HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

FINANCIAL REPORT
YEARS ENDED JUNE 30, 2020 AND 2019

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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, 2020 and 2019, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our 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, 2020 and 2019, 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.

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 48-55 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 October 14, 2020, 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
October 14, 2020

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, 2020.

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 47 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 $44,596,871 (net position). Of this amount $4,361,425 (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 $4,122,268.

- The Authority's total debt decreased by $3,211,508 during the current fiscal year. This decrease in debt is due to scheduled principal payments in excess of new borrowings.

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 $44,596,871 at the close of the most recent fiscal year.

Financial Analysis: (Continued)

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		
	2020	2019	2018
Current, restricted, and other assets	$ 9,781,904	$ 9,337,484	$ 9,295,784
Capital assets	97,648,123	97,476,198	90,789,855
Total assets	$ 107,430,027	$ 106,813,682	$ 100,085,639
Total deferred outflows of resources	$ 472,931	$ 356,274	$ 506,030
Current liabilities	$ 6,778,859	$ 6,593,345	$ 6,283,879
Long-term liabilities	56,276,420	59,979,830	55,450,783
Total liabilities	$ 63,055,279	$ 66,573,175	$ 61,734,662
Total deferred inflows of resources	$ 250,808	$ 122,178	$ 176,244
Net position:			
Net investment in capital assets	$ 39,805,796	$ 35,882,587	$ 34,176,713
Restricted	429,650	299,198	399,757
Unrestricted	4,361,425	4,292,818	4,104,293
Total net position	$ 44,596,871	$ 40,474,603	$ 38,680,763

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		
	2020	2019	2018
Revenues:			
Operating revenues	$ 6,024,863	$ 5,589,209	$ 5,197,882
Debt Service revenue	6,329,807	6,116,412	5,770,397
Investment income	80,085	121,108	76,084
Other revenue	49,184	35,509	58,922
Total revenues	$ 12,483,939	$ 11,862,238	$ 11,103,285
Expenses:			
Operating expenses (excluding depreciation)	$ 4,713,115	$ 4,719,843	$ 4,176,134
Depreciation expense	4,576,565	4,372,714	4,263,624
Interest expense	1,563,655	1,590,342	1,586,236
Other	250,502	219,007	201,564
Total expenses	$ 11,103,837	$ 10,901,906	$ 10,227,558
Income (loss) before capital contributions	$ 1,380,102	$ 960,332	$ 875,727
Capital contributions	2,742,166	833,508	871,008
Increase (decrease) in net position	$ 4,122,268	$ 1,793,840	$ 1,746,735
Net position—July 1	40,474,603	38,680,763	36,934,028
Net position—June 30	$ 44,596,871	$ 40,474,603	$ 38,680,763

Financial Analysis: (Continued)

The Authority's net position increased by $4,122,268 during the current year. Operating revenues increased by $435,654 while operating expenses decreased $6,728 from FY 2019 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, 2020 amounts to $97,648,123 (net of accumulated depreciation). Investment in capital assets increased by approximately 0.2% 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, 2020 with that of June 30, 2019 and 2018.

	2020	2019	2018
Land	$ 193,392	$ 193,392	$ 193,392
Plant	70,709,984	72,465,460	73,612,539
Machinery and equipment	23,358,484	11,043,290	12,530,114
Vehicles and equipment	487,906	186,488	197,353
Construction in progress	2,898,357	13,587,568	4,256,457
Total capital assets	$ 97,648,123	$ 97,476,198	$ 90,789,855

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

Long-Term Debt - At the end of the current fiscal year, the Authority had $60,510,639 in bonds outstanding versus $63,722,147 last year, a decrease of 5.04%. The decrease is due to scheduled payments of debt in excess of new borrowings.

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 2020 actual to budgeted revenue is shown on Schedule 1 – Schedule of Income and Expenses – By Fund. Operating revenues increased by $435,654 (7.79%) during FY 2020 to $6,024,863. The increase is mostly due to increased operations and maintenance revenue from localities which totaled $4,767,030 as compared to the FY 2019 total of $4,368,154

Operating Expenses: A comparison of FY 2020 actual and budgeted expenses is found on Schedule 2 – Schedule of Operating Expenses – Budget and Actual. Operating and Maintenance (O&M) expenses were $538,914 under budget. Operating expenses decreased $6,728 from FY 2019 levels.

Longer-Term Issues

FY 2020 Capital Improvement Projects - The FY 2020 Capital Improvement Plan (CIP) was adopted by the Authority's Board of Directors on May 6, 2019 and subsequently amended on May 4, 2020. Significant projects included the Enhanced Biosolids Reuse and Reduction (EBRR) project, Blacks Run Improvements (BRI) – Division 1 project and Tertiary Filter Improvements Project. The total value of capital outlay and projects capitalized during FY 2020 was $15,437,700 with most of this amount attributed to the EBRR project which was completed during the fiscal year. Construction-in-Progress as of June 30, 2020 totaled $2,898,357.

Longer-Term Issues: (Continued)

EBRR Project – The Authority completed construction of the EBRR project in October 2019 and began producing Class A Exceptional Quality (EQ) biosolids from the project's new biosolids dryer during the fiscal year. The EBRR project has enabled the Authority to recover anaerobic digester biogas as fuel for a biosolids dryer to provide additional dewatering of Class B biosolids. The dried biosolids have non-detectable levels of pathogenic organisms to meet the EPA Class A EQ designation. FY 2020 data indicate an O&M cost savings of $250,000 per year due to an estimated 82% reduction in weight of biosolids requiring hauling due to biosolids drying. O&M cost savings are expected to increase each year as rates for Class B biosolids hauling and disposal typically increase by 2-3% annually.

In August 2020, DEQ approval to distribute and market the Class A EQ biosolids final product from the biosolids dryer was obtained through issuance of VPA Permit No. 04012. The permit is for 10-years. In conjunction with the VPA permit issue, the Authority also successfully completed registration of the Class A EQ material as a soil amendment with the Virginia Department of Agriculture and Consumer Services under the name North River EQ. Since the VPA permit was issued in August 2020, over 100 tons of North River EQ have been sold in bulk for a modest fee of $10.00 per ton.

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

BRI – Division 1 project - The Authority completed final design and easement acquisition of its BRI – Division 1 project during the fiscal year and solicited bids for construction in June, 2020.

The BRI -Division 1 project is the first of 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 25 to 30-year time period beginning in FY 2021. The improvement program is timed 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 2045 - 2052.

