
HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

**FINANCIAL REPORT
YEARS ENDED JUNE 30, 2019 AND 2018**

Table of Contents

	Page
Independent Auditors' Report	1-2
Management's Discussion and Analysis	3-7
Financial Statements:	
Statement of Net Position	8-9
Statement of Revenues, Expenses and Changes in Net Position	10
Statement of Cash Flows	11
Notes to Financial Statements	12-48
Required Supplementary Information:	
Schedule of Changes in Net Pension Liability and Related Ratios	49
Schedule of Employer Contributions - Pension Plan	50
Notes to Required Supplementary Information-Pension Plan	51
Schedule of Changes in Total OPEB Liability (Asset) and Related Ratios - Health Insurance	52
Notes to Required Supplementary Information - Health Insurance	53
Schedule of Authority's Share of Net OPEB Liability - Group Life Insurance Program ..	54
Schedule of Employer Contributions - Group Life Insurance Program	55
Notes to Required Supplementary Information - Group Life Insurance Program	56
Other Supplementary Information:	
Supporting Schedules:	
Schedule 1 Schedule of Income and Expenses - By Fund	57-58
Schedule 2 Schedule of Operating Expenses - Budget and Actual	59-60
Schedule 3 Insurance Coverage	61
Schedule 4 Average Daily Flow and Revenue by Locality	62
Schedule 5 Pledged Revenue Coverage - Sewer Revenue Bonds	63
Compliance:	
Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i>	64-65



Independent Auditors' Report

Board of Directors
Harrisonburg-Rockingham Regional Sewer Authority
Mt. Crawford, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of Harrisonburg-Rockingham Regional Sewer Authority, as of and for the years ended June 30, 2019 and 2018, 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 audits. We conducted our audits 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 Harrisonburg-Rockingham Regional Sewer Authority, as of June 30, 2019 and 2018, and the changes in financial position, and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As described in Note 13 to the financial statements, in 2019, the Authority adopted new accounting guidance, GASB State No. 88 *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*. 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 3-7 and 49-56 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Harrisonburg-Rockingham Regional Sewer 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.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated September 30, 2019, on our consideration of Harrisonburg-Rockingham Regional Sewer Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Harrisonburg-Rockingham Regional Sewer Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Harrisonburg-Rockingham Regional Sewer Authority's internal control over financial reporting and compliance.

Robinson, Farmer, Cox Associates

Charlottesville, Virginia
September 30, 2019

Management's Discussion and Analysis

To the Board of Directors
Harrisonburg-Rockingham Regional Sewer Authority
Mt. Crawford, Virginia

As management of the Harrisonburg-Rockingham Regional Sewer Authority, (the Authority), we offer readers of our financial statements this narrative and overview and analysis of the financial activities of the Authority for the fiscal year ended June 30, 2019.

Overview of the Financial Statements

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

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

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

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

The basic enterprise fund financial statements can be found on pages 8 through 11 of this report.

Notes to financial statements. The notes provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes to the financial statements can be found on pages 12 through 48 of this report. Required supplementary information concerning the Authority's progress in funding its obligation to provide pension benefits and OPEB to its employees is located immediately following the notes to the financial statements.

Financial Highlights

- The assets and deferred outflows of resources of the Authority exceeded its liabilities and deferred inflows at the close of the most recent fiscal year by \$40,474,603 (net position). Of this amount \$4,292,818 (unrestricted net position) may be used to meet the Authority's ongoing obligations to customers and creditors.
- The Authority's total net position increased by \$1,793,840.
- The Authority's total debt increased by \$4,592,573 during the current fiscal year. This increase in debt is due to new borrowings in excess of scheduled principal payments on the Authority's bonds.

Financial Analysis

As noted earlier, net position may serve over time as a useful indicator of an Authority's financial position. In the case of the Authority, assets and deferred outflows exceeded liabilities and deferred inflows by \$40,474,603 at the close of the most recent fiscal year.

By far the largest portion of the Authority's net position (89 percent) reflects its investment in capital assets, less any related outstanding debt used to acquire those assets. The Authority uses these capital assets to provide services to its customers; consequently, these assets are not available for future spending. Although the Authority's investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities.

	Net Position		
	2019	2018	2017
Current, restricted, and other assets	\$ 9,337,484	\$ 9,295,784	\$ 9,844,695
Capital assets	97,476,198	90,789,855	90,347,561
Total assets	\$ 106,813,682	\$ 100,085,639	\$ 100,192,256
Total deferred outflows of resources	\$ 356,274	\$ 506,030	\$ 759,781
Current liabilities	\$ 6,593,345	\$ 6,283,879	\$ 6,125,012
Long-term liabilities	59,979,830	55,450,783	57,634,432
Total liabilities	\$ 66,573,175	\$ 61,734,662	\$ 63,759,444
Total deferred inflows of resources	\$ 122,178	\$ 176,244	\$ 22,652
Net position:			
Net investment in capital assets	\$ 35,882,587	\$ 34,176,713	\$ 31,674,317
Restricted	299,198	399,757	853,317
Unrestricted	4,292,818	4,104,293	4,642,307
Total net position	\$ 40,474,603	\$ 38,680,763	\$ 37,169,941

Financial Analysis: (Continued)

At the end of the current fiscal year, the Authority is able to report positive balances in all categories of net position. The same situation held true for the prior two fiscal years.

	Change in Net Position		
	2019	2018	2017
Revenues:			
Operating revenues	\$ 5,589,209	\$ 5,197,882	\$ 5,249,216
Debt Service revenue	6,116,412	5,770,397	5,624,260
Investment income	121,108	76,084	32,863
Other revenue	35,509	58,922	102,712
Total revenues	\$ 11,862,238	\$ 11,103,285	\$ 11,009,051
Expenses:			
Operating expenses (excluding depreciation)	\$ 4,719,843	\$ 4,176,134	\$ 4,323,977
Depreciation expense	4,372,714	4,263,624	4,409,740
Interest expense	1,590,342	1,586,236	1,589,390
Other	219,007	201,564	334,550
Total expenses	\$ 10,901,906	\$ 10,227,558	\$ 10,657,657
Income (loss) before capital contributions	\$ 960,332	\$ 875,727	\$ 351,394
Capital contributions	833,508	871,008	1,051,512
Increase (decrease) in net position	\$ 1,793,840	\$ 1,746,735	\$ 1,402,906
Net position—July 1	38,680,763	36,934,028	35,767,035
Net position—June 30	\$ 40,474,603	\$ 38,680,763	\$ 37,169,941

The Authority's net position increased by \$1,793,840 during the current year. Operating revenues increased by \$391,327 while operating expenses increased \$543,709 from FY 2018 levels. Key elements of these changes are explained in greater detail under the Review of Operations section.

Capital Asset and Debt Administration

Capital Assets - The Authority's investment in capital assets as of June 30, 2019 amounts to \$97,476,198 (net of accumulated depreciation). Investment in capital assets increased by approximately 7.4% during the year, due to additions to capital assets in excess of depreciation. 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.

	2019	2018	2017
Land	\$ 193,392	\$ 193,392	\$ 193,392
Plant	72,465,460	73,612,539	74,899,528
Machinery and equipment	11,043,290	12,530,114	14,021,115
Vehicles and equipment	186,488	197,353	143,898
Construction in progress	13,587,568	4,256,457	1,089,628
Total capital assets	\$ 97,476,198	\$ 90,789,855	\$ 90,347,561

More detailed information on the Authority's capital assets is presented in Note 5 of the Notes to the financial statements.

Capital Asset and Debt Administration: (Continued)

Long-Term Debt - At the end of the current fiscal year, the Authority had \$63,722,147 in bonds outstanding versus \$59,129,574 last year, an increase of 7.8%. The increase is due to new borrowings in excess of scheduled payments of debt.

Other long-term obligations of the Authority include accrued vacation pay and other postemployment benefits. More detailed information on the Authority's long-term liabilities is presented in Note 6 of the notes to the financial statements.

Operating Revenues: A comparison of FY 2019 actual to budgeted revenue is shown on Schedule 1 - Schedule of Income and Expenses - By Fund. Operating revenues increased by \$391,327 (7.5%) during FY 2019 to \$5,589,209. The increase is mostly due to increased revenue from industrial solids and septage treatment which totaled \$1,065,887 as compared to the FY 2018 total of \$754,841.

Operating Expenses: A comparison of FY 2019 actual and budgeted expenses is found on Schedule 2 - Schedule of Operating Expenses - Budget and Actual. Operating and Maintenance (O&M) expenses were \$468,727 under budget. However as noted, operating expenses increased \$543,709 from FY 2018 levels. The increase in operating expenses is attributed to a 28.4% increase in wastewater flows over the prior year due to inflow and infiltration from abnormally high precipitation. The annual average precipitation was 51.26 inches in FY 2019. By comparison, the annual average precipitation for the Harrisonburg, VA area is normally 36.41 inches.

Longer-Term Issues

FY 2019 Capital Improvement Projects Overview - The FY 2019 Capital Improvement Plan (CIP) was adopted by the Authority's Board of Directors on May 7, 2018 and subsequently amended on June 3, 2019. Significant projects included the Enhanced Biosolids Reuse and Reduction Project (EBRR), Blacks Run and Lower Cooks Creek Improvements (BR-LCC) Project and Tertiary Filter Improvements Project. The total value of capital outlay and projects capitalized during FY 2019 was \$1,727,946. Construction-in-Progress as of June 30, 2019 totaled \$13,587,568, with most of this amount attributed to the EBRR project.

