

**RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY**

**Sperryville, Virginia**

**FINANCIAL REPORT**

**YEAR ENDED JUNE 30, 2020**

RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

Sperryville, Virginia

FINANCIAL REPORT

YEAR ENDED JUNE 30, 2020

Table of Contents

	Page
Independent Auditors' Report .....	1-2
<b>Basic Financial Statements:</b>	
Statement of Net Position .....	3
Statement of Revenues, Expenses and Changes in Net Position .....	4
Statement of Cash Flows .....	5
Notes to Financial Statements .....	6-25
<b>Required Supplementary Information:</b>	
Schedule of Authority's Proportionate Share of the Net Pension Liability .....	26
Schedule of Employer Contributions - Pension Plan.....	27
Notes to Required Supplementary Information - Pension Plan .....	28
Schedule of Authority's Share of the Total OPEB Liability - Health Insurance Plan.....	29
Notes to Required Supplementary Information - Health Insurance Plan .....	30
Schedule of Authority's Share of Net OPEB Liability - Group Life Insurance Plan.....	31
Schedule of Employer Contributions - Group Life Insurance Plan.....	32
Notes to Required Supplementary Information - Group Life Insurance Plan .....	33
<b>Compliance:</b>	
Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i> .....	34-35



# ROBINSON, FARMER, COX ASSOCIATES, PLLC

*Certified Public Accountants*

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## INDEPENDENT AUDITORS' REPORT

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To the Board of Directors  
Rappahannock County Water and Sewer Authority  
Sperryville, Virginia

### Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of Rappahannock County Water and Sewer Authority, as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise Rappahannock County Water and Sewer Authority's basic financial statements as listed in the table of contents.

### *Management's Responsibility for the Financial Statements*

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

### *Auditors' Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the *Specifications for Audits of Authorities, Boards, and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

## ***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities of Rappahannock County Water and Sewer Authority, as of June 30, 2020, and the changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## ***Other Matters***

### ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the schedules related to pension and OPEB funding on pages 26-33 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Management has omitted the Management's Discussion and Analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. Our opinion on the basic financial statements is not affected by the missing information.

### ***Report on Summarized Comparative Information***

We have previously audited Rappahannock County Water and Sewer Authority's 2019 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated April 17, 2020. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2019, is consistent, in all material respects, with the audited financial statements from which it has been derived.

### ***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated July 23, 2021 on our consideration of Rappahannock County Water and Sewer Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Rappahannock County Water and Sewer Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Rappahannock County Water and Sewer Authority's internal control over financial reporting and compliance.

*Robinson Farrow Cox Associates*

Charlottesville, Virginia  
July 23, 2021

**- Basic Financial Statements -**

**RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY**

**Statement of Net Position  
As of June 30, 2020  
With Comparative Totals for 2019**

	<u>2020</u>	<u>2019</u>
<b>Assets</b>		
Current assets:		
Cash and cash equivalents (Note 3)	\$ 270,641	\$ 267,599
Petty cash	49	100
Prepaid expense	-	2,614
Accounts receivable, net (Note 4)	<u>54,433</u>	<u>53,655</u>
Total current assets	\$ <u>325,123</u>	\$ <u>323,968</u>
Capital assets, net of accumulated depreciation (Note 5)	\$ <u>40,969</u>	\$ <u>44,683</u>
Total assets	\$ <u>366,092</u>	\$ <u>368,651</u>
<b>Deferred outflows of resources</b>		
Pension related	\$ 14,900	\$ 12,543
OPEB related	<u>1,813</u>	<u>988</u>
Total deferred outflows of resources	\$ <u>16,713</u>	\$ <u>13,531</u>
<b>Liabilities</b>		
Current liabilities:		
Accounts payable and accrued expenses	\$ <u>26,145</u>	\$ <u>28,740</u>
Total current liabilities	\$ <u>26,145</u>	\$ <u>28,740</u>
Long-term liabilities:		
Net pension liability	\$ 39,582	\$ 38,372
Net OPEB liabilities	<u>16,309</u>	<u>17,274</u>
Total long-term liabilities	\$ <u>55,891</u>	\$ <u>55,646</u>
Total liabilities	\$ <u>82,036</u>	\$ <u>84,386</u>
<b>Deferred inflows of resources</b>		
Pension related	\$ 3,851	\$ 3,497
OPEB related	<u>1,692</u>	<u>1,938</u>
Total deferred inflows of resources	\$ <u>5,543</u>	\$ <u>5,435</u>
<b>Net position</b>		
Investment in capital assets	\$ 40,969	\$ 44,683
Unrestricted	<u>254,257</u>	<u>247,678</u>
Total net position	\$ <u><u>295,226</u></u>	\$ <u><u>292,361</u></u>