The BRI Division 1 project consists of rehabilitating approximately 3,000 linear feet of existing 36" diameter sewer line with cured-in-place pipe (CIPP) lining methods and replacement of existing parallel 24 and 36-inch diameter sewer lines with approximately 3,700 linear feet of new 48-inch diameter sewer line. Notice to proceed on the project was issued on October 12, 2020. Project completion is scheduled for January 1, 2022.

The Authority closed on VCWRLF project financing on September 10, 2020 with a loan amount of $6,618,791. The terms of the financing agreement are 30-years, 1.85% annual interest and a bond maturity date of March 1, 2050. The annual debt service for the project is approximately $300,000. The first scheduled payment (cost of funds only) will be due on March 1, 2022.

Tertiary Filtration Improvements Project – The Tertiary Filtration Improvements project overhauled the NRWWTF's existing tertiary filtration process with new cloth media filtration technology. The new cloth media filtration system is capable of achieving the ultra-low total suspended solids removal to meet the NRWWTF's stringent limits for phosphorus removal and will increase the peak rated capacity of the process to 80 MGD.

The project was constructed in three phases. Phase I was completed in FY 2019 at a cost of $1,210,193. Phase II was completed in October 2019 at a cost of $938,052. The last phase of the Tertiary Filtration Improvements project – Phase III - was nearing completion at the close of the fiscal year with a total project cost of approximately $2,600,000.

The Phase III project was constructed under agreement with Rockingham County to transfer the nutrient waste load allocation (WLA) currently assigned to the County's McGaheysville STP to NRWWTF in return for an additional 1.0 MGD in flow allocation. The agreement called for the County to permanently transfer the eligible portion of the McGaheysville STP's nutrient WLA to NRWWTF and pay all costs related to the construction of the Phase III project.

Longer-Term Issues: (Continued)

On October 2, 2020, the Authority was notified that all three phases of the project have been approved by DEQ to receive a Water Quality Improvement Fund (WQIF) grant of $2,360,070 due to improved phosphorus removal performance of the upgraded filtration process. Rockingham County's share of the WQIF grant provided by the state is approximately $1,400,000. The balance of the grant, approximately $900,000, will go to the Authority to offset some of the costs of the Phase I and Phase II projects.

Upon completion of the Phase III project, the Authority will be able to rerate the current design flow of NRWWTF form 22 MGD to 23 MGD. Rockingham County's flow allocation will increase from 4.6 MGD to 5.6 MGD. Flow allocations of the Authority's other members will remain unchanged.

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.

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- Financial Statements -

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HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Statements of Net Position
At June 30, 2020 and 2019

ASSETS	2020	2019
Current Assets:		
Cash and cash equivalents	$ 4,388,898	$ 4,233,919
Accounts receivable	585,250	772,091
Other receivables	326,750	3,421
Prepaid items	27,194	22,596
Total Current Assets	$ 5,328,092	$ 5,032,027
Noncurrent Assets:		
Restricted Assets (Note 2):		
Cash and temporary investments	$ 901,700	$ 887,170
Cash and temporary investments held by trustee	2,708,747	2,597,397
Total Restricted Assets	$ 3,610,447	$ 3,484,567
Other Assets:		
Patronage equities	$ 843,365	$ 820,890
Total Other Assets	$ 843,365	$ 820,890
Capital Assets:		
Land	$ 193,392	$ 193,392
Plant	127,795,054	126,707,726
Machinery, equipment and vehicles	42,880,712	28,841,816
Office furniture and equipment	153,482	153,482
Computer equipment	428,059	151,176
	$ 171,450,699	$ 156,047,592
Accumulated depreciation	76,700,933	72,158,962
	$ 94,749,766	$ 83,888,630
Construction in progress	2,898,357	13,587,568
Net Capital Assets	$ 97,648,123	$ 97,476,198
Total Noncurrent Assets	$ 102,101,935	$ 101,781,655
Total Assets	$ 107,430,027	$ 106,813,682
DEFERRED OUTFLOWS OF RESOURCES		
Deferred charge on refunding	$ 142,175	$ 213,262
Pension related items	235,782	124,153
OPEB related items	94,974	18,859
Total Deferred Outflows of Resources	$ 472,931	$ 356,274

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Statements of Net Position
At June 30, 2020 and 2019 (Continued)

LIABILITIES	**2020**	**2019**
Current Liabilities:		
Accounts payable	$ 833,879	$ 617,407
Retainage payable	86,797	538,404
Accrued expenses	59,844	42,163
Current maturities of long-term debt	2,387,801	1,966,652
Compensated absences	229,741	243,350
Total Current Liabilities	$ 3,598,062	$ 3,407,976
Current Liabilities Payable From Restricted Assets:		
Current maturities of long-term debt	$ 2,708,747	$ 2,597,397
Accrued interest payable	472,050	587,972
Total Current Liabilities Payable From Restricted Assets	$ 3,180,797	$ 3,185,369
Noncurrent Liabilities:		
Net OPEB liabilities	$ 335,013	$ 298,970
Net pension liability	431,503	379,043
Revenue bonds (net of unamortized premiums)	55,509,904	59,301,817
Total Noncurrent Liabilities	$ 56,276,420	$ 59,979,830
Total Liabilities	$ 63,055,279	$ 66,573,175
DEFERRED INFLOWS OF RESOURCES		
Pension related items	$ 200,837	$ 106,462
OPEB related items	49,971	15,716
Total Deferred Inflows of Resources	$ 250,808	$ 122,178
NET POSITION		
Net investment in capital assets	$ 39,805,796	$ 35,882,587
Restricted for debt service and bond covenants	429,650	299,198
Unrestricted	4,361,425	4,292,818
Total Net Position	$ 44,596,871	$ 40,474,603

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

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Statements of Revenues, Expenses and Changes in Net Position
Years Ended June 30, 2020 and 2019