EBRR Project - At the close of FY 2019, the Authority was nearing completion of the EBRR project. This project will allow recovery of excess digester biogas from the anaerobic digester to heat a thermal dryer for biosolids drying. The Authority's dewatered biosolids have a solids content of approximately 15% solids. After thermal drying, the final product will have greater than 90% solids and meet the EPA definition of Class A Exceptional Quality (E/Q) biosolids. In addition to significant cost savings from reduced biosolids hauling, the project is strategically important as the Class A E/Q designation greatly increases storage and disposal options.

The EBRR project is financed through the Virginia Clean Water Revolving Loan Fund (VCWRLF) with a principal amount of \$12,740,000, 2.25% annual interest and a maturity date of September 1, 2044 (25-year loan). The financing agreement was dated December 1, 2017. The first debt service payment is due on March 1, 2020.

BR-LCC Project - The BR-LCC Project is a phased program to upgrade the Authority's Blacks Run and Lower Cooks Creek interceptors. The phased program is planned for construction in four divisions over a 15 to 20-year time period beginning in FY 2020. The improvement program is projected for completion on or around the same timeframe as the 28 MGD expansion of the North River Wastewater Treatment Facility (NRWWTF), which is currently projected to occur sometime between 2042 - 2048.

In FY 2019, the Authority completed the Preliminary Engineering Report for the Division 1 project to upgrade the upper portion of the Blacks Run Interceptor in the City of Harrisonburg and successfully applied for project funding through the VCWRLF. Division 1 funding was approved by the State Water Control Board at its December 12, 2018 meeting. The Authority also completed geotechnical and utility location surveys; began easement acquisition and commenced final design during the fiscal year.

Longer-Term Issues: (Continued)

The Division 1 project consists of rehabilitating approximately 3,000 linear feet of an existing 36" sewer line and manholes with cured-in-place pipe (CIPP) lining methods and replacement of existing parallel 24 and 36-inch lines with approximately 5,600 linear feet of new 48-inch pipe. The estimated cost of construction is \$8.8 million with an annual debt service of approximately \$350,000 per year.

Tertiary Filtration Improvements Project - The Tertiary Filtration Improvements project will overhaul the NRWTF's existing tertiary filtration process with new cloth media filtration technology. Originally constructed in 1993 to provide BOD₅ polishing, the existing tertiary filters consist of eight shallow bed sand filter cells. An inspection of the filter cells conducted in 2017 found that all eight filter cells needed extensive rehabilitation including anthracite media replacement. Rather than restore what is essentially obsolete technology, the Authority opted to retrofit four of the cells with cloth media filters and backwash pumps cable of achieving the ultra-low total suspended solids removal now needed to meet the NRWTF's stringent limits for phosphorus. Upon completion of all three phases of the project, the tertiary filtration process will have sufficient capacity to rerate the plant for the future 28 MGD design flow tier. Phase I of the project was completed in FY 2019 at a total project cost of \$1,210,193. Phases II and III of the project are scheduled for completion in FY 2020 at estimated costs of approximately \$1,200,000 and \$3,700,000, respectively.

23 MGD Plant Expansion - During FY 2019, the Authority began the process of rerating the NRWTF from its current design flow of 22 MGD to 23 MGD. The expansion was initiated by a request from Rockingham County to transfer the nutrient waste load allocation (WLA) currently assigned to the County's McGaheysville STP to NRWTF. At its May 6, 2019 meeting, the Authority's Board of Directors approved the County's transfer request which was subsequently memorialized in an agreement signed and dated on June 3, 2019.

The agreement calls for the County to permanently transfer the eligible portion of the McGaheysville STP's nutrient WLA retroactively effective January 1, 2019 and for the Authority to construct Phase III of the Tertiary Filtration Improvements Project; apply for state grant funding and modify the NRWTF's VPDES permit to increase the design flow of the NRWTF from 22 MGD to 23 MGD. The County is responsible for paying all costs related to the VPDES permit modification and the Phase III Tertiary Filtration Improvements Project (see above discussion) and will be provided a credit by the Authority for any grant funding provided by the state. The County is also responsible for paying all costs associated with closing the McGaheysville STP. After the certificate to operate the NRWTF at the new 23 MGD design flow is issued, the County's flow allocation of the North River WWTF will be increased from 4.6 MGD to 5.6 MGD.

Requests for Information

This financial report is designed to provide a general overview of the Authority's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Executive Director, at P.O. Box 8, Mount Crawford, VA 22841.

This page intentionally left blank

- Financial Statements -

This page intentionally left blank

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Statement of Net Position
At June 30, 2019 and 2018

ASSETS	2019	2018
Current Assets:		
Cash and cash equivalents	\$ 4,233,919	\$ 4,614,200
Accounts receivable	772,091	602,813
Other receivables	3,421	4,600
Prepaid items	22,596	45,394
Total Current Assets	\$ 5,032,027	\$ 5,267,007
Noncurrent Assets:		
Restricted Assets (Note 2):		
Cash and temporary investments	\$ 887,170	\$ 866,028
Cash and temporary investments held by trustee	2,597,397	2,356,287
Total Restricted Assets	\$ 3,484,567	\$ 3,222,315
Other Assets:		
Patronage equities	\$ 820,890	\$ 806,462
Total Other Assets	\$ 820,890	\$ 806,462
Capital Assets:		
Land	\$ 193,392	\$ 193,392
Plant	126,707,726	125,118,326
Machinery, equipment and vehicles	28,841,816	28,715,395
Office furniture and equipment	153,482	153,482
Computer equipment	151,176	139,051
	\$ 156,047,592	\$ 154,319,646
Accumulated depreciation	72,158,962	67,786,248
	\$ 83,888,630	\$ 86,533,398
Construction in progress	13,587,568	4,256,457
Net Capital Assets	\$ 97,476,198	\$ 90,789,855
Total Noncurrent Assets	\$ 101,781,655	\$ 94,818,632
Total Assets	\$ 106,813,682	\$ 100,085,639
DEFERRED OUTFLOWS OF RESOURCES		
Deferred charge on refunding	\$ 213,262	\$ 320,272
Pension related items	124,153	177,575
OPEB related items	18,859	8,183
Total Deferred Outflows of Resources	\$ 356,274	\$ 506,030

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Statement of Net Position At June 30, 2019 and 2018 (Continued)

LIABILITIES	2019	2018
Current Liabilities:		
Accounts payable	\$ 617,407	\$ 964,560
Retainage payable	538,404	105,523
Accrued expenses	42,163	39,009
Current maturities of long-term debt	1,966,652	2,122,287
Compensated absences	243,350	229,942
Total Current Liabilities	<u>\$ 3,407,976</u>	<u>\$ 3,461,321</u>
Current Liabilities Payable From Restricted Assets:		
Current maturities of long-term debt	\$ 2,597,397	\$ 2,356,287
Accrued interest payable	587,972	466,271
Total Current Liabilities Payable From Restricted Assets	<u>\$ 3,185,369</u>	<u>\$ 2,822,558</u>
Noncurrent Liabilities:		
Net OPEB liabilities	\$ 298,970	\$ 300,148
Net pension liability	379,043	445,031
Revenue bonds (net of unamortized premiums)	59,301,817	54,705,604
Total Noncurrent Liabilities	<u>\$ 59,979,830</u>	<u>\$ 55,450,783</u>
Total Liabilities	<u>\$ 66,573,175</u>	<u>\$ 61,734,662</u>
DEFERRED INFLOWS OF RESOURCES		
Pension related items	\$ 106,462	\$ 157,990
OPEB related items	15,716	18,254
Total Deferred Inflows of Resources	<u>\$ 122,178</u>	<u>\$ 176,244</u>
NET POSITION		
Net investment in capital assets	\$ 35,882,587	\$ 34,176,713
Restricted for debt service and bond covenants	299,198	399,757
Unrestricted	4,292,818	4,104,293
Total Net Position	<u><u>\$ 40,474,603</u></u>	<u><u>\$ 38,680,763</u></u>

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

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Statement of Revenues, Expenses and Changes in Net Position Years Ended June 30, 2019 and 2018

	<u>2019</u>	<u>2018</u>
Operating Revenue:		
Operations and maintenance	\$ 4,368,154	\$ 4,381,271
Septage/waste treatment	1,065,887	754,841
Pretreatment	141,000	37,634
Nutrient credit sales	<u>14,168</u>	<u>24,136</u>
Total Operating Revenue	\$ <u>5,589,209</u>	\$ <u>5,197,882</u>
Operating Expenses:		
Power	\$ 724,258	\$ 608,718
Operations and maintenance	389,632	336,198
Sewage treatment	454,232	480,611
Biosolids expenses	733,306	424,232
Professional expenses	96,427	77,935
Personnel	2,156,203	2,094,354
Administrative	<u>165,785</u>	<u>154,086</u>
Total Operating Expenses	\$ <u>4,719,843</u>	\$ <u>4,176,134</u>
Operating Income Before Depreciation	\$ 869,366	\$ 1,021,748
Depreciation	<u>4,372,714</u>	<u>4,263,624</u>
Operating income (loss)	\$ <u>(3,503,348)</u>	\$ <u>(3,241,876)</u>
Nonoperating Revenues (Expenses):		
Debt service revenue	\$ 6,116,412	\$ 5,770,397
Investment income	121,108	76,084
Patronage refunds and miscellaneous	35,509	58,922
Bond issue costs	(51,402)	-
Interest expense and bond fees	(1,590,342)	(1,586,236)
Planning and repair expenses	<u>(167,605)</u>	<u>(201,564)</u>
Nonoperating revenues (expenses)	\$ <u>4,463,680</u>	\$ <u>4,117,603</u>
Income (loss) before capital contributions	\$ 960,332	\$ 875,727
Capital contributions	<u>833,508</u>	<u>871,008</u>
Change in Net Position	\$ 1,793,840	\$ 1,746,735
Net Position, Beginning of Year	<u>38,680,763</u>	<u>36,934,028</u>
Net Position, End of Year	<u><u>\$ 40,474,603</u></u>	<u><u>\$ 38,680,763</u></u>

