compared to 0.00502% at June 30, 2017.

For the year ended June 30, 2019, the participating employer recognized GLI OPEB expense of $(1,000).

At June 30, 2019, 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	$ 4,000	$ 2,000
Net difference between projected and actual earnings on GLI OPEB program investments	-	2,000
Change in assumptions	-	3,000
Employer contributions subsequent to the measurement date	4,728	-
Total	$ 8,728	$ 7,000

NOTE 6–OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

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

$4,728 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, 2020. 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		
2020	$	(1,000)
2021		(1,000)
2022		(1,000)
2023		-
2024		-
Thereafter		-

Actuarial Assumptions

The total GLI OPEB liability was based on an actuarial valuation as of June 30, 2017, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018.

Inflation	2.5%
Salary increases, including inflation:	
General state employees	3.5% – 5.35%
Teachers	3.5%-5.95%
SPORS employees	3.5%-4.75%
VaLORS employees	3.5%-4.75%
JRS employees	4.5%
Locality - General employees	3.5%-5.35%
Locality - Hazardous Duty employees	3.5%-4.75%
Investment rate of return	7.0%, 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 7.0%. However, since the difference was minimal, and a more conservative 7.0% 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 7.0% to simplify preparation of OPEB liabilities.

NOTE 6–OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

Actuarial Assumptions: (Continued)

Mortality Rates – General State Employees

Pre-Retirement:
RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with scale BB to 2020; males set back 1 year, 85% of rates; females set back 1 year.

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 1 year; females set back 1 year with 1.5% increase compounded from ages 70 to 85.

Post-Disablement:
RP-2014 Disability Mortality Rates projected with scale BB to 2020; males 115% of rates; females 130% of rates.

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

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	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 25%

NOTE 6–OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

Actuarial Assumptions: (Continued)

Mortality Rates – Teachers

Pre-Retirement:
RP-2014 White Collar Employee Rates to age 80, White Collar Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020.

Post-Retirement:
RP-2014 White Collar Employee Rates to age 49, White Collar Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males 1% increase compounded from ages 70 to 90; females set back 3 years with 1.5% increase compounded from ages 65 to 70 and 2.0% increase compounded from ages 75 to 90.

Post-Disablement:
RP-2014 Disability Mortality Rates projected with scale BB to 2020; 115% of rates for males and females.

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

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	Adjusted rates to better match experience
Salary Scale	No change

NOTE 6—OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

Actuarial Assumptions: (Continued)

Mortality Rates – SPORS Employees

Pre-Retirement:
RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with scale BB to 2020; males 90% of rates; females set forward 1 year.

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 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

Post-Disablement:
RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 85%

NOTE 6—OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

Actuarial Assumptions: (Continued)

Mortality Rates – VaLORS Employees

Pre-Retirement:
RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with scale BB to 2020; males 90% of rates; females set forward 1 year.

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 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

Post-Disablement:
RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 50% to 35%

NOTE 6–OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

Actuarial Assumptions: (Continued)

Mortality Rates – JRS Employees

Pre-Retirement:
RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with scale BB to 2020; males set back 1 year, 85% of rates; females set back 1 year.

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 1 year; females set back 1 year with 1.5% compounding increase from ages 70 to 85.

Post-Disablement:
RP-2014 Disability Mortality Rates projected with scale BB to 2020; males 115% of rates; females 130% of rates.

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Decreased rates at first retirement eligibility
Withdrawal Rates	No change
Disability Rates	Removed disability rates
Salary Scale	No change

NOTE 6—OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

Actuarial Assumptions: (Continued)

Mortality Rates – Largest Ten Locality Employers – General Employees

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

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

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

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

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% to 20%

NOTE 6–OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

Actuarial Assumptions: (Continued)

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

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

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

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

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

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% to 15%

NOTE 6–OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

Actuarial Assumptions: (Continued)

Mortality Rates – Largest Ten Locality Employers – Hazardous Duty Employees

Pre-Retirement:
RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with scale BB to 2020; males 90% of rates; females set forward 1 year.

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 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

Post-Disablement:
RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years; unisex using 100% male

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

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
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Increased disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 70%

NOTE 6–OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

Actuarial Assumptions: (Continued)

Mortality Rates – Non-Largest Ten Locality Employers – Hazardous Duty Employees

Pre-Retirement:
RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with scale BB to 2020; males 90% of rates; females set forward 1 year.