	2020	2019
Operating Revenue:		
Operations and maintenance	$ 4,767,030	$ 4,368,154
Septage/waste treatment	1,094,593	1,065,887
Pretreatment	158,615	141,000
Nutrient credit sales	4,625	14,168
Total Operating Revenue	$ 6,024,863	$ 5,589,209
Operating Expenses:		
Power	$ 665,021	$ 724,258
Operations and maintenance	405,316	389,632
Sewage treatment	584,201	454,232
Biosolids expenses	504,374	733,306
Professional expenses	69,384	96,427
Personnel	2,281,638	2,156,203
Administrative	203,181	165,785
Total Operating Expenses	$ 4,713,115	$ 4,719,843
Operating Income Before Depreciation	$ 1,311,748	$ 869,366
Depreciation	4,576,565	4,372,714
Operating income (loss)	$ (3,264,817)	$ (3,503,348)
Nonoperating Revenues (Expenses):		
Debt service revenue	$ 6,329,807	$ 6,116,412
Investment income	80,085	121,108
Patronage refunds and miscellaneous	49,184	35,509
Bond issue costs	-	(51,402)
Interest expense and bond fees	(1,563,655)	(1,590,342)
Planning and repair expenses	(250,502)	(167,605)
Nonoperating revenues (expenses)	$ 4,644,919	$ 4,463,680
Income (loss) before capital contributions	$ 1,380,102	$ 960,332
Capital contributions	2,742,166	833,508
Change in Net Position	$ 4,122,268	$ 1,793,840
Net Position, Beginning of Year	40,474,603	38,680,763
Net Position, End of Year	$ 44,596,871	$ 40,474,603

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

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Statements of Cash Flows
Years Ended June 30, 2020 and 2019

		2020		2019
Cash flows from operating activities:				
Receipts from customers and users	$	5,915,084	$	5,424,771
Payments to suppliers		(2,219,603)		(2,887,995)
Payments to and on behalf of employees		(2,248,177)		(2,218,127)
Net cash provided by (used for) operating activities	$	1,447,304	$	318,649
Cash flows from noncapital financing activities:				
Planning and major repair outlays	$	(250,502)	$	(167,605)
Cash flows from capital and related financing activities:				
Purchase of capital assets	$	(5,211,097)	$	(10,626,176)
Proceeds from localities-debt service revenues		6,329,807		6,116,412
Proceeds from localities-capital contributions		2,742,166		833,508
Proceeds from issuance of bonds		1,352,541		12,416,147
Principal payments on bonds		(4,564,049)		(7,823,574)
Interest and fees paid on bonds		(1,645,396)		(1,323,918)
Net cash provided by (used for) capital and related financing activities	$	(996,028)	$	(407,601)
Cash flows from investing activities:				
Interest income	$	80,085	$	121,108
Patronage refunds		-		17,420
Net cash provided by (used for) investing activities	$	80,085	$	138,528
Net Increase (Decrease) in cash and cash equivalents	$	280,859	$	(118,029)
Cash and cash equivalents, beginning of year (including $3,464,567 and $3,222,315, respectively reported in restricted accounts)		7,718,486		7,836,515
Cash and cash equivalents, end of year (including $3,180,797 and $3,484,567, respectively reported in restricted accounts)	$	7,999,345	$	7,718,486
Reconciliation of operating income (loss) to net cash provided by (used for) operating activities:				
Operating income (loss)	$	(3,264,817)	$	(3,503,348)
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:				
Depreciation		4,576,565		4,372,714
Miscellaneous revenues		(296,620)		4,840
Changes in operating assets and liabilities:				
(Increase) decrease in accounts receivable		186,841		(169,278)
(Increase) decrease in prepaid items		(4,598)		22,798
Increase (decrease) in accounts payable		216,472		(347,153)
(Increase) decrease in pension deferred outflows of resources		(111,629)		53,422
(Increase) decrease in OPEB deferred outflows of resources		(76,115)		(10,676)
Increase (decrease) in pension deferred inflows of resources		94,375		(51,528)
Increase (decrease) in OPEB deferred inflows of resources		34,255		(2,538)
Increase (decrease) in net OPEB liabilities		36,043		(1,178)
Increase (decrease) in net pension liability		52,460		(65,988)
Increase (decrease) in accrued expenses		17,681		3,154
Increase (decrease) in compensated absences		(13,609)		13,408
Net cash flows from operating activities	$	1,447,304	$	318,649

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

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.

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.

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:

Assets	Years
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 cost incurred before the end of a construction period is 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.

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.

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 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, 2020 and 2019, restricted assets consisted of the following:

	2020	2019
Restricted Assets:		
Cash and temporary investments held by Authority:		
O & M Reserve Account	$ 901,700	$ 887,170
Cash and temporary investments held by Trustee:		
Bond Service fund	$ 2,708,747	$ 2,597,397
Restricted asset balance June 30	$ 3,610,447	$ 3,484,567
Board designated accounts, included in current assets:		
Special reserve account	$ 270,510	$ 266,151
Planning and repair account	1,758,696	2,324,997
Capital outlay escrow	64,605	63,564
Total	$ 2,093,811	$ 2,654,712

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).

NOTE 3 - DEPOSITS AND INVESTMENTS: (CONTINUED)

Credit Risk of Debt Securities

The Authority's rated debt investments as of June 30, 2020 and 2019 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	2020 Fair Quality Ratings AAAm	2019 Fair Quality Ratings AAAm
Local Government Investment Pool	$ 2,995,881	$ 3,542,246
Money market fund - Federated Automated Money Trust	2,708,747	2,597,397
Total deposits and investments	$ 5,704,628	$ 6,139,643

Interest Rate Risk:

Investment Maturities (in Years) as of June 30, 2020

	Fair Value	Less Than 1 Year
Local Government Investment Pool	$ 2,995,881	$ 2,995,881
Money market fund - Federated Automated Money Trust	2,708,747	2,708,747
	$ 5,704,628	$ 5,704,628

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 fund - Federated Automated Money Trust	2,597,397	2,597,397
	$ 6,139,643	$ 6,139,643

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.

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, 2020	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	$ 2,708,747	$ 2,708,747	$ -	$ -
Total investments measured at fair value	$ 2,708,747	$ 2,708,747	$ -	$ -

	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	$ 2,597,397	$ 2,597,397	$ -	$ -

NOTE 5 - CAPITAL ASSETS:

Details of changes in capital assets for the year ended June 30, 2020 are as follows:

	Beginning Balance	Increases	Decreases	Ending Balance
Capital assets not being depreciated:				
Land	$ 193,392	$ -	$ -	$ 193,392
Construction in progress	13,587,568	4,837,273	15,526,484	2,898,357
Total capital assets not being depreciated	$ 13,780,960	$ 4,837,273	$ 15,526,484	$ 3,091,749
Capital assets being depreciated:				
Plant	$ 126,707,726	$ 1,087,328	$ -	$ 127,795,054
Machinery and equipment	28,313,851	13,985,942	-	42,299,793
Vehicles	527,965	87,548	34,594	580,919
Office furniture and equipment	153,482	-	-	153,482
Computer equipment	151,176	276,883	-	428,059
Total capital assets being depreciated	$ 155,854,200	$ 15,437,701	$ 34,594	$ 171,257,307
Accumulated depreciation:				
Plant	$ (54,242,267)	$ (2,842,803)	$ -	$ (57,085,070)
Machinery and equipment	(17,270,561)	(1,670,748)	-	(18,941,309)
Vehicles	(379,258)	(43,360)	(34,594)	(388,024)
Office furniture and equipment	(143,508)	(8,005)	-	(151,513)
Computer equipment	(123,368)	(11,649)	-	(135,017)
Total accumulated depreciation	$ (72,158,962)	$ (4,576,565)	$ (34,594)	$ (76,700,933)
Total capital assets, being depreciated, net	$ 83,695,238	$ 10,861,136	$ -	$ 94,556,374
Total capital assets net	$ 97,476,198	$ 15,698,409	$ 15,526,484	$ 97,648,123

NOTE 5 - CAPITAL ASSETS: (CONTINUED)

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

	Beginning Balance	Increases	Decreases	Ending Balance
Capital assets not being depreciated:				
Land	$ 193,392	$ -	$ -	$ 193,392
Construction in progress	4,256,457	11,054,407	1,723,296	13,587,568
Total capital assets not being depreciated	$ 4,449,849	$ 11,054,407	$ 1,723,296	$ 13,780,960
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	139,051	12,125	-	151,176
Total capital assets being depreciated	$ 154,126,254	$ 1,727,946	$ -	$ 155,854,200
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	(114,854)	(8,514)	-	(123,368)
Total accumulated depreciation	$ (67,786,248)	$ (4,372,714)	$ -	$ (72,158,962)
Total capital assets, being depreciated, net	$ 86,340,006	$ (2,644,768)	$ -	$ 83,695,238
Total capital assets net	$ 90,789,855	$ 8,409,639	$ 1,723,296	$ 97,476,198

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, 2020:

	Beginning Balance	Issuances/ Additions	Retirements/ Reductions	Ending Balance	Due Within One Year
Direct borrowings and placements:					
Revenue bonds	$ 63,722,147	$ 1,352,541	$ (4,564,049)	$ 60,510,639	$ 5,096,548
Unamortized issuance premiums	143,719	-	(47,906)	95,813	-
Total direct borrowings and placements	$ 63,865,866	$ 1,352,541	$ (4,611,955)	$ 60,606,452	$ 5,096,548
Net OPEB liabilities	298,970	120,643	(84,600)	335,013	-
Net pension liability	379,043	813,366	(760,906)	431,503	-
Compensated absences	243,350	48,670	(62,279)	229,741	229,741
Totals	$ 64,787,229	$ 2,335,220	$ (5,519,740)	$ 61,602,709	$ 5,326,289

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

	Beginning Balance	Issuances/ Additions	Retirements/ Reductions	Ending Balance	Due Within One Year
Direct borrowings and placements:					
Revenue bonds	$ 59,129,574	$ 12,416,147	$ (7,823,574)	$ 63,722,147	$ 4,564,049
Unamortized issuance premiums	54,604	175,657	(86,542)	143,719	-
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	229,942	13,408	-	243,350	243,350
Totals	$ 60,159,299	$ 13,247,747	$ (8,619,817)	$ 64,787,229	$ 4,807,399

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, 2020 are as follows:

Year Ending	Revenue Bonds	
June 30,	Principal	Interest
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	645,934	33,340
2044	660,550	18,724
2045	105,534	3,778
Total	$ 60,510,639	$ 10,578,441

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. Unamortized issuance premium was \$95,813 at June 30, 2020.	\$ 2,305,813
\$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.	18,061,972
\$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.	20,269,972
\$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.	7,459,019
\$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.	12,509,676
Total Direct Borrowings and Placements	\$ 60,606,452
Net OPEB liabilities	335,013
Net pension liability	431,503
Compensated absences	229,741
Total Long-Term Obligations	\$ 61,602,709

NOTE 6 - LONG-TERM OBLIGATIONS: (CONTINUED)

D. Presentation of Long-Term Debt:

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

	June 30, 2020	June 30, 2019
Revenue Bonds:		
2018C Series	$ 2,210,000	$ 3,235,000
Unamortized issuance premium	95,813	143,719
Current portion	(1,075,000)	(1,025,000)
	$ 1,230,813	$ 2,353,719
2007 Series	$ 18,061,972	$ 19,547,226
Current portion	(1,522,918)	(1,485,254)
	$ 16,539,054	$ 18,061,972
2008B Series	$ 20,269,972	$ 21,917,208
Current portion	(1,692,346)	(1,647,236)
	$ 18,577,626	$ 20,269,972
2015 Series	$ 7,459,019	$ 7,865,577
Current portion	(411,452)	(406,559)
	$ 7,047,567	$ 7,459,018
2017 Series	$ 12,509,676	$ 11,157,136
Current portion	(394,832)	-
	$ 12,114,844	$ 11,157,136
Revenue Bonds	$ 55,509,904	$ 59,301,817

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	$ 63,722,147	$ 1,352,541	$ (4,564,049)	$ 60,510,639

Revenue bonds totaling $60,510,639 contain a provision that in the event of default the entire unpaid principal and interest become immediately due and payable.

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, 2020 and 2019, the liability for accrued leave (including frozen sick leave) was $229,741 and $243,350, 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.

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

	2019 Number	2018 Number
Inactive members or their beneficiaries currently receiving benefits	23	23
Inactive members:		
Vested inactive members	5	4
Non-vested inactive members	5	3
Inactive members active elsewhere in VRS	6	6
Total inactive members	16	13
Active members	29	30
Total covered employees	68	66

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, 2020 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 $81,282 and $79,905 for the years ended June 30, 2020 and June 30, 2019, respectively.

Net Pension Liability

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

Actuarial Assumptions – General Employees

The total pension liability for General Employees in the Authority's Retirement Plan was based on an actuarial valuation as of June 30, 2018, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2019.

Inflation	2.50%
Salary increases, including inflation	3.50% – 5.35%
Investment rate of return	6.75%, net of pension plan investment 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 6.75%. However, since the difference was minimal, and a more conservative 6.75% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 6.75% to simplify preparation of pension liabilities.

NOTE 8 - PENSION PLAN: (CONTINUED)

Actuarial Assumptions – General Employees: (Continued)

Mortality rates:

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

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

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

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

The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows:

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

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

NOTE 8 - PENSION PLAN: (CONTINUED)

Long-Term Expected Rate of Return

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

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

* The above allocation provides a one-year return of 7.30%. 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%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation.