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

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Statement of Cash Flows
Years Ended June 30, 2019 and 2018

	2019	2018
Cash flows from operating activities:		
Receipts from customers and users	\$ 5,424,771	\$ 5,208,106
Payments to suppliers	(2,887,995)	(2,141,038)
Payments to and on behalf of employees	(2,218,127)	(2,157,577)
Net cash provided by (used for) operating activities	\$ 318,649	\$ 909,491
Cash flows from noncapital financing activities:		
Planning and major repair outlays	\$ (167,605)	\$ (201,564)
Cash flows from capital and related financing activities:		
Purchase of capital assets	\$ (10,626,176)	\$ (4,600,394)
Proceeds from localities-debt service revenues	6,116,412	5,770,397
Proceeds from localities-capital contributions	833,508	871,008
Proceeds from issuance of bonds	12,416,147	2,466,888
Principal payments on bonds	(7,823,574)	(4,351,494)
Interest and fees paid on bonds	(1,323,918)	(1,562,822)
Net cash provided by (used for) capital and related financing activities	\$ (407,601)	\$ (1,406,417)
Cash flows from investing activities:		
Interest income	\$ 121,108	\$ 76,084
Patronage refunds	17,420	37,456
Net cash provided by (used for) investing activities	\$ 138,528	\$ 113,540
Net Increase (Decrease) in cash and cash equivalents	\$ (118,029)	\$ (584,950)
Cash and cash equivalents, beginning of year (including \$3,222,315 and \$3,371,442, respectively reported in restricted accounts)	7,836,515	8,421,465
Cash and cash equivalents, end of year (including \$3,484,567 and \$3,222,315, respectively reported in restricted accounts)	\$ 7,718,486	\$ 7,836,515
Reconciliation of operating income (loss) to net cash provided by (used for) operating activities:		
Operating income (loss)	\$ (3,503,348)	\$ (3,241,876)
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:		
Depreciation	4,372,714	4,263,624
Miscellaneous revenues	4,840	20,600
Changes in operating assets and liabilities:		
(Increase) decrease in accounts receivable	(169,278)	(10,376)
(Increase) decrease in prepaid items	22,798	(24,795)
Increase (decrease) in accounts payable	(347,153)	(34,463)
(Increase) decrease in pension deferred outflows of resources	53,422	181,866
(Increase) decrease in OPEB deferred outflows of resources	(10,676)	(8,183)
Increase (decrease) in pension deferred inflows of resources	(51,528)	135,338
Increase (decrease) in OPEB deferred inflows of resources	(2,538)	18,254
Increase (decrease) in net OPEB liabilities	(1,178)	(22,921)
Increase (decrease) in net pension liability	(65,988)	(355,159)
Increase (decrease) in accrued expenses	3,154	(3,659)
Increase (decrease) in compensated absences	13,408	(8,759)
Net cash flows from operating activities	\$ 318,649	\$ 909,491

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

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements
As of June 30, 2019 and 2018

NOTE 1 - FORMATION OF THE HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY:

The Harrisonburg-Rockingham Regional Sewer Authority ("HRRSA") is a public body politic and corporate organized and existing under the provisions of the Virginia Water and Waste Authorities Act, Chapter 51, Title 15.2 of the Code of Virginia of 1950, as amended (the "Enabling Act"), and Chapter 61, 1971 Va. Acts of Assembly (the "HRRSA Enabling Act"). HRRSA was created by concurrent resolutions adopted by the governing bodies of the Member Jurisdictions and was chartered by the State Corporation Commission on July 15, 1970. The SCC charter was extended for fifty years on September 13, 2005. The purpose for which HRRSA was formed is to acquire, finance, construct, operate and maintain facilities for the collection and treatment of sewage within its service area.

The Enabling Act provides that HRRSA is authorized, among other things (a) to acquire, construct, improve, operate and maintain any sewer system or sewage disposal system, (b) to issue revenue bonds of HRRSA, payable solely from revenues, to pay all or any part of the cost of a sewer system or sewage disposal system, (c) to fix, revise, charge and collect rates, fees and charges for the use of and for the services furnished by any system operated by HRRSA, and (d) to enter into contracts with any counties, towns and cities, providing for or relating to the furnishing of services and facilities or to the use of any sewer system or sewage disposal system of HRRSA, including the provision of charges therefore. The Enabling Act also provides that HRRSA is subject in all respects to the jurisdiction of the Virginia State Water Control Board under the provisions of the State Water Control Law.

Financial Reporting Entity:

The member jurisdictions are the City of Harrisonburg, the County of Rockingham and the Towns of Bridgewater, Dayton and Mt. Crawford. These governmental entities have an ongoing financial responsibility to the Authority because a covenant to pay the Authority's rates and charges is included in the service contract.

The Authority's governing body is composed of four members appointed by the City of Harrisonburg and one member each appointed by the other member jurisdictions. Therefore, none of the participants appoints a voting majority of board members.

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

Based on the above representations, the Harrisonburg-Rockingham Regional Sewer Authority has been determined to be a joint venture of its member jurisdictions. The Authority is not a component unit of any of the participating governments. There are no component units to be included within the Authority's financial statements.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

A. Basis of Accounting:

The Harrisonburg-Rockingham Regional Sewer Authority operates as an enterprise fund or business-type activity 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 Governmental Accounting Standards Board (GASB) pronouncements.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

A. Basis of Accounting: (Continued)

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

B. Allowance for Doubtful Accounts:

The Authority bills the member jurisdictions for substantially all of its services and consequently no provision for doubtful accounts is considered necessary.

C. Basic Financial Statements:

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

D. 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 its useful life are not capitalized.

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

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

D. Capital Assets: (Continued)

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

<u>Assets</u>	<u>Years</u>
Sewage treatment plant and equipment	10 to 50
Machinery and equipment	3 to 25
Office furniture and equipment	10
Vehicles	5

E. Interest on Indebtedness:

Interest expense applicable to that portion of indebtedness, the proceeds of which are used to construct new facilities, was capitalized during the period of construction as part of the cost of such facilities through the year ended June 30, 2017. The Authority adopted GASB Statement No. 89 in the year ended June 30, 2018. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. Accordingly, interest costs of the Authority are treated as nonoperating expenses.

F. Cash and Cash Equivalents:

The Authority's cash and cash equivalents consist of demand deposits, investments in the Virginia State Treasurer's Local Government Investment Pool, and investments in United States Government Securities money market mutual funds, all of which have original maturities of three months or less from the date of acquisition.

G. Investments:

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

H. Budgets and Budgetary Accounting:

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

I. Inventory:

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

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

J. Use of Estimates:

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

K. 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. One item is the deferred charge on refunding results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. The other item is comprised of certain items related to the measurement of the net pension liability and the net OPEB liabilities and/or contributions to the pension and OPEB plans made during the current year and subsequent to the net pension liability and net OPEB liability measurement date. 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 liability and net OPEB liabilities are reported as deferred inflows of resources. For more detailed information on these items, reference the related notes.

L. 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.

M. Net Position Flow Assumption:

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

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

N. Pensions:

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

O. Other Postemployment Benefits (OPEB)

Medical and Dental Insurance - Pay-as-you Go

For purposes of measuring the total OPEB liability, deferred outflows of resources and deferred inflows of resources related to the OPEB, and OPEB expense have been determined on the same basis as they were reported by the plan actuary. In addition, benefit payments are recognized when due and payable in accordance with the benefit terms.

Group Life Insurance

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

P. Restricted Assets:

The Authority maintains a number of restricted accounts which are required by contract with the users, by bond resolution, or by the Board of Directors. At June 30, 2019 and 2018 restricted assets consisted of the following:

	<u>2019</u>	<u>2018</u>
Restricted Assets:		
Cash and temporary investments held by Authority:		
O & M Reserve Account	\$ <u>887,170</u>	\$ <u>866,028</u>
Cash and temporary investments held by Trustee:		
Bond Service fund	\$ <u>2,597,397</u>	\$ <u>2,356,287</u>
Restricted asset balance June 30	\$ <u><u>3,484,567</u></u>	\$ <u><u>3,222,315</u></u>
Board designated accounts, included in current assets:		
Special reserve account	\$ 266,151	\$ 259,809
Planning and repair account	2,324,997	2,507,839
Capital outlay escrow	<u>63,564</u>	<u>62,050</u>
Total	\$ <u><u>2,654,712</u></u>	\$ <u><u>2,829,698</u></u>

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

P. Restricted Assets: (Continued)

Special Reserve Account: The purpose of this account is to hold monies in reserve for the financing of special unanticipated repairs, maintenance, additions, and/or improvements as designated by the Board.

Operating and Maintenance (O & M) Reserve Account: This account is required by contract to equal two months of operations and maintenance expenses under the current budget. This fund is to be used for current operations and maintenance if there are insufficient monies in the operation and maintenance account (unrestricted) caused by extraordinary maintenance and repairs and for capital expenditures.

Planning and Repair Account: This account, held by the Authority, may be used to pay costs or expenses related to the construction, replacement, renewal, or improvement of the Authority's sewage disposal system.

Bond Service Fund: This account, established by the 1992 and 1998 Bond Resolutions, is held in trust and is to be used by the trustee to pay all interest and principal requirements of the bonds. The Authority covenants that it will pay to the Trustee, on a monthly basis, funds sufficient to service the current interest and principal requirements of the Sewer Revenue Bonds.

Capital Outlay Escrow: This account was established by the Board and is used to accumulate funds for capital outlay purchases, such as vehicles.