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 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

Post-Disablement:
RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 60% to 45%

NOTE 6–OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

NET GLI OPEB Liability

The net OPEB liability (NOL) for the GLI Program represents the program'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, 2018, NOL amounts for the GLI Program are as follows (amounts expressed in thousands):

		Group Life Insurance OPEB Program
Total GLI OPEB Liability	$	3,113,508
Plan Fiduciary Net Position		1,594,773
Employers' Net GLI OPEB Liability (Asset)	$	1,518,735
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability		51.22%

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

Long-Term Expected Rate of Return

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

Asset Class (Strategy)	Target Allocation	Arithmetic Long-term Expected Rate of Return	Weighted Average Long-term Expected Rate of Return
Public Equity	40.00%	4.54%	1.82%
Fixed Income	15.00%	0.69%	0.10%
Credit Strategies	15.00%	3.96%	0.59%
Real Assets	15.00%	5.76%	0.86%
Private Equity	15.00%	9.53%	1.43%
Total	100.00%		4.80%
		Inflation	2.50%
		*Expected arithmetic nominal return	7.30%

NOTE 6–OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

Long-Term Expected Rate of Return (Continued)

*The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.

Discount Rate

The discount rate used to measure the total GLI OPEB liability was 7.00%. 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, 2018, the rate contributed by the entity for the GLI OPEB will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly which was 100% of the actuarially determined contribution rate. From July 1, 2018 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 7.00%, 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 (6.00%) or one percentage point higher (8.00%) than the current rate:

	Rate		
	1% Decrease (6.00%)	Current Discount (7.00%)	1% Increase (8.00%)
Authority's proportionate share of the Group Life Insurance Program Net OPEB Liability	$ 97,000	$ 74,000	$ 55,000

GLI Program Fiduciary Net Position

Detailed information about the GLI Program's Fiduciary Net Position is available in the separately issued VRS 2018 Comprehensive Annual Financial Report (CAFR). A copy of the 2018 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2018-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

NOTE 6—OTHER POSTEMPLOYMENT BENEFITS (OPEB): (CONTINUED)

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

OPEB Aggregate Totals

	Deferred Outflows of Resources	Net OPEB Liabilities	Deferred Inflows of Resources	Expense
Retiree Plan	$ 27,092	$ 146,304	$ -	$ 16,876
GLI	8,728	74,000	7,000	(1,000)
Totals	$ 35,820	$ 220,304	$ 7,000	$ 15,876

NOTE 7—RISK MANAGEMENT:

The Authority is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Authority joined together with other local governments in the State to form the Virginia Municipal League Insurance Programs, 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 and other insurance coverages. The Agreement for Formation of the association provides that the association will be self-sustaining through member premiums. Settled claims have not exceeded pool coverage in any of the past three fiscal years.

NOTE 8—COMMITMENTS AND CONTINGENCIES:

By agreement dated October 5, 2012, the Authority amended its Raw Water Supply Agreement (Agreement) with Wintergreen Partners, Inc. The Amended Agreement provides an additional 5 million gallons of raw water storage capacity to the Authority in providing redundancy to the system and to allocate the use of all stored and raw water to the Authority during a water emergency. Under the terms of the Agreement, the Authority will pay a monthly surcharge of $12.70363 per thousand gallons of raw water provided each month (maximum $12,703.63 per month).

The Authority has plans to replace the Wintergreen wastewater treatment plant and make improvements to the sewer collection system. This project is to be funded through a $20,100,000 loan from the United States Department of Agriculture Rural Development. No contracts have been signed and no funds have been borrowed as of June 30, 2019.

NOTE 9—UPCOMING PRONOUNCEMENTS:

Statement No. 84, Fiduciary Activities, establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities. This Statement describes four fiduciary funds that should be reported, if applicable: (1) pension (and other employee benefit) trust funds, (2) investment trust funds, (3) private-purpose trust funds, and (4) custodial funds. This Statement also provides for recognition of a liability to the beneficiaries in a fiduciary fund when an event has occurred that compels the government to disburse fiduciary resources. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018.

Statement No. 87, Leases, increases the usefulness of governments' financial statements by requiring 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. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019.