Discount Rate

The discount rate used to measure the total pension liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Consistent with the phased-in funding provided by the General Assembly for state and teacher employer contributions; the Authority was also provided with an opportunity to use an alternative employer contribution rate. For the year ended June 30, 2019, the alternate rate was the employer contribution rate used in FY 2012 or 100% of the actuarially determined employer contribution rate from the June 30, 2017 actuarial valuations, whichever was greater. From July 1, 2019 on, participating employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

NOTE 8 - PENSION PLAN: (CONTINUED)

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, 2018	$ 7,158,836	$ 6,779,793	$ 379,043
Changes for the year:			
Service cost	$ 117,655	$ -	$ 117,655
Interest	490,691	-	490,691
Changes of assumptions	205,020	-	205,020
Differences between expected and actual experience	(160,649)	-	(160,649)
Contributions - employer	-	79,772	(79,772)
Contributions - employee	-	76,429	(76,429)
Net investment income	-	448,816	(448,816)
Benefit payments, including refunds of employee contributions	(297,943)	(297,943)	-
Administrative expenses	-	(4,477)	4,477
Other changes	-	(283)	283
Net changes	$ 354,774	$ 302,314	$ 52,460
Balances at June 30, 2019	$ 7,513,610	$ 7,082,107	$ 431,503

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, 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

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

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

		Rate	
	1% Decrease	Current Discount	1% Increase
	(5.75%)	(6.75%)	(7.75%)
2020			
Authority's Net Pension Liability	$ 1,365,723	$ 431,503	$ (318,284)
	(6.00%)	(7.00%)	(8.00%)
2019			
Authority's Net Pension Liability	$ 1,246,886	$ 379,043	$ (348,119)

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, 2020, the Authority recognized pension expense of $116,152. At June 30, 2020, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 4,798	$ 130,470
Change in assumptions	149,907	10,490
Net difference between projected and actual earnings on pension plan investments	-	59,879
Employer contributions subsequent to the measurement date	81,282	-
Total	$ 235,987	$ 200,839

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:

	Deferred Outflows of Resources	Deferred Inflows of Resources
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	79,905	-
Total	$ 124,153	$ 106,462

NOTE 8 - PENSION PLAN: (CONTINUED)

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

$81,282 reported as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the fiscal year ending June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future reporting periods as follows:

Year ended June 30		
2021	$	(1,703)
2022		(55,808)
2023		7,247
2024		4,130
Thereafter		-

$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:

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

Pension Plan Data

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

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS

Medical 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.

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Medical 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, 2020 and 2019 (measurement dates), the following employees were covered by the benefit terms:

	2020	2019
Total active employees with coverage	28	28
Total retirees with coverage	2	1
Total	30	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, 2020 and 2019 were $18,915 and $19,370, respectively.

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

Total OPEB Liability

The Authority's Total OPEB liability was measured as of June 30, 2020. The total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of January 1, 2020.

Actuarial Assumptions

The total OPEB liability in the January 1, 2020 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.50% per year as of June 30, 2020
Salary Increases	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	3.50% for accounting and funding disclosures as of June 30, 2019 2.21% for accounting and funding disclosures as of June 30, 2020

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 2.21% as of the end of the fiscal year.

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

Changes in Total OPEB Liability

	Total OPEB Liability
Balances at June 30, 2019	$ 173,970
Changes for the year:	
Service cost	9,310
Interest	6,087
Effect of Economic/Demographic Gains or Losses	72,133
Effect of Assumptions Changes or Inputes	(42,635)
Benefit payments	(18,915)
Balances at June 30, 2020	$ 199,950

	Total OPEB Liability
Balances at June 30, 2018	$ 173,148
Changes for the year:	
Service cost	8,478
Interest	6,658
Effect of Assumptions Changes or Inputes	5,056
Benefit payments	(19,370)
Balances at June 30, 2019	$ 173,970

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

The following amounts present the total OPEB liability of the Authority, as well as what the total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (1.21%) or one percentage point higher (3.21%) than the current discount rate:

	Rate		
	1% Decrease (1.21%)	Current Discount Rate (2.21%)	1% Increase (3.21%)
June 30, 2020	$ 214,456	$ 199,950	$ 186,240
	(2.50%)	(3.50%)	(4.50%)
June 30, 2019	$ 188,304	$ 173,970	$ 160,645

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Medical 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, 2020	$ 181,474	$ 199,950	$ 222,355
June 30, 2019	$ 154,185	$ 173,970	$ 198,270

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

For the year ended June 30, 2020, the Authority recognized OPEB expense in the amount of $18,572. At June 30, 2020, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resouces	Deferred Inflows of Resources
Differences between expected and actual experience	$ 64,619	$ -
Changes in assumptions	3,776	41,372
Net difference between projected and actual earnings on OPEB plan investments	-	-
Employer contributions subsequent to the measurement date	-	-
Total	$ 68,395	$ 41,372

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 Resouces	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

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Medical 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, 2020 will be recognized in OPEB expense in future reporting periods as follows:

Year Ended June 30		
2021	$	3,175
2022		3,175
2023		3,175
2024		3,175
2025		3,175
Thereafter		11,148

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:

Year Ended June 30		
2020	$	102
2021		102
2022		102
2023		102
2024		102
Thereafter		190

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) Plan (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.

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Group Life Insurance (GLI) Plan (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 in 2015. This will be increased annually based on the VRS Plan 2 cost-of-living adjustment calculation. The minimum benefit adjusted for the COLA was $8,463 as of June 30, 2020.

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, 2020 was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the GLI Program from the entity were $8,668 and $8,443 for the years ended June 30, 2020 and June 30, 2019, respectively.

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

At June 30, 2020 and 2019, the entity reported a liability of $135,063 and $125,000, respectively, for its proportionate share of the Net GLI OPEB Liability. The Net GLI OPEB Liability was measured as of June 30, 2019 and the total GLI OPEB liability used to calculate the Net GLI OPEB Liability was determined by an actuarial valuation performed as of June 30, 2018, and rolled forward to the measurement date of June 30, 2019. The covered employer's proportion of the Net GLI OPEB Liability was based on the covered employer's actuarially determined employer contributions to the GLI Program for the year ended June 30, 2018 relative to the total of

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

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

the actuarially determined employer contributions for all participating employers. At June 30, 2019, the participating employer's proportion was .00830% as compared to .00827% at June 30, 2018.