Q. 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.

NOTE 3 - DEPOSITS AND INVESTMENTS:

Deposits

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

Investments:

Statutes authorize the Authority to invest in obligations of the United States or agencies thereof, obligations of the Commonwealth of Virginia or political subdivisions thereof, obligations of the International Bank for Reconstruction and Development (World Bank), the Asian Development Bank, the African Development Bank, "prime quality" commercial paper and certain corporate notes, banker's acceptances, repurchase agreements and the State Treasurer's Local Government Investment Pool (LGIP).

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 3 - DEPOSITS AND INVESTMENTS: (CONTINUED)

Credit Risk of Debt Securities

The Authority's rated debt investments as of June 30, 2019 and 2018 were rated by Standard & Poor's and the ratings are presented below using the Standard & Poor's rating scale.

Authority's Rated Debt Investments' Values				
Rated Debt Investments	2019		2018	
	Fair Quality Ratings		Fair Quality Ratings	
	AAA ^m		AAA ^m	
Local Government Investment Pool	\$	3,542,246	\$	3,954,186
Money market - Federated Automated Money Trust		2,597,397		2,356,287
Total deposits and investments	\$	6,139,643	\$	6,310,473

Interest Rate Risk:

Investment Maturities (in Years) as of June 30, 2019			
		Fair Value	Less Than 1 Year
Local Government Investment Pool	\$	3,542,246	\$ 3,542,246
Money market - Federated Automated Money Trust		2,597,397	2,597,397
	\$	6,139,643	\$ 6,139,643

Investment Maturities (in Years) as of June 30, 2018			
		Fair Value	Less Than 1 Year
Local Government Investment Pool	\$	3,954,186	\$ 3,954,186
Money market - Federated Automated Money Trust		2,356,287	2,356,287
	\$	6,310,473	\$ 6,310,473

External Investment Pools

The value of the positions in the external investment pool (Local Government Investment Pool) is the same as the value of the pool shares. As this pool is not SEC registered, regulatory oversight of the pool rests with the Virginia State Treasury. LGIP is measured at amortized cost. There are no withdrawal limitations or restrictions imposed on participants.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 4 - FAIR VALUE MEASUREMENTS:

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

- Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 – Significant observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.
- Level 3 – Significant unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

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

	Fair Value Measurements at Reporting Date Using			
	Total June 30, 2019	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
U.S. Treasury & Agency Money Market Funds	\$ 2,597,397	\$ 2,597,397	\$ -	\$ -
Total investments measured at fair value	<u>\$ 2,597,397</u>	<u>\$ 2,597,397</u>	<u>\$ -</u>	<u>\$ -</u>
	Quoted Prices in Active Markets for Identical Assets (Level 1)			
	Total June 30, 2018	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
U.S. Treasury & Agency Money Market Funds	\$ 2,356,287	\$ 2,356,287	\$ -	\$ -
Total investments measured at fair value	<u>\$ 2,356,287</u>	<u>\$ 2,356,287</u>	<u>\$ -</u>	<u>\$ -</u>

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 5 - CAPITAL ASSETS:

Details of changes in capital assets for the year ended June 30, 2019 are as follows:

	<u>Beginning Balance</u>	<u>Increases</u>	<u>Decreases</u>	<u>Ending Balance</u>
Capital assets not being depreciated:				
Land	\$ 193,392	\$ -	\$ -	\$ 193,392
Construction in progress	<u>4,256,457</u>	<u>11,054,407</u>	<u>1,723,296</u>	<u>13,587,568</u>
Total capital assets not being depreciated	<u>\$ 4,449,849</u>	<u>\$ 11,054,407</u>	<u>\$ 1,723,296</u>	<u>\$ 13,780,960</u>
Capital assets being depreciated:				
Plant	\$ 125,118,326	\$ 1,589,400	\$ -	\$ 126,707,726
Machinery and equipment	28,224,924	88,927	-	28,313,851
Vehicles	490,471	37,494	-	527,965
Office furniture and equipment	153,482	-	-	153,482
Computer equipment	<u>139,051</u>	<u>12,125</u>	<u>-</u>	<u>151,176</u>
Total capital assets being depreciated	<u>\$ 154,126,254</u>	<u>\$ 1,727,946</u>	<u>\$ -</u>	<u>\$ 155,854,200</u>
Accumulated depreciation:				
Plant	\$ (51,505,787)	\$ (2,736,480)	\$ -	\$ (54,242,267)
Machinery and equipment	(15,694,811)	(1,575,750)	-	(17,270,561)
Vehicles	(342,033)	(37,225)	-	(379,258)
Office furniture and equipment	(128,763)	(14,745)	-	(143,508)
Computer equipment	<u>(114,854)</u>	<u>(8,514)</u>	<u>-</u>	<u>(123,368)</u>
Total accumulated depreciation	<u>\$ (67,786,248)</u>	<u>\$ (4,372,714)</u>	<u>\$ -</u>	<u>\$ (72,158,962)</u>
Total capital assets, being depreciated, net	<u>\$ 86,340,006</u>	<u>\$ (2,644,768)</u>	<u>\$ -</u>	<u>\$ 83,695,238</u>
Total capital assets net	<u>\$ 90,789,855</u>	<u>\$ 8,409,639</u>	<u>\$ 1,723,296</u>	<u>\$ 97,476,198</u>

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 5 - CAPITAL ASSETS: (CONTINUED)

Details of changes in capital assets for the year ended June 30, 2018 are as follows:

	Beginning Balance	Increases	Decreases	Ending Balance
Capital assets not being depreciated:				
Land	\$ 193,392	\$ -	\$ -	\$ 193,392
Construction in progress	1,089,628	4,517,704	1,350,875	4,256,457
Total capital assets not being depreciated	<u>\$ 1,283,020</u>	<u>\$ 4,517,704</u>	<u>\$ 1,350,875</u>	<u>\$ 4,449,849</u>
Capital assets being depreciated:				
Plant	\$ 123,767,451	\$ 1,350,875	\$ -	\$ 125,118,326
Machinery and equipment	28,156,156	78,863	10,095	28,224,924
Vehicles	470,737	109,350	89,616	490,471
Office furniture and equipment	153,482	-	-	153,482
Computer equipment	139,051	-	-	139,051
Total capital assets being depreciated	<u>\$ 152,686,877</u>	<u>\$ 1,539,088</u>	<u>\$ 99,711</u>	<u>\$ 154,126,254</u>
Accumulated depreciation:				
Plant	\$ (48,867,923)	\$ (2,637,864)	\$ -	\$ (51,505,787)
Machinery and equipment	(14,135,041)	(1,569,865)	(10,095)	(15,694,811)
Vehicles	(401,726)	(29,923)	(89,616)	(342,033)
Office furniture and equipment	(114,019)	(14,744)	-	(128,763)
Computer equipment	(103,627)	(11,227)	-	(114,854)
Total accumulated depreciation	<u>\$ (63,622,336)</u>	<u>\$ (4,263,623)</u>	<u>\$ (99,711)</u>	<u>\$ (67,786,248)</u>
Total capital assets, being depreciated, net	<u>\$ 89,064,541</u>	<u>\$ (2,724,535)</u>	<u>\$ -</u>	<u>\$ 86,340,006</u>
Total capital assets net	<u><u>\$ 90,347,561</u></u>	<u><u>\$ 1,793,169</u></u>	<u><u>\$ 1,350,875</u></u>	<u><u>\$ 90,789,855</u></u>

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 6 - LONG-TERM OBLIGATIONS:

A. Changes in Long-Term Obligations:

The following is a summary of long-term obligations transactions for the year ended June 30, 2019:

	<u>Beginning Balance</u>	<u>Issuances/ Additions</u>	<u>Retirements/ Reductions</u>	<u>Ending Balance</u>	<u>Due Within One Year</u>
Direct borrowings and placements:					
Revenue bonds	\$ 59,129,574	\$ 12,416,147	\$ (7,823,574)	\$ 63,722,147	\$ 4,564,049
Unamortized issuance premiums	<u>54,604</u>	<u>175,657</u>	<u>(86,542)</u>	<u>143,719</u>	<u>-</u>
Total direct borrowings and placements	\$ 59,184,178	\$ 12,591,804	\$ (7,910,116)	\$ 63,865,866	\$ 4,564,049
Net OPEB liabilities	300,148	39,192	(40,370)	298,970	-
Net pension liability	445,031	603,343	(669,331)	379,043	-
Compensated absences	<u>229,942</u>	<u>13,408</u>	<u>-</u>	<u>243,350</u>	<u>243,350</u>
Totals	<u>\$ 60,159,299</u>	<u>\$ 13,247,747</u>	<u>\$ (8,619,817)</u>	<u>\$ 64,787,229</u>	<u>\$ 4,807,399</u>

The following is a summary of long-term obligations transactions for the year ended June 30, 2018:

	<u>Beginning Balance</u>	<u>Issuances/ Additions</u>	<u>Retirements/ Reductions</u>	<u>Ending Balance</u>	<u>Due Within One Year</u>
Direct borrowings and placements:					
Revenue bonds	\$ 61,014,180	\$ 2,466,888	\$ (4,351,494)	\$ 59,129,574	\$ 4,478,574
Unamortized issuance premiums	<u>83,129</u>	<u>-</u>	<u>(28,525)</u>	<u>54,604</u>	<u>-</u>
Total direct borrowings and placements	\$ 61,097,309	\$ 2,466,888	\$ (4,380,019)	\$ 59,184,178	\$ 4,478,574
Net OPEB liabilities	87,153	212,995	-	300,148	-
Net pension liability	800,190	-	(355,159)	445,031	-
Compensated absences	<u>238,701</u>	<u>-</u>	<u>(8,759)</u>	<u>229,942</u>	<u>229,942</u>
Totals	<u>\$ 62,223,353</u>	<u>\$ 2,679,883</u>	<u>\$ (4,743,937)</u>	<u>\$ 60,159,299</u>	<u>\$ 4,708,516</u>