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

NOTE 10—ADOPTION OF ACCOUNTING PRINCIPLES:

The Authority implemented the financial reporting provisions of Governmental Accounting Standards Board Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, during the fiscal year ended June 30, 2019. This Statement clarifies which liabilities governments should include when disclosing information related to debt. It also requires that additional essential information related to debt be disclosed in notes to financial statements. No restatement was required as a result of this implementation.

The Authority early implemented provisions of Governmental Accounting Standards Board Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*, during the fiscal year ended June 30, 2019. This Statement simplifies accounting for interest cost incurred before the end of a construction period. Interest cost incurred during construction is expensed and no longer capitalized as part of project costs. No restatement was required as a result of this implementation.

Required Supplementary Information

NELSON COUNTY SERVICE AUTHORITY

Schedule of Changes in Net Pension Liability (Asset) and Related Ratios
For the Measurement Dates of June 30, 2014 through June 30, 2018

	2018	2017	2016	2015	2014
Total pension liability					
Service cost	$ 74,178	$ 75,984	$ 86,559	$ 92,489	$ 94,627
Interest	209,385	197,968	183,830	173,319	158,516
Differences between expected and actual experience	29,459	39,406	(17,550)	(71,530)	-
Changes in assumptions	-	(94,164)	-	-	-
Benefit payments, including refunds of employee contributions	(64,767)	(47,432)	(54,300)	(33,953)	(49,393)
Net change in total pension liability	$ 248,255	$ 171,762	$ 198,539	$ 160,325	$ 203,750
Total pension liability - beginning	3,023,592	2,851,830	2,653,291	2,492,966	2,289,216
Total pension liability - ending (a)	$ 3,271,847	$ 3,023,592	$ 2,851,830	$ 2,653,291	$ 2,492,966
Plan fiduciary net position					
Contributions - employer	$ 25,549	$ 26,373	$ 45,009	$ 45,587	$ 48,305
Contributions - employee	44,352	44,575	44,193	44,779	47,081
Net investment income	246,811	361,227	51,396	124,624	363,411
Benefit payments, including refunds of employee contributions	(64,767)	(47,432)	(54,300)	(33,953)	(49,393)
Administrative expense	(2,090)	(2,023)	(1,741)	(1,626)	(1,901)
Other	(221)	(324)	(21)	(26)	20
Net change in plan fiduciary net position	$ 249,634	$ 382,396	$ 84,536	$ 179,385	$ 407,523
Plan fiduciary net position - beginning	3,312,933	2,930,537	2,846,001	2,666,616	2,259,093
Plan fiduciary net position - ending (b)	$ 3,562,567	$ 3,312,933	$ 2,930,537	$ 2,846,001	$ 2,666,616
Authority's net pension asset - ending (a) - (b)	$ (290,720)	$ (289,341)	$ (78,707)	$ (192,710)	$ (173,650)
Plan fiduciary net position as a percentage of the total pension liability	108.89%	109.57%	102.76%	107.26%	106.97%
Covered payroll	$ 930,093	$ 926,850	$ 907,286	$ 902,864	$ 937,128
Authority's net pension asset as a percentage of covered payroll	-31.26%	-31.22%	-8.67%	-21.34%	-18.53%

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.

NELSON COUNTY SERVICE AUTHORITY

Schedule of Employer Contributions - Pension Plan
For the Years Ended June 30, 2010 through June 30, 2019

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)
2019	$ 13,310	$ 13,310	$ -	$ 902,216	1.48%
2018	25,524	25,524	-	930,093	2.74%
2017	26,460	26,460	-	926,850	2.85%
2016	45,010	45,010	-	907,286	4.96%
2015	45,520	45,520	-	902,864	5.04%
2014	48,075	48,075	-	937,128	5.13%
2013	48,430	48,430	-	944,049	5.13%
2012	29,908	29,908	-	911,844	3.28%
2011	28,415	28,415	-	866,313	3.28%
2010	27,898	27,898	-	933,059	2.99%

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

Largest 10 – Non-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% to 20%

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% to 15%

NELSON COUNTY SERVICE AUTHORITY

Schedule of Nelson County Service Authority's Share of Net OPEB Liability
Group Life Insurance Program
For the Measurement Dates of June 30, 2018 and 2017

Date (1)	Employer's Proportion of the Net GLI OPEB Liability (2)	Employer's Proportionate Share of the Net GLI OPEB Liability (3)	Employer's Covered Payroll (4)	Employer's Proportionate Share of the Net GLI OPEB Liability as a Percentage of Covered Payroll (3)/(4) (5)	Plan Fiduciary Net Position as a Percentage of Total GLI OPEB Liability (6)
2018	0.00488%	$ 74,000	$ 930,093	7.96%	51.22%
2017	0.00502%	76,000	926,850	8.20%	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.