For the years ended June 30, 2020 and 2019, the participating employer recognized GLI OPEB expense of $3,202 and $1,000, 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, 2020, the employer reported deferred outflows of resources and deferred inflows of resources related to the GLI OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 8,983	$ 1,752
Net difference between projected and actual earnings on GLI OPEB program investments	-	2,774
Change in assumptions	8,527	4,073
Changes in proportion	401	-
Employer contributions subsequent to the measurement date	8,668	-
Total	$ 26,579	$ 8,599

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

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 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	8,443	-
Total	$ 14,443	$ 12,000

$8,668 reported as deferred outflows of resources related to the GLI OPEB resulting from the employer's contributions subsequent to the measurement date will be recognized as a reduction of the Net GLI OPEB Liability in the fiscal year ending June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the GLI OPEB will be recognized in the GLI OPEB expense in future reporting periods as follows:

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

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

Year Ended June 30		
2020	$	559
2021		559
2022		1,734
2023		2,806
2024		2,854
Thereafter		800

$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:

Year Ended June 30		
2020	$	(2,000)
2021		(2,000)
2022		(2,000)
2023		-
2024		-
Thereafter		-

Actuarial Assumptions

The total GLI OPEB liability was based on an actuarial valuation as of June 30, 2018, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2019. The assumptions include several employer groups as noted below. Salary increases and mortality rates included herein are for relevant employer groups. Information for other groups can be referenced in the VRS CAFR.

Inflation	2.50%
Salary increases, including inflation:	
Locality - General employees	3.50%-5.35%
Investment rate of return	6.75%, net of investment expenses, including inflation*

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

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

Group Life Insurance (GLI) Plan (OPEB Plan): (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, 2018 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows:

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages and extended final retirement age from 70 to 75
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Discount Rate	Decreased from 7.00% to 6.75%

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, 2019 and 2018, NOL amounts for the GLI Program are as follows (amounts expressed in thousands):

	Group Life Insurance OPEB Program 2019	2018
Total GLI OPEB Liability	$ 3,390,238	3,113,508
Plan Fiduciary Net Position	1,762,972	1,594,773
GLI Net OPEB Liability (Asset)	1,627,266	1,518,735
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability	52.00%	51.22%

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

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

Long-Term Expected Rate of Return

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

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

*The above allocation provides a one-year return of 7.63%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 7.11%, including expected inflation of 2.50%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation.

Discount Rate

The discount rate used to measure the total GLI OPEB liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that member contributions will be made per the VRS guidance and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ended June 30, 2019, the rate contributed by the entity for the GLI OPEB will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly which was 100% of the actuarially determined contribution rate. From July 1, 2019 on, employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the GLI OPEB's fiduciary net position was projected to be available to make all projected future benefit payments of eligible employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total GLI OPEB liability.

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

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

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

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

		Rate	
	1% Decrease	Current Discount	1% Increase
	(5.75%)	(6.75%)	(7.75%)
2020			
Authority's proportionate share of the Group Life Insurance Program Net OPEB Liability	$ 177,435	$ 135,063	$ 100,700
	(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

GLI Program Fiduciary Net Position

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

OPEB Aggregate Totals

	June 30, 2020			
	Deferred Outflows	Deferred Inflows	Net/Total OPEB Liability	OPEB Expense
VRS OPEB Plan:				
Group Life Insurance Program	$ 26,579	$ 8,599	$ 135,063	$ 3,202
Authority Stand-Alone Plan	68,395	41,372	199,950	18,572
Totals	$ 94,974	$ 49,971	$ 335,013	$ 21,774

NOTE 9 - OTHER POSTEMPLOYMENT BENEFITS: (CONTINUED)

OPEB Aggregate Totals: (Continued)

	June 30, 2019			
	Deferred Outflows	Deferred Inflows	Net/Total OPEB Liability	OPEB Expense
VRS OPEB Plan:				
Group Life Insurance Program	$ 14,443	$ 12,000	$ 125,000	$ 1,000
Authority Stand-Alone Plan	4,416	3,716	173,970	15,238
Totals	$ 18,859	$ 15,716	$ 298,970	$ 16,238

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.

NOTE 11 - UPCOMING PRONOUNCEMENTS:

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 June 15, 2021.

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, 2020. 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:

Project	Spent-to-Date	Remaining Commitment
Tertiary Filter Equipment - Phase III	$ 1,886,949	$ 468,025
Enhanced Biosolids Reuse and Reduction Project	1,559,158	12,681
Various	282,958	664,827

- Required Supplementary Information -

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Harrisonburg-Rockingham Regional Sewer Authority

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

	2019	2018	2017	2016	2015	2014
Total pension liability						
Service cost	$ 117,655	$ 127,125	$ 128,242	$ 134,331	$ 141,510	$ 140,711
Interest	490,691	471,683	456,498	427,006	415,446	399,558
Differences between expected and actual experience	(160,649)	(27,620)	3,999	157,464	(44,646)	-
Changes in assumptions	205,020	-	(72,197)	-	-	-
Benefit payments, including refunds of employee contributions	(297,943)	(301,370)	(297,851)	(297,123)	(397,209)	(229,374)
Net change in total pension liability	$ 354,774	$ 269,818	$ 218,691	$ 421,678	$ 115,101	$ 310,895
Total pension liability - beginning	7,158,836	6,889,018	6,670,327	6,248,649	6,133,548	5,822,653
Total pension liability - ending (a)	$ 7,513,610	$ 7,158,836	$ 6,889,018	$ 6,670,327	$ 6,248,649	$ 6,133,548
Plan fiduciary net position						
Contributions - employer	$ 79,772	$ 93,738	$ 93,493	$ 113,630	$ 116,681	$ 131,211
Contributions - employee	76,429	74,384	73,333	70,370	72,522	77,714
Net investment income	448,816	473,589	709,648	100,911	267,145	800,801
Benefit payments, including refunds of employee contributions	(297,943)	(301,370)	(297,851)	(297,123)	(397,209)	(229,374)
Administrative expense	(4,477)	(4,114)	(4,143)	(3,683)	(3,796)	(4,294)
Other	(283)	(421)	(630)	(43)	(56)	42
Net change in plan fiduciary net position	$ 302,314	$ 335,806	$ 573,850	$ (15,938)	$ 55,287	$ 776,100
Plan fiduciary net position - beginning	6,779,793	6,443,987	5,870,137	5,886,075	5,830,788	5,054,688
Plan fiduciary net position - ending (b)	$ 7,082,107	$ 6,779,793	$ 6,443,987	$ 5,870,137	$ 5,886,075	$ 5,830,788
Authority's net pension liability - ending (a) - (b)	$ 431,503	$ 379,043	$ 445,031	$ 800,190	$ 362,574	$ 302,760
Plan fiduciary net position as a percentage of the total pension liability	94.26%	94.71%	93.54%	88.00%	94.20%	95.06%
Covered payroll	$ 1,626,398	$ 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	26.53%	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, 2011 through June 30, 2020