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 6 - LONG-TERM OBLIGATIONS: (CONTINUED)

B. Annual Amortization of Long-Term Obligations:

The annual requirements to amortize all long-term obligations outstanding as of June 30, 2019 are as follows:

Year Ending June 30,	Revenue Bonds	
	Principal	Interest
2020	\$ 4,564,049	\$ 1,715,641
2021	5,096,548	1,443,975
2022	5,255,398	1,288,494
2023	4,221,759	1,158,049
2024	4,325,694	1,054,114
2025	4,432,271	947,537
2026	4,541,558	838,249
2027	4,653,626	726,182
2028	4,768,545	611,263
2029	4,886,390	493,418
2030	5,007,237	372,571
2031	3,030,760	248,645
2032	974,337	204,667
2033	991,412	187,591
2034	1,008,814	170,189
2035	1,026,550	152,454
2036	1,044,625	134,379
2037	811,584	115,966
2038	577,568	101,706
2039	590,636	88,638
2040	604,000	75,274
2041	617,667	61,607
2042	631,642	47,631
2043	59,477	3,300
Total	\$ <u>63,722,147</u>	\$ <u>12,241,540</u>

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 6 - LONG-TERM OBLIGATIONS: (CONTINUED)

C. Details of Long-Term Obligations:

Direct Borrowings and Placements:

Revenue Bonds:

\$3,235,000 Series 2018C Sewer Revenue Refunding Bonds dated October 14, 2018 bearing interest at rates ranging from 4.43% to 5.125%, principal payable annually on October 1 and interest payable semi-annually on April 1 and October 1, final maturity October 1, 2021.	\$ 3,378,719
\$30,000,000 Series 2007 Sewer Revenue Bond dated December 20, 2007 bearing interest at 2.52%, due in semi-annual installments of combined principal and interest of \$984,273, final maturity September 1, 2030.	19,547,226
\$33,219,297 Series 2008B Sewer Revenue Bond dated November 25, 2008 bearing interest at 2.72%, due in semi-annual installments of combined principal and interest of \$1,116,129, final maturity September 1, 2030.	21,917,208
\$8,665,505 Series 2015 Sewer Revenue Bond dated February 27, 2015 with allonge dated September 22, 2015 bearing interest at 1.20%, due in semi-annual installments beginning November 1, 2017 of combined principal and interest of \$249,865, final maturity November 1, 2036.	7,865,577
\$12,740,000 Series 2017 Sewer Revenue Bond dated December 8, 2017 bearing interest at 2.25%, due in semi-annual installments beginning September 1, 2020 of combined principal and interest of \$339,637, final maturity November 1, 2044.	<u>11,157,136</u>
Total Direct Borrowings and Placements	\$ 63,865,866
Net OPEB liabilities	298,970
Net pension liability	379,043
Compensated absences	<u>243,350</u>
Total Long-Term Obligations	<u><u>\$ 64,787,229</u></u>

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 6 - LONG-TERM OBLIGATIONS: (CONTINUED)

D. Presentation of Long-Term Debt:

The following is a summary of long-term debt accounts:

	June 30,	
	2019	2018
Revenue Bonds:		
2008A Series	\$ -	\$ 4,370,000
Unamortized issuance premium	-	54,604
Current portion	-	(1,025,000)
	<u>\$ -</u>	<u>\$ 3,399,604</u>
2018C Series	\$ 3,235,000	\$ -
Unamortized issuance premium	143,719	-
Current portion	(1,025,000)	-
	<u>\$ 2,353,719</u>	<u>\$ -</u>
2007 Series	\$ 19,547,226	\$ 20,995,747
Current portion	(1,485,254)	(1,448,521)
	<u>\$ 18,061,972</u>	<u>\$ 19,547,226</u>
2008B Series	\$ 21,917,208	\$ 23,520,538
Current portion	(1,647,236)	(1,603,329)
	<u>\$ 20,269,972</u>	<u>\$ 21,917,209</u>
2015 Series	\$ 7,865,577	\$ 8,267,301
Current portion	(406,559)	(401,724)
	<u>\$ 7,459,018</u>	<u>\$ 7,865,577</u>
2017 Series	\$ 11,157,136	\$ 1,975,988
Current portion	-	-
	<u>\$ 11,157,136</u>	<u>\$ 1,975,988</u>
Revenue Bonds	<u>\$ 59,301,817</u>	<u>\$ 54,705,604</u>

E. Revenue Covenants:

The Authority is required to establish, charge and collect rates and enter into agreements with the Units contracting with the Authority for use of its services and facilities. Under the contracts, net revenues will in each fiscal year be sufficient to provide, together with any other funds available, an amount at least equal to the sum of 100% of the principal and interest requirements on account of all the bonds then outstanding under the Resolution.

F. Direct Borrowings and Placements:

	Beginning Balance	Increases	Decreases	Ending Balance
Revenue Bonds	\$ 59,129,574	\$ 12,416,147	\$ (7,823,574)	\$ 63,722,147

Revenue bonds totaling \$63,722,147 contain a provision that in the event of default the entire unpaid principal and interest become immediately due and payable.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 7 - COMPENSATED ABSENCES:

Effective July 1, 2014, the Authority combined its annual and sick leave plans into a single Paid Time Off (PTO) leave plan. Employee accumulated annual leave balances as of June 30, 2014 were converted to PTO leave and accumulated sick leave was converted to frozen sick leave. As of July 1, 2014, Authority employees earn Paid Time Off (PTO) leave each month in accordance with the years of service. Accumulated unpaid PTO and other compensatory leave amounts are accrued when incurred. Accumulated sick leave which was converted to frozen sick leave was accrued when incurred. At June 30, 2019 and 2018 the liability for accrued leave (including frozen sick leave) was \$243,350 and \$229,942, respectively.

NOTE 8 - PENSION PLAN:

Plan Description

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

Benefit Structures

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

- a. Employees 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.
- 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.
- 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.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 8 - PENSION PLAN: (CONTINUED)

Average Final Compensation and Service Retirement Multiplier

The VRS defined benefit is a lifetime monthly benefit based on a retirement multiplier as a percentage of the employee's average final compensation multiplied by the employee's total 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. Under Plan 2, average final compensation is the average of the employee's 60 consecutive months of highest compensation and the retirement multiplier is 1.65% for non-hazardous duty employees, 1.85% for sheriffs and regional jail superintendents. Under the Hybrid Plan, average final compensation is the average of the employee's 60 consecutive months of highest compensation 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:

	2018 Number	2017 Number
Inactive members or their beneficiaries currently receiving benefits	23	23
Inactive members:		
Vested inactive members	4	4
Non-vested inactive members	3	3
Inactive members active elsewhere in VRS	6	7
Total inactive members	13	14
Active members	30	28
Total covered employees	66	65

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements
As of June 30, 2019 and 2018 (Continued)

NOTE 8 - 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 5.49% 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 \$79,905 and \$93,875 for the years ended June 30, 2019 and June 30, 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.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 8 - 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.

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%

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 8 - PENSION PLAN: (CONTINUED)

Actuarial Assumptions - General Employees: (Continued)

Mortality rates: (Continued)

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%

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%.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 8 - PENSION PLAN: (CONTINUED)

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. 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.

Changes in Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at June 30, 2017	\$ 6,889,018	\$ 6,443,987	\$ 445,031
Changes for the year:			
Service cost	\$ 127,125	\$ -	\$ 127,125
Interest	471,683	-	471,683
Differences between expected and actual experience	(27,620)	-	(27,620)
Contributions - employer	-	93,738	(93,738)
Contributions - employee	-	74,384	(74,384)
Net investment income	-	473,589	(473,589)
Benefit payments, including refunds of employee contributions	(301,370)	(301,370)	-
Administrative expenses	-	(4,114)	4,114
Other changes	-	(421)	421
Net changes	\$ 269,818	\$ 335,806	\$ (65,988)
Balances at June 30, 2018	\$ 7,158,836	\$ 6,779,793	\$ 379,043

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 8 - PENSION PLAN: (CONTINUED)

Changes in Net Pension Liability: (Continued)

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at June 30, 2016	\$ 6,670,327	\$ 5,870,137	\$ 800,190
Changes for the year:			
Service cost	\$ 128,242	\$ -	\$ 128,242
Interest	456,498	-	456,498
Differences between expected and actual experience	3,999	-	3,999
Contributions - employer	-	93,493	(93,493)
Contributions - employee	-	73,333	(73,333)
Net investment income	-	709,648	(709,648)
Benefit payments, including refunds of employee contributions	(297,851)	(297,851)	-
Administrative expenses	-	(4,143)	4,143
Other changes	-	(630)	630
Net changes	\$ 218,691	\$ 573,850	\$ (355,159)
Balances at June 30, 2017	\$ 6,889,018	\$ 6,443,987	\$ 445,031

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

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

	Rate		
	1% Decrease (6.00%)	Current Discount (7.00%)	1% Increase (8.00%)
2019			
Authority's			
Net Pension Liability	\$ 1,246,886	\$ 379,043	\$ (348,119)
2018			
Authority's			
Net Pension Liability	\$ 1,291,710	\$ 445,031	\$ (263,260)

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 8 - 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 \$15,674. At June 30, 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 44,248	\$ 20,970
Change in assumptions	-	31,059
Net difference between projected and actual earnings on pension plan investments	-	54,433
Employer contributions subsequent to the measurement date	<u>79,905</u>	<u>-</u>
Total	\$ <u><u>124,153</u></u>	\$ <u><u>106,462</u></u>