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

**RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY**

**Statement of Revenues, Expenses and Changes in Net Position**  
**Year Ended June 30, 2020**  
**With Comparative Totals for 2019**

	<u>2020</u>	<u>2019</u>
<b>Operating revenue:</b>		
Sewer service charges	\$ 220,267	\$ 220,490
Other charges	<u>473</u>	<u>-</u>
Total operating revenue	\$ <u>220,740</u>	\$ <u>220,490</u>
<b>Operating expenses:</b>		
Salaries and related benefits	\$ 138,583	\$ 142,275
Bookkeeping/accounting	11,541	11,040
Legal	4,360	4,200
Telephone	1,473	1,223
Electric power	13,448	10,976
Laboratory and management support	8,486	8,722
Plant and system maintenance	12,357	13,108
Miscellaneous and other	28,231	26,119
Casual labor	134	-
Depreciation	<u>3,714</u>	<u>3,954</u>
Total operating expenses	\$ <u>222,327</u>	\$ <u>221,617</u>
<b>Operating loss</b>	\$ <u>(1,587)</u>	\$ <u>(1,127)</u>
<b>Nonoperating revenue:</b>		
Interest income	\$ <u>4,452</u>	\$ <u>4,608</u>
Net nonoperating revenue	\$ <u>4,452</u>	\$ <u>4,608</u>
<b>Change in net position</b>	\$ 2,865	\$ 3,481
<b>Net position, beginning of year</b>	<u>292,361</u>	<u>288,880</u>
<b>Net position, end of year</b>	\$ <u><u>295,226</u></u>	\$ <u><u>292,361</u></u>

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

# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Statement of Cash Flows Year Ended June 30, 2020 With Comparative Totals for 2019

	2020	2019
<b>Cash flows from operating activities:</b>		
Receipts from customers	\$ 219,961	\$ 209,497
Payments to suppliers	(80,010)	(64,488)
Payments to and for employees	(141,412)	(144,015)
Net cash flows provided by (used for) operating activities	\$ (1,461)	\$ 994
<b>Cash flows from capital and related financing activities:</b>		
Capital asset purchases	\$ -	\$ (31,937)
Net cash flows provided by (used for) capital and related financing activities	\$ -	\$ (31,937)
<b>Cash flows from investing activities:</b>		
Interest income	\$ 4,452	\$ 4,608
<b>Increase (decrease) in cash and cash equivalents</b>	<b>\$ 2,991</b>	<b>\$ (26,335)</b>
<b>Cash and cash equivalents, beginning of year</b>	<b>267,699</b>	<b>294,034</b>
<b>Cash and cash equivalents, end of year</b>	<b>\$ 270,690</b>	<b>\$ 267,699</b>
<b>Reconciliation of net operating income (loss) to net cash flows provided by (used for) operating activities:</b>		
Operating loss	\$ (1,587)	\$ (1,127)
Adjustments to reconcile operating (loss) to net cash provided by (used for) operating activities:		
Depreciation	3,714	3,954
Increase (decrease) in provision for uncollectible accounts	-	(1)
(Increase) decrease in accounts receivable	(778)	(10,992)
(Increase) decrease in prepaid expenses	2,614	(2,614)
(Increase) decrease in deferred outflows of resources - pension related	(2,357)	(4,330)
(Increase) decrease in deferred outflows of resources - OPEB related	(825)	(713)
Increase (decrease) in net pension liability	1,210	5,518
Increase (decrease) in net OPEB liabilities	(965)	1,589
Increase (decrease) in accounts payable and accrued expenses	(2,595)	13,513
Increase (decrease) in deferred inflows of resources - pension related	354	(3,771)
Increase (decrease) in deferred inflows of resources - OPEB related	(246)	(32)
Net cash flows provided by (used for) operating activities	\$ (1,461)	\$ 994

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



# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020

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### **NOTE 1 - NATURE OF BUSINESS AND REPORTING ENTITY:**

#### Nature of Business:

Rappahannock County Water and Sewer Authority (the Authority) is a Virginia Corporation organized and existing under the provisions of the Virginia Water and Sewer Authorities Act, Sec. 15.1-1239 et seq., *Code of Virginia*, 1950 (as amended). As such, the Authority is in business to acquire, construct, operate and maintain facilities for providing water and sewage treatment services. At June 30, 2020, the Authority was not involved in the treatment and distribution of water. Its sole operations consisted of providing sewage treatment services for the Sperryville Community.

#### Financial Reporting Entity:

The Authority is considered a related organization of the County of Rappahannock, Virginia for financial reporting purposes. The Authority's Board members are appointed by the County of Rappahannock Board of Supervisors; however, the County exercises no oversight responsibility and the Authority's Board approves its own budget and appoints management. The County accountability for the Authority does not extend beyond making the appointments to the Board. No other entities are included in this report since the Board has no oversight or management control over any other entities.

### **NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:**

#### Financial Reporting:

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

#### Basis of Accounting:

The accrual basis of accounting is used to account for all funds. Revenues are recognized when earned, and expenses are recorded as liabilities when incurred, regardless of when the related cash flow takes place.

#### Cash and Cash Equivalents:

Cash and cash equivalents include cash on hand and amounts in demand deposits as well as short-term investments with a maturity date within three months of the date acquired by the Authority.

#### Capital Assets:

Capital assets, which include property, plant and equipment, are reported in the financial statements. Capital assets are defined by the Authority as land, wastewater treatment plant, and equipment with an initial individual cost of more than \$1,500 (amount not rounded) and an estimated useful life in excess of two years. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at acquisition value at the date of donation.

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

RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

Notes to Financial Statements  
As of June 30, 2020 (continued)

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**NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (Continued)**

Capital Assets: (Continued)

The Authority depreciates property and equipment in service, using the straight-line method, over the following estimated useful lives:

Wastewater treatment facility	30 Years
System improvements and components	5 to 15 Years
Equipment	5 Years

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 one item that qualifies for reporting in this category. It is comprised of certain items related to the measurement of the net pension liability and net OPEB liabilities and contributions to the 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 may 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.

Operating and Nonoperating Revenues and Expenses:

The Authority distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses consist primarily of charges for sewage treatment services and expenses related to the providing of those services. Charges are billed on a quarterly basis, using a fixed rate which is based on the estimated amount of effluent that the customer discharges. Nonoperating revenues and expenses consist of capital and noncapital and related financing expenses.

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 these estimates.

Comparative Totals:

Comparative totals are presented for informational purposes only. Certain reclassifications of prior year expenses have been made to be comparable to the current year presentation.

## RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

### Notes to Financial Statements As of June 30, 2020 (continued)

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#### **NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (Continued)**

##### Net Position:

The difference between assets and deferred outflows of resources less liabilities and deferred inflows of resources is called net position. Net position is comprised of three components: net investment in capital assets, restricted, and unrestricted.

- Net investment in capital assets consists of capital assets, net of accumulated depreciation and reduced by outstanding balances of bonds, notes, and other debt that are attributable 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 included in this component of net position.
- Restricted net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Assets are reported as restricted when constraints are placed on asset use either by external parties or by law through constitutional provision or enabling legislation.
- Unrestricted net position is the net amount of the assets, deferred outflows of resources, liabilities, and deferred inflows of resources that does not meet the definition of the two preceding categories.

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 or used before unrestricted net position is applied.

##### 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.

##### Other Postemployment