Date	Contractually Required Contribution (1)	Contributions in Relation to Contractually Required Contribution (2)	Contribution Deficiency (Excess) (3)	Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (5)
2020	$ 81,282	$ 81,282	$ -	$ 1,666,900	4.88%
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%

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

Changes of assumptions – The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows:

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

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

Harrisonburg-Rockingham Regional Sewer Authority

Schedule of Changes in Total OPEB Liability (Asset) and Related Ratios
Authority OPEB - Retiree Health Insurance
For the Measurement Dates of June 30, 2018 through June 30, 2020

	2020	2019	2018
Total OPEB liability			
Service cost	$ 9,310	8,478	$ 8,876
Interest	6,087	6,658	6,417
Effect of Economic/Demographic Gains or Losses	72,133	-	-
Effect of Assumptions Changes or Inputes	(42,635)	5,056	(4,792)
Benefit payments	(18,915)	(19,370)	(23,419)
Net change in total OPEB liability	$ 25,980	822	$ (12,918)
Total OPEB liability - beginning	173,970	173,148	186,066
Total OPEB liability - ending	$ 199,950	173,970	$ 173,148
Covered payroll	$ 1,639,941	1,547,871	$ 1,547,871
Authority's total OPEB liability as a percentage of covered payroll	12.19%	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 - Retiree Health Insurance
Year Ended June 30, 2020

Valuation Date: 1/1/2020
Measurement Date: 6/30/2020

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	3.50% as of June 30, 2019; 2.21% as of June 30, 2020
Inflation	2.50% per year as of June 30, 2019; 2.50% per year as of June 30, 2020
Healthcare Trend Rate	The healthcare trend rate assumption starts at 3.70% in 2018, 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 (GLI) Plan
For the Measurement Dates of June 30, 2017 through June 30, 2019

Date (1)	Employer's Proportion of the Net GLI OPEB Liability (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)
2019	0.00830%	$ 135,063	$ 1,626,398	8.30%	52.00%
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 (GLI) Plan
For the Years Ended June 30, 2011 through June 30, 2020

Date	Contractually Required Contribution (1)	Contributions in Relation to Contractually Required Contribution (2)	Contribution Deficiency (Excess) (3)	Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (5)
2020	$ 8,668	$ 8,668	$ -	$ 1,666,900	0.52%
2019	8,443	8,443	-	1,626,398	0.52%
2018	8,183	8,183	-	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%

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

Changes of assumptions – The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows:

Non-Largest Ten Locality Employers - General Employees

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

- Other Supplementary Information -

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- Supporting Schedules -

HARRISONBURG-ROCKINGHAM REGIONAL SEWER AUTHORITY

Schedule of Income and Expenses - By Fund
Years Ended June 30, 2020 and 2019

	Budgeted Operating	Unrestricted Operating	Special Reserve	Debt Service
Operating Revenue:				
Operations and maintenance	$ 4,767,029	$ 4,767,030	$ -	$ -
Septage/waste treatment	410,000	1,094,593	-	-
Pretreatment	75,000	158,615	-	-
Nutrient credit sales	-	4,625	-	-
Total Operating Revenue	$ 5,252,029	$ 6,024,863	$ -	$ -
Operating Expenses:				
Power	$ 823,470	$ 665,021	$ -	$ -
Operations and maintenance	461,800	405,316	-	-
Sewage treatment	581,000	584,201	-	-
Biosolids expenses	551,359	504,374	-	-
Professional expenses	120,000	69,384	-	-
Personnel	2,514,400	2,281,638	-	-
Administrative	200,000	203,181	-	-
Total Operating Expenses	$ 5,252,029	$ 4,713,115	$ -	$ -
Operating Income Before Depreciation	$ -	$ 1,311,748	$ -	$ -
Depreciation		4,576,565	-	-
Operating income (loss)		$ (3,264,817)	$ -	$ -
Nonoperating Revenues (Expenses):				
Debt service revenue		$ -	$ -	$ 6,329,807
Investment income		6	4,359	26,450
Patronage refunds and miscellaneous		49,184	-	-
Transfers		599,999	-	-
Bond issuance costs		-	-	-
Interest expense and bond fees		-	-	(1,563,655)
Planning and repair expenses		-	-	-
Nonoperating revenues (expenses)		$ 649,189	$ 4,359	$ 4,792,602
Income (loss) before capital contributions		$ (2,615,628)	$ 4,359	$ 4,792,602
Capital contributions		2,742,166	-	-
Change in Net Position		$ 126,538	$ 4,359	$ 4,792,602

O & M Reserve	Planning & Repair	Capital Outlay Escrow	2020 Actual Total	2019 Actual Total
$ -	$ -	$ -	$ 4,767,030	$ 4,368,154
-	-	-	1,094,593	1,065,887
-	-	-	158,615	141,000
-	-	-	4,625	14,168
$ -	$ -	$ -	$ 6,024,863	$ 5,589,209
$ -	$ -	$ -	$ 665,021	$ 724,258
-	-	-	405,316	389,632
-	-	-	584,201	454,232
-	-	-	504,374	733,306
-	-	-	69,384	96,427
-	-	-	2,281,638	2,156,203
-	-	-	203,181	165,785
$ -	$ -	$ -	$ 4,713,115	$ 4,719,843
$ -	$ -	$ -	$ 1,311,748	$ 869,366
-	-	-	4,576,565	4,372,714
$ -	$ -	$ -	$ (3,264,817)	$ (3,503,348)
$ -	$ -	$ -	$ 6,329,807	$ 6,116,412
14,530	33,698	1,041	80,084	121,108
-	-	-	49,184	35,509
-	(599,999)	-	-	-
-	-	-	-	(51,402)
-	-	-	(1,563,655)	(1,590,342)
-	(250,502)	-	(250,502)	(167,605)
$ 14,530	$ (816,803)	$ 1,041	$ 4,644,918	$ 4,463,680
$ 14,530	$ (816,803)	$ 1,041	$ 1,380,101	$ 960,332
-	-	-	2,742,166	833,508
$ 14,530	$ (816,803)	$ 1,041	$ 4,122,267	$ 1,793,840