For the year ended June 30, 2018, the Authority recognized pension expense of \$55,766. At June 30, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 83,700	\$ 11,655
Change in assumptions	-	51,628
Net difference between projected and actual earnings on pension plan investments	-	94,707
Employer contributions subsequent to the measurement date	<u>93,875</u>	<u>-</u>
Total	\$ <u><u>177,575</u></u>	\$ <u><u>157,990</u></u>

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 8 - PENSION PLAN: (CONTINUED)

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

\$79,905 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:

<u>Year ended June 30</u>	
2020	\$ 32,877
2021	(17,759)
2022	(71,864)
2023	(5,468)
Thereafter	-

\$93,875 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, 2019. 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:

<u>Year ended June 30</u>	
2019	\$ (54,255)
2020	45,650
2021	(4,986)
2022	(60,699)
Thereafter	-

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 9 - OTHER POSTEMPLOYMENT BENEFITS

Medical and Dental Insurance - Pay-as-you Go

Plan Description

In addition to the pension benefits described in Note 8, 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.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

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 Harrisonburg-Rockingham Regional Sewer Authority (Authority) must meet the eligibility requirements based on service earned with the Authority to be eligible to receive benefits upon retirement. Participants who do not retire directly from active service are not eligible for a benefit. Participants must meet one of the following criteria to be eligible for benefits:

- Participants must attain the age of 50 with at least 30 years of service with the Virginia Retirement System (VRS), have 15 years of service with the Authority and must have participated in the health plan for the last 5 years prior to retirement.
- Participants must attain the age of 55 with at least 15 years of service with the Authority and must have participated in the health plan for the last 5 years prior to retirement.

Health benefits include medical, dental, and vision coverage. Retirees under the age of 65 may elect the Anthem BCBS (PPO) medical option and a separate dental option. Retirees may elect to cover a spouse until the earliest of any of the following conditions: the retiree reaches age 65, the spouse reaches age 65 or the spouse becomes eligible for Medicare.

All benefits cease upon the death of the retiree.

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

Plan Membership

At June 30, 2019 and 2018 (measurement dates), the following employees were covered by the benefit terms:

	2019	2018
Total active employees with coverage	28	28
Total retirees with coverage	1	1
Total	29	29

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 years ended June 30, 2019 and 2018 were \$19,370 and \$23,419, respectively.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

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 January 1, 2018.

Actuarial Assumptions

The total OPEB liability in the January 1, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

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

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 based on the Bond Buyer General Obligation 20-Year 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.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

Changes in Total OPEB Liability

	<u>Total OPEB Liability</u>	
Balances at June 30, 2018	\$	173,148
Changes for the year:		
Service cost		8,478
Interest		6,658
Changes in assumptions		5,056
Benefit payments		(19,370)
Balances at June 30, 2019	\$	<u>173,970</u>
	<u>Total OPEB Liability</u>	
Balances at June 30, 2017	\$	186,066
Changes for the year:		
Service cost		8,876
Interest		6,417
Changes in assumptions		(4,792)
Benefit payments		(23,419)
Balances at June 30, 2018	\$	<u>173,148</u>

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:

	<u>Rate</u>		
	<u>1% Decrease (2.50%)</u>	<u>Current Discount Rate (3.50%)</u>	<u>1% Increase (4.50%)</u>
June 30, 2019	\$ 188,304	\$ 173,970	\$ 160,645
June 30, 2018	\$ 186,371	\$ 173,148	\$ 160,857

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

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

The following presents the total OPEB liability of the Authority, as well as what the total OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower (2.7% increasing annually to an ultimate rate of 3.2%) or one percentage point higher (4.7% increasing by to an ultimate rate of 5.20%) than the current healthcare cost trend rates:

		Rates		
		1% Decrease (2.70% increasing to 3.20%)	Healthcare Cost Trend (3.70% increasing to 4.20%)	1% Increase (4.70% increasing to 5.20%)
June 30, 2019	\$	154,185	\$ 173,970	\$ 198,270
June 30, 2018	\$	156,658	\$ 173,148	\$ 193,316

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 \$15,238. 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
Differences between expected and actual experience	\$ -	\$ -
Changes in assumptions	4,416	3,716
Net difference between projected and actual earnings on OPEB plan investments	-	-
Employer contributions subsequent to the measurement date	-	-
Total	\$ 4,416	\$ 3,716

For the year ended June 30, 2018, the Authority recognized OPEB expense in the amount of \$14,755. At June 30, 2018, 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
Differences between expected and actual experience	\$ -	\$ -
Changes in assumptions	-	4,254
Net difference between projected and actual earnings on OPEB plan investments	-	-
Employer contributions subsequent to the measurement date	-	-
Total	\$ -	\$ 4,254

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources: (Continued)

Amounts reported as deferred outflows of resources and deferred inflows of resources at June 30, 2019 will be recognized in OPEB expense in future reporting periods as follows:

<u>Year Ended June 30</u>	
2020	\$ 102
2021	102
2022	102
2023	102
2024	102
Thereafter	190

Amounts reported as deferred outflows of resources and deferred inflows of resources at June 30, 2018 will be recognized in OPEB expense in future reporting periods as follows:

<u>Year Ended June 30</u>	
2019	\$ 538
2020	538
2021	538
2022	538
2023	538
Thereafter	1,564

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.

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.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

Plan Description: (Continued)

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.

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 \$8,443 and \$8,183 for the years ended June 30, 2019 and June 30, 2018, respectively.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (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

At June 30, 2019 and 2018, the entity reported a liability of \$125,000 and \$127,000, respectively, 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 .00827% as compared to .00838% at June 30, 2017.

For the years ended June 30, 2019 and 2018, the participating employer recognized GLI OPEB expense of \$1,000 and \$4,000, respectively. Since there was a change in proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

At June 30, 2019, the employer reported deferred outflows of resources and deferred inflows of resources related to the GLI OPEB from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 6,000	\$ 3,000
Net difference between projected and actual earnings on GLI OPEB program investments	-	4,000
Change in assumptions	-	5,000
Employer contributions subsequent to the measurement date	<u>8,443</u>	<u>-</u>
Total	<u>\$ 14,443</u>	<u>\$ 12,000</u>

At June 30, 2018, the employer reported deferred outflows of resources and deferred inflows of resources related to the GLI OPEB from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ -	\$ 3,000
Net difference between projected and actual earnings on GLI OPEB program investments	-	5,000
Change in assumptions	-	6,000
Employer contributions subsequent to the measurement date	<u>8,183</u>	<u>-</u>
Total	<u>\$ 8,183</u>	<u>\$ 14,000</u>

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (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)

\$8,443 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:

<u>Year Ended June 30</u>	
2020	\$ (2,000)
2021	(2,000)
2022	(2,000)
2023	-
2024	-
Thereafter	-

\$8,183 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, 2019. 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:

<u>Year Ended June 30</u>	
2019	\$ 3,000
2020	3,000
2021	3,000
2022	3,000
2023	2,000
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. The assumptions include several employer groups as noted below. Mortality rates included herein are for relevant employer groups. Information for other groups can be referenced in the VRS CAFR.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

Actuarial Assumptions: (Continued)

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.

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%

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (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%

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 and 2017, NOL amounts for the GLI Program are as follows (amounts expressed in thousands):

Group Life Insurance OPEB Program		
	2018	2017
Total GLI OPEB Liability	\$ 3,113,508	2,942,426
Plan Fiduciary Net Position	1,594,773	1,437,586
Employers' Net GLI OPEB Liability (Asset)	\$ 1,518,735	1,504,840
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability	51.22%	48.86%

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

NET GLI OPEB Liability: (Continued)

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

Long-Term Expected Rate of Return

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

<u>Asset Class (Strategy)</u>	<u>Target Allocation</u>	<u>Arithmetic Long-term Expected Rate of Return</u>	<u>Weighted Average Long-term Expected Rate of Return</u>
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	<u>100.00%</u>		<u>4.80%</u>
		Inflation	<u>2.50%</u>
		*Expected arithmetic nominal return	<u>7.30%</u>

*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%.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

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	Current Discount	1% Increase
		(6.00%)	(7.00%)	(8.00%)
2019				
Authority's proportionate share of the Group Life Insurance Program				
Net OPEB Liability	\$	164,000 \$	125,000 \$	94,000
2018				
Authority's proportionate share of the Group Life Insurance Program				
Net OPEB Liability	\$	164,000 \$	127,000 \$	97,000

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.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

OPEB Aggregate Totals

		June 30, 2019			
		<u>Deferred Outflows</u>	<u>Deferred Inflows</u>	<u>Net/Total OPEB Liability</u>	<u>OPEB Expense</u>
VRS OPEB Plan:					
Group Life Insurance Program	\$	14,443	\$ 12,000	\$ 125,000	\$ 1,000
Authority Stand-Alone Plan		<u>4,416</u>	<u>3,716</u>	<u>173,970</u>	<u>15,238</u>
Totals	\$	<u><u>18,859</u></u>	<u><u>15,716</u></u>	<u><u>298,970</u></u>	<u><u>16,238</u></u>
		June 30, 2018			
		<u>Deferred Outflows</u>	<u>Deferred Inflows</u>	<u>Net/Total OPEB Liability</u>	<u>OPEB Expense</u>
VRS OPEB Plan:					
Group Life Insurance Program	\$	8,183	\$ 14,000	\$ 127,000	\$ 4,000
Authority Stand-Alone Plan		<u>-</u>	<u>4,254</u>	<u>173,148</u>	<u>14,755</u>
Totals	\$	<u><u>8,183</u></u>	<u><u>18,254</u></u>	<u><u>300,148</u></u>	<u><u>18,755</u></u>

NOTE 10 - RISK MANAGEMENT:

The Authority is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Authority joined together with other local governments in the State to form the Virginia Municipal Group Self Insurance Association, a public entity risk pool currently operating as a common risk management and insurance program for member governments. The Authority pays an annual premium to the pool for its workers compensation and other liability insurance coverage. 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.