NELSON COUNTY SERVICE AUTHORITY

Schedule of Employer Contributions
Group Life Insurance Program
Years Ended June 30, 2010 through June 30, 2019

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)
2019	$ 4,728	$ 4,728	$ -	$ 902,216	0.52%
2018	4,427	4,427	$ -	930,093	0.52%
2017	4,820	4,820	-	926,850	0.52%
2016	4,355	4,355	-	907,286	0.48%
2015	4,334	4,334	-	902,864	0.48%
2014	4,498	4,498	-	937,128	0.48%
2013	4,531	4,531	-	944,049	0.48%
2012	2,542	2,542	-	907,857	0.28%
2011	2,426	2,426	-	866,313	0.28%
2010	1,900	1,900	-	933,059	0.27%

Notes to Required Supplementary Information
Group Life Insurance Program
For the Year Ended June 30, 2019

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

General State 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 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	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 25%

Teachers

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	Adjusted rates to better match experience
Salary Scale	No change

SPORS Employees

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 85%

VaLORS Employees

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better fit experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 50% to 35%

Notes to Required Supplementary Information
Group Life Insurance Program
For the Year Ended June 30, 2019 (Continued)

JRS Employees

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Decreased rates at first retirement eligibility
Withdrawal Rates	No change
Disability Rates	Removed disability rates
Salary Scale	No change

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% to 20%

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% to 15%

Largest Ten Locality Employers - Hazardous Duty 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
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Increased disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 70%

Non-Largest Ten Locality Employers - Hazardous Duty Employees

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 60% to 45%

NELSON COUNTY SERVICE AUTHORITY

Schedule of Changes in Total OPEB Liability (Asset) and Related Ratios - Health Insurance
For the Measurement Dates of June 30, 2018 through 2019

		2019	2018
Total OPEB liability			
Service cost	$	8,407	6,317
Interest		5,281	2,860
Effect of plan changes		-	18,304
Changes in assumptions		5,991	26,846
Benefit payments		(2,823)	(530)
Net change in total OPEB liability	$	16,856	53,797
Total OPEB liability - beginning		129,448	75,651
Total OPEB liability - ending	$	146,304	129,448
Covered payroll	$	N/A	N/A
Authority's total OPEB liability as a percentage of covered payroll		N/A	N/A

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

Notes to Required Supplementary Information - Health Insurance
Year Ended June 30, 2019

Valuation Date: 7/1/2017
Measurement Date: 6/30/2019

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

Methods and assumptions used to determine OPEB liability:

Actuarial Cost Method	Entry age normal level % of pay
Discount Rate	3.87% as of June 30, 2018; 3.50% as of June 30, 2019
Inflation	2.50% per year as of June 30, 2018; 2.50% per year as of June 30, 2019
Healthcare Trend Rate	The healthcare trend rate assumption starts at 5.70% in 2017, increases to 6.10% in 2019 and gradually declines to 4.20% by the year 2087
Salary Increase Rates	The salary increase rate starts at 5.35% salary increase for 1 year of service and gradually declines to 3.50% salary increase for 20 or more years of service
Retirement Age	The average age at retirement is 62
Mortality Rates	The mortality rates for active and healthy retirees was calculated using the RP-2014 Total Dataset Mortality Table fully generational using scale MP-2014. The mortality rates for disabled retirees was calculated using the RP-2014 Disabled Mortality Table projected with Scale BB to 2020.