Schedule of Operating Expenses - Budget and Actual
Year Ended June 30, 2020

	Budgeted Amounts Original	Budgeted Amounts Final	Actual	Variance with Final Budget
Power costs:				
Plant	$ 800,000	$ 800,000	$ 646,924	$ 153,076
Bridgewater pumping station	20,700	20,700	16,123	4,577
Metering	2,770	2,770	1,974	796
Total Power Costs	$ 823,470	$ 823,470	$ 665,021	$ 158,449
Operation and Maintenance:				
Sewage treatment equipment	$ 230,000	$ 230,000	$ 234,906	$ (4,906)
Generator	87,800	87,800	58,195	29,605
Bridgewater pumping station	10,000	10,000	4,233	5,767
Sewer lines	9,000	9,000	7,834	1,166
Buildings	40,000	40,000	28,446	11,554
Grounds	40,000	40,000	35,675	4,325
Vehicles	45,000	45,000	36,027	8,973
Total Operation and Maintenance	$ 461,800	$ 461,800	$ 405,316	$ 56,484
Sewage Treatment:				
Chemicals	$ 430,000	$ 430,000	$ 440,013	$ (10,013)
Laboratory	90,000	90,000	90,186	(186)
Pretreatment	30,000	30,000	27,574	2,426
Lubricants	8,000	8,000	11,245	(3,245)
Tools/other	8,000	8,000	2,979	5,021
Environmental/safety	15,000	15,000	12,204	2,796
Total Sewage Treatment	$ 581,000	$ 581,000	$ 584,201	$ (3,201)
Biosolids Expenses:				
Chemicals	$ 180,000	$ 180,000	$ 251,633	$ (71,633)
Laboratory	8,000	8,000	6,576	1,424
Vehicle	-	-	6,983	(6,983)
Equipment	24,000	24,000	5,756	18,244
Contract hauling - liquid	80,000	80,000	-	80,000
Contract hauling - dewatered	259,359	259,359	233,426	25,933
Total Biosolids Expenses	$ 551,359	$ 551,359	$ 504,374	$ 46,985
Professional Expenses:				
Board members expense	$ 13,000	$ 13,000	$ 10,887	$ 2,113
Legal	35,000	35,000	12,332	22,668
Other	72,000	72,000	46,165	25,835
Total Professional Expenses	$ 120,000	$ 120,000	$ 69,384	$ 50,616

Schedule of Operating Expenses - Budget and Actual
Year Ended June 30, 2020 (continued)

	Budgeted Amounts Original	Budgeted Amounts Final	Actual	Variance Favorable (Unfavorable)
Personnel Expenses:				
Salaries	$ 1,881,000	$ 1,881,000	$ 1,743,252	$ 137,748
Payroll taxes	150,000	150,000	131,585	18,415
Virginia Retirement System	124,000	124,000	132,653 *	(8,653)
Health and disability insurance	319,400	319,400	245,645	73,755
Uniform service	19,000	19,000	19,325	(325)
Travel and training	16,000	16,000	5,944	10,056
Miscellaneous	5,000	5,000	3,234	1,766
Total Personnel Expenses	$ 2,514,400	$ 2,514,400	$ 2,281,638	$ 232,762
Administrative:				
Insurance - regular	$ 95,000	$ 95,000	$ 115,315	$ (20,315)
Office supplies	16,000	16,000	13,741	2,259
Dues and subscriptions	20,000	20,000	19,488	512
Licenses	20,000	20,000	14,569	5,431
Telephone/internet/security	45,000	45,000	39,550	5,450
Advertising	4,000	4,000	518	3,482
Total Administrative	$ 200,000	$ 200,000	$ 203,181	$ (3,181)
Total Operating Expenses	$ 5,252,029	$ 5,252,029	$ 4,713,115	$ 538,914

* - Actual employer payments to the Virginia Retirement System were $91,513 during the year.

Insurance Coverage
At June 30, 2020

Insurance Company	Policy Number	Dates	Type	Policy Limits
Virginia Municipal Liability Pool	Member #301	7/1/19-7/1/20	Workmen's Compensation and Employer's Liability	$ 1,000,000
		7/1/19-7/1/20	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
		7/1/19-7/1/20	Local government liability	1,000,000

Average Daily Flow and Revenue by Locality

		Fiscal Year 2020		Fiscal Year 2019
City of Harrisonburg:				
Average Daily Flow (mgd)		6.211		9.225
Operation & Maintenance Payments	$	2,605,738	$	2,426,627
Capital Outlay Payments		136,928		134,840
Pretreatment Payments		32,031		21,208
Projects		406,702		326,715
Debt Service Payments		3,250,301		3,127,825
Total Payments	$	6,431,700	$	6,037,215
Town of Dayton:				
Average Daily Flow (mgd)		1.889		2.050
Operation & Maintenance Payments	$	684,545	$	590,819
Capital Outlay Payments		35,972		33,411
Pretreatment Payments		2,076		400
Projects		106,843		80,953
Debt Service Payments		785,940		757,363
Total Payments	$	1,615,376	$	1,462,946
Town of Bridgewater:				
Average Daily Flow (mgd)		0.677		0.955
Operation & Maintenance Payments	$	277,401	$	264,696
Capital Outlay Payments		14,577		14,913
Pretreatment Payments		1,548		7,396
Projects		43,297		36,133
Debt Service Payments		554,083		538,015
Total Payments	$	890,906	$	861,153
Rockingham County:				
Average Daily Flow (mgd)		3.021		3.960
Operation & Maintenance Payments	$	1,189,175	$	1,077,133
Capital Outlay Payments		62,489		59,839
Pretreatment Payments		12,679		438
Projects		185,606		144,989
Debt Service Payments		1,730,869		1,685,389
Total Payments	$	3,180,818	$	2,967,788
Town of Mount Crawford:				
Average Daily Flow (mgd)		0.029		0.031
Operation & Maintenance Payments	$	10,170	$	8,878
Capital Outlay Payments		534		501
Projects		1,587		1,214
Debt Service Payments		8,613		7,820
Total Payments	$	20,904	$	18,413
TOTAL DAILY AVERAGE FLOW (mgd)		11.827		16.221

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 Principal	Debt Service Interest	Coverage
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%
2020	12,434,755	4,713,115	7,721,640	4,564,049	1,645,396	124%

(1) Operating revenue, debt service revenue and investment income.
(2) Net of depreciation.

- Compliance -

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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, 2020, 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 October 14, 2020.

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) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of 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 financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

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

Robinson, Farmer, Cox Associates

Charlottesville, Virginia
October 14, 2020