The Authority provides employee health and accident insurance through participation in the City of Harrisonburg's health insurance pool. The Authority pays a monthly premium to the pool for health insurance coverage. Settled claims resulting from these risks have not exceeded pool insurance coverage in any of the past three fiscal years.

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Notes to Financial Statements

As of June 30, 2019 and 2018 (Continued)

NOTE 11 - 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 12 - CONSTRUCTION COMMITMENTS:

The Authority has active construction projects as of June 30, 2019. The Enhanced Biosolids Reuse and Reduction Project is funded by the Series 2017 bond issue. The other projects are funded by capital contributions from the member jurisdictions and Planning and Repair Account funds. At year end the Authority's commitments with contractors are as follows:

<u>Project</u>	<u>Spent-to-Date</u>	<u>Remaining Commitment</u>
Enhanced Biosolids Reuse and Reduction Project	\$ 10,229,677	\$ 1,088,652
Tertiary Filter Equipment - Phase II & III	-	2,250,500
Engineering and Design:		
Enhanced Biosolids Reuse and Reduction Project	1,271,597	150,121
Various	198,818	348,879

NOTE 13 - ADOPTION OF ACCOUNTING PRINCIPLE:

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.

This page intentionally left blank

- Required Supplementary Information -

This page intentionally left blank

Harrisonburg-Rockingham Regional Sewer Authority

Schedule of and Changes in Net Pension Liability 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	\$ 127,125	\$ 128,242	\$ 134,331	\$ 141,510	\$ 140,711
Interest	471,683	456,498	427,006	415,446	399,558
Differences between expected and actual experience	(27,620)	3,999	157,464	(44,646)	-
Changes in assumptions	-	(72,197)	-	-	-
Benefit payments, including refunds of employee contributions	(301,370)	(297,851)	(297,123)	(397,209)	(229,374)
Net change in total pension liability	\$ 269,818	\$ 218,691	\$ 421,678	\$ 115,101	\$ 310,895
Total pension liability - beginning	6,889,018	6,670,327	6,248,649	6,133,548	5,822,653
Total pension liability - ending (a)	\$ 7,158,836	\$ 6,889,018	\$ 6,670,327	\$ 6,248,649	\$ 6,133,548
Plan fiduciary net position					
Contributions - employer	\$ 93,738	\$ 93,493	\$ 113,630	\$ 116,681	\$ 131,211
Contributions - employee	74,384	73,333	70,370	72,522	77,714
Net investment income	473,589	709,648	100,911	267,145	800,801
Benefit payments, including refunds of employee contributions	(301,370)	(297,851)	(297,123)	(397,209)	(229,374)
Administrative expense	(4,114)	(4,143)	(3,683)	(3,796)	(4,294)
Other	(421)	(630)	(43)	(56)	42
Net change in plan fiduciary net position	\$ 335,806	\$ 573,850	\$ (15,938)	\$ 55,287	\$ 776,100
Plan fiduciary net position - beginning	6,443,987	5,870,137	5,886,075	5,830,788	5,054,688
Plan fiduciary net position - ending (b)	\$ 6,779,793	\$ 6,443,987	\$ 5,870,137	\$ 5,886,075	\$ 5,830,788
Authority's net pension liability - ending (a) - (b)	\$ 379,043	\$ 445,031	\$ 800,190	\$ 362,574	\$ 302,760
Plan fiduciary net position as a percentage of the total pension liability	94.71%	93.54%	88.00%	94.20%	95.06%
Covered payroll	\$ 1,573,349	\$ 1,544,856	\$ 1,471,161	\$ 1,466,601	\$ 1,501,832
Authority's net pension liability as a percentage of covered payroll	24.09%	28.81%	54.39%	24.72%	20.16%

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.

Harrisonburg-Rockingham Regional Sewer Authority

Schedule of Employer Contributions - Pension Plan

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	\$ 79,905	\$ 79,905	\$ -	\$ 1,626,398	4.91%
2018	93,875	93,875	-	1,573,349	5.97%
2017	93,647	93,647	-	1,544,856	6.06%
2016	113,806	113,806	-	1,471,161	7.74%
2015	116,852	116,852	-	1,466,601	7.97%
2014	129,908	129,908	-	1,501,832	8.65%
2013	120,283	120,283	-	1,390,556	8.65%
2012	40,016	40,016	-	1,238,871	3.23%
2011	37,290	37,290	-	1,154,499	3.23%
2010	48,264	48,264	-	1,143,695	4.22%

Amounts for fiscal years ended June 30, 2015 through 2019 are from Authority records and prior year contributions are from the VRS actuarial valuation performed each year.

Harrisonburg-Rockingham Regional Sewer Authority

Notes to Pension Required Supplementary Information - Pension Plan 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:

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%

Harrisonburg-Rockingham Regional Sewer Authority

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

	2019	2018
Total OPEB liability		
Service cost	\$ 8,478	\$ 8,876
Interest	6,658	6,417
Changes in assumptions	5,056	(4,792)
Benefit payments	(19,370)	(23,419)
Net change in total OPEB liability	\$ 822	\$ (12,918)
Total OPEB liability - beginning	173,148	186,066
Total OPEB liability - ending	<u>\$ 173,970</u>	<u>\$ 173,148</u>
 Covered payroll	 \$ 1,547,871	 \$ 1,547,871
 Authority's total OPEB liability as a percentage of covered payroll	 11.24%	 11.19%

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

Harrisonburg-Rockingham Regional Sewer Authority

Notes to Required Supplementary Information - Authority OPEB Year Ended June 30, 2019

Valuation Date: 1/1/2018
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 3.70% in 2017, increases to 7.80% 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.

Harrisonburg-Rockingham Regional Sewer Authority

Schedule of 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	0.00827%	\$ 125,000	\$ 1,573,349	7.94%	51.22%
2017	0.00838%	127,000	1,544,856	8.22%	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.

Harrisonburg-Rockingham Regional Sewer 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	\$ 8,457	\$ 8,457	\$ -	\$ 1,626,398	0.52%
2018	8,181	8,181	-	1,573,349	0.52%
2017	8,035	8,035	-	1,544,856	0.52%
2016	7,798	7,798	-	1,471,403	0.53%
2015	7,774	7,774	-	1,466,818	0.53%
2014	7,960	7,960	-	1,501,832	0.53%
2013	7,392	7,392	-	1,394,710	0.53%
2012	5,468	5,468	-	1,242,800	0.44%
2011	5,080	5,080	-	1,154,499	0.44%
2010	4,117	4,117	-	1,143,695	0.36%

Harrisonburg-Rockingham Regional Sewer Authority

Notes to Required Supplementary Information

Group Life Insurance Program

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:

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%

- Other Supplementary Information -

This page intentionally left blank

- Supporting Schedules -

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Schedule of Income and Expenses - By Fund Years Ended June 30, 2019 and 2018

	Budgeted Operating	Unrestricted Operating	Special Reserve	Debt Service
Operating Revenue:				
Operations and maintenance	\$ 4,703,570	\$ 4,368,154	\$ -	\$ -
Septage/waste treatment	410,000	1,065,887	-	-
Pretreatment	75,000	141,000	-	-
Nutrient credit sales	-	14,168	-	-
Total Operating Revenue	\$ 5,188,570	\$ 5,589,209	\$ -	\$ -
Operating Expenses:				
Power	\$ 721,370	\$ 724,258	\$ -	\$ -
Operations and maintenance	450,800	389,632	-	-
Sewage treatment	579,500	454,232	-	-
Biosolids expenses	772,000	733,306	-	-
Professional expenses	118,500	96,427	-	-
Personnel	2,351,400	2,156,203	-	-
Administrative	195,000	165,785	-	-
Total Operating Expenses	\$ 5,188,570	\$ 4,719,843	\$ -	\$ -
Operating Income Before Depreciation	\$ -	\$ 869,366	\$ -	\$ -
Depreciation		4,372,714	-	-
Operating income (loss)		\$ (3,503,348)	\$ -	\$ -
Nonoperating Revenues (Expenses):				
Debt service revenue	\$ -	\$ -	\$ 6,116,412	
Investment income	471	6,342	33,048	
Patronage refunds and miscellaneous	35,509	-	-	
Transfers	241,433	-	-	
Bond issuance costs	-	-	(51,402)	
Interest expense and bond fees	-	-	(1,590,342)	
Planning and repair expenses	-	-	-	
Nonoperating revenues (expenses)	\$ 277,413	\$ 6,342	\$ 4,507,716	
Income (loss) before capital contributions	\$ (3,225,935)	\$ 6,342	\$ 4,507,716	
Capital contributions	833,508	-	-	
Change in Net Position	\$ (2,392,427)	\$ 6,342	\$ 4,507,716	