Other Supplementary Information

Supporting Schedules

Schedule of Revenues and Expenses - Budget and Actual
Year Ended June 30, 2019

	Final Budget	Actual	Variance Favorable (Unfavorable)
Operating Revenue:			
Water and sewer charges	$ 3,783,500	$ 3,538,927	$ (244,573)
Availability fees	38,000	37,829	(171)
Fire protection	318,812	318,812	-
Connection fees	28,000	26,000	(2,000)
Other	125,000	87,022	(37,978)
Total Operating Revenue	$ 4,293,312	$ 4,008,590	$ (284,722)
Operating Expenses:			
Personnel	$ 1,153,500	$ 994,297	$ 159,203
Depreciation	789,097	816,921	(27,824)
Maintenance	270,600	210,798	59,802
Fringe benefits	339,000	224,190	114,810
Operations	271,600	241,624	29,976
Power pumping	155,500	216,224	(60,724)
Raw water	372,444	334,281	38,163
General and administrative	143,050	102,369	40,681
Insurance	53,000	46,278	6,722
Contractual services	80,000	156,240	(76,240)
Grinder pump expenses	161,000	135,281	25,719
Uniforms	6,200	2,160	4,040
Small tools	1,500	1,477	23
Total Operating Expenses	$ 3,796,491	$ 3,482,140	$ 314,351
Income (loss) from Operations	$ 496,821	$ 526,450	$ 29,629
Nonoperating Revenues (Expenses):			
Interest earned	$ 350	$ 7,381	$ 7,031
Gain (loss) on disposal of assets	-	140	140
Interest expense	(347,049)	(235,730)	111,319
Total nonoperating revenues (expenses)	$ (346,699)	$ (228,209)	$ 118,490
Income (loss)	$ 150,122	$ 298,241	$ 148,119

Schedule of Funding and Expenditures - Capital Budget
Year Ended June 30, 2019

	Final Budget	Actual	Variance Favorable (Unfavorable)
Funding:			
Income (loss) before contributed capital	$ 150,122	$ 298,241	$ 148,119
Depreciation	789,097	816,921	27,824
Contributed capital	-	12,490	12,490
Total Funding	$ 939,219	$ 1,127,652	$ 188,433
Expenditures:			
Principal payments on debt	$ 305,962	$ 356,698	$ (50,736)
Capital expenditures	340,000	135,918	204,082
Total Expenditures	$ 645,962	$ 492,616	$ 153,346
Funding Over (Under) Expenditures	$ 293,257	$ 635,036	$ 341,779

Debt Service Coverage
Last Ten Fiscal Years

			Net Revenue Available	Debt Service			
Fiscal Year	Gross Revenue	Direct Operating Expenses	For Debt Service	Principal	Interest	Total	Coverage
2019	$ 4,015,971	$ 2,665,219	$ 1,350,752	$ 356,696	$ 236,316	$ 593,012	2.28
2018	4,074,134	2,825,956	1,248,178	702,026	250,467	952,493	1.31
2017	4,000,016	2,644,482	1,355,534	906,131	274,363	1,180,494	1.15
2016	4,038,777	2,612,224	1,426,553	727,389	277,964	1,005,353	1.42
2015	4,096,369	2,629,907	1,466,462	710,823	295,513	1,006,336	1.46
2014	4,070,513	2,584,422	1,486,091	697,209	386,442	1,083,651	1.37
2013	4,143,361	2,473,024	1,670,337	675,065	396,959	1,072,024	1.56
2012	4,080,814	2,245,397	1,835,417	663,588	426,382	1,089,970	1.68
2011	3,543,000	2,236,383	1,306,617	594,421	395,151	989,572	1.32
2010	3,334,336	2,346,478	987,858	559,230	383,177	942,407	1.05

Note: Gross revenue includes operating revenues and nonoperating interest income. Contributed capital is excluded from gross revenue. Direct operating expenses do not include interest, depreciation or amortization expenses.

Compliance

ROBINSON, FARMER, COX ASSOCIATES, PLLC
Certified Public Accountants
CPAs | CONSULTANTS

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

BOARD OF DIRECTORS
NELSON COUNTY SERVICE AUTHORITY
LOVINGSTON, 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 Nelson County Service Authority as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Nelson County Service Authority's financial statements and have issued our report thereon dated November 19, 2019.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Nelson County Service Authority's internal control over financial reporting (internal control) to determine 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 Nelson County Service Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of Nelson County Service 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 Nelson County Service 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 determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

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

Robinson, Farmer, Cox Associates

Charlottesville, Virginia
November 19, 2019