Schedule 1

O & M Reserve	Planning & Repair	Capital Outlay Escrow	2019 Actual Total	2018 Actual Total
\$ -	\$ -	\$ -	\$ 4,368,154	\$ 4,381,271
-	-	-	1,065,887	754,841
-	-	-	141,000	37,634
-	-	-	14,168	24,136
\$ -	\$ -	\$ -	\$ 5,589,209	\$ 5,197,882
\$ -	\$ -	\$ -	\$ 724,258	\$ 608,718
-	-	-	389,632	336,198
-	-	-	454,232	480,611
-	-	-	733,306	424,232
-	-	-	96,427	77,935
-	-	-	2,156,203	2,094,354
-	-	-	165,785	154,086
\$ -	\$ -	\$ -	\$ 4,719,843	\$ 4,176,134
\$ -	\$ -	\$ -	\$ 869,366	\$ 1,021,748
-	-	-	4,372,714	4,263,624
\$ -	\$ -	\$ -	\$ (3,503,348)	\$ (3,241,876)
\$ -	\$ -	\$ -	\$ 6,116,412	\$ 5,770,397
21,141	58,591	1,515	121,108	76,084
-	-	-	35,509	58,922
-	(241,433)	-	-	-
-	-	-	(51,402)	-
-	-	-	(1,590,342)	(1,586,236)
-	(167,605)	-	(167,605)	(201,564)
\$ 21,141	\$ (350,447)	\$ 1,515	\$ 4,463,680	\$ 4,117,603
\$ 21,141	\$ (350,447)	\$ 1,515	\$ 960,332	\$ 875,727
-	-	-	833,508	871,008
\$ 21,141	\$ (350,447)	\$ 1,515	\$ 1,793,840	\$ 1,746,735

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

	Budgeted Amounts		Actual		Variance with Final Budget
	Original	Final			
Power costs:					
Plant	\$ 700,000	\$ 700,000	\$ 701,119	\$	(1,119)
Bridgewater pumping station	18,700	18,700	21,116		(2,416)
Metering	2,670	2,670	2,023		647
Total Power Costs	\$ 721,370	\$ 721,370	\$ 724,258	\$	(2,888)
Operation and Maintenance:					
Sewage treatment equipment	\$ 220,000	\$ 220,000	\$ 219,059	\$	941
Generator	87,800	87,800	67,182		20,618
Bridgewater pumping station	9,000	9,000	3,003		5,997
Sewer lines	9,000	9,000	4,965		4,035
Buildings	40,000	40,000	26,476		13,524
Grounds	40,000	40,000	33,681		6,319
Vehicles	45,000	45,000	35,266		9,734
Total Operation and Maintenance	\$ 450,800	\$ 450,800	\$ 389,632	\$	61,168
Sewage Treatment:					
Chemicals	\$ 430,000	\$ 430,000	\$ 354,311	\$	75,689
Laboratory	90,000	90,000	72,265		17,735
Pretreatment	30,000	30,000	5,794		24,206
Lubricants	8,000	8,000	7,884		116
Tools/other	6,500	6,500	8,145		(1,645)
Environmental/safety	15,000	15,000	5,833		9,167
Total Sewage Treatment	\$ 579,500	\$ 579,500	\$ 454,232	\$	125,268
Biosolids Expenses:					
Chemicals	\$ 180,000	\$ 180,000	\$ 207,275	\$	(27,275)
Laboratory	8,000	8,000	6,636		1,364
Vehicle	-	-	32,307		(32,307)
Equipment	24,000	24,000	3,662		20,338
Contract hauling - liquid	80,000	80,000	-		80,000
Contract hauling - dewatered	480,000	480,000	483,426		(3,426)
Total Biosolids Expenses	\$ 772,000	\$ 772,000	\$ 733,306	\$	38,694
Professional Expenses:					
Board members expense	\$ 11,500	\$ 11,500	\$ 10,997	\$	503
Legal	35,000	35,000	20,655		14,345
Other	72,000	72,000	64,775		7,225
Total Professional Expenses	\$ 118,500	\$ 118,500	\$ 96,427	\$	22,073

Schedule of Operating Expenses - Budget and Actual
Year Ended June 30, 2019 (continued)

	Budgeted Amounts		Actual	Variance Favorable (Unfavorable)
	Original	Final		
Personnel Expenses:				
Salaries	\$ 1,746,000	\$ 1,746,000	\$ 1,698,654	\$ 47,346
Payroll taxes	140,000	140,000	127,741	12,259
Virginia Retirement System	120,000	120,000	37,515 *	82,485
Health and disability insurance	309,400	309,400	266,041	43,359
Uniform service	15,000	15,000	18,161	(3,161)
Travel and training	16,000	16,000	5,273	10,727
Miscellaneous	5,000	5,000	2,818	2,182
Total Personnel Expenses	\$ 2,351,400	\$ 2,351,400	\$ 2,156,203	\$ 195,197
Administrative:				
Insurance - regular	\$ 90,000	\$ 90,000	\$ 85,427	\$ 4,573
Office supplies	16,000	16,000	14,731	1,269
Dues and subscriptions	20,000	20,000	10,266	9,734
Licenses	20,000	20,000	13,914	6,086
Telephone/internet/security	45,000	45,000	40,641	4,359
Advertising	4,000	4,000	806	3,194
Total Administrative	\$ 195,000	\$ 195,000	\$ 165,785	\$ 29,215
Total Operating Expenses	\$ 5,188,570	\$ 5,188,570	\$ 4,719,843	\$ 468,727

* - Actual employer payments to the Virginia Retirement System were \$110,212 during the year.

Insurance Coverage

At June 30, 2019

Insurance Company	Policy Number	Dates	Type	Policy Limits
Virginia Municipal Liability Pool	Member #301	7/1/18-7/1/19	Workmen's Compensation and Employer's Liability	\$ 1,000,000
		7/1/18-7/1/19	Automobile Contribution	1,000,000
			Values per policy	182,346,845
			Fidelity/Crime Contribution	100,000
			Comprehensive general liability	1,000,000
			Excess umbrella liability	5,000,000
			Boiler: Machinery Contribution	1,000,000
		7/1/18-7/1/19	Local government liability	1,000,000

Average Daily Flow and Revenue by Locality

	Fiscal Year 2019	Fiscal Year 2018
City of Harrisonburg:		
Average Daily Flow (mgd)	9.225	6.086
Operation & Maintenance Payments	\$ 2,426,627	\$ 2,324,738
Capital Outlay Payments	134,840	141,450
Pretreatment Payments	21,208	25,492
Projects	326,715	323,458
Debt Service Payments	3,127,825	2,921,354
Total Payments	<u>\$ 6,037,215</u>	<u>\$ 5,736,492</u>
Town of Dayton:		
Average Daily Flow (mgd)	2.050	1.801
Operation & Maintenance Payments	\$ 590,819	\$ 712,548
Capital Outlay Payments	33,411	42,695
Pretreatment Payments	400	356
Projects	80,953	97,632
Debt Service Payments	757,363	718,474
Total Payments	<u>\$ 1,462,946</u>	<u>\$ 1,571,705</u>
Town of Bridgewater:		
Average Daily Flow (mgd)	0.955	0.746
Operation & Maintenance Payments	\$ 264,696	\$ 305,108
Capital Outlay Payments	14,913	18,378
Pretreatment Payments	7,396	11,116
Projects	36,133	42,026
Debt Service Payments	538,015	512,569
Total Payments	<u>\$ 861,153</u>	<u>\$ 889,197</u>
Rockingham County:		
Average Daily Flow (mgd)	3.960	2.825
Operation & Maintenance Payments	\$ 1,077,133	\$ 1,028,385
Capital Outlay Payments	59,839	61,853
Pretreatment Payments	438	671
Projects	144,989	141,440
Debt Service Payments	1,685,389	1,611,468
Total Payments	<u>\$ 2,967,788</u>	<u>\$ 2,843,817</u>
Town of Mount Crawford:		
Average Daily Flow (mgd)	0.031	0.026
Operation & Maintenance Payments	\$ 8,878	\$ 10,491
Capital Outlay Payments	501	632
Projects	1,214	1,444
Debt Service Payments	7,820	6,532
Total Payments	<u>\$ 18,413</u>	<u>\$ 19,099</u>
TOTAL DAILY AVERAGE FLOW (mgd)	16.221	11.484

Pledged Revenue Coverage - Sewer Revenue Bonds
Last Ten Fiscal Years

Fiscal Year	Gross Revenue (1)		Less Operating Expenses (2)		Net Revenues Available For Debt Service	Debt Service		Coverage
						Principal	Interest	
2010	\$	7,143,169	\$	3,798,558	\$ 3,344,611	\$ 715,000	\$ 488,948	278%
2011		8,662,564		4,288,258	4,374,306	740,000	4,682,880	81%
2012		10,316,896		4,264,872	6,052,024	3,129,301	2,499,898	108%
2013		10,860,757		4,382,582	6,478,175	3,231,421	2,391,832	115%
2014		10,783,848		4,582,468	6,201,380	3,354,653	2,249,632	111%
2015		10,970,116		4,255,568	6,714,548	3,478,953	2,106,046	120%
2016		11,012,859		4,365,420	6,647,439	3,717,191	1,688,512	123%
2017		10,906,339		4,323,977	6,582,362	3,831,754	1,571,537	122%
2018		11,044,363		4,176,134	6,868,229	4,350,220	1,553,096	116%
2019		11,826,729		4,719,843	7,106,886	4,478,574	1,427,192	120%

(1) Operating revenue, debt service revenue and investment income.

(2) Net of depreciation.

- Compliance -

This page intentionally left blank



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
Harrisonburg-Rockingham Regional Sewer Authority
Mt. Crawford, Virginia

We have audited, in accordance with the auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the *Specifications for Audits of Authorities, Boards, and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia, the financial statements of the business-type activities of Harrisonburg-Rockingham Regional Sewer Authority as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise Harrisonburg-Rockingham Regional Sewer Authority's basic financial statements and have issued our report thereon dated September 30, 2019.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Harrisonburg-Rockingham Regional Sewer 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 Harrisonburg-Rockingham Regional Sewer Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of Harrisonburg-Rockingham Regional Sewer Authority's internal control.

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

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

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Harrisonburg-Rockingham Regional Sewer Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the 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
September 30, 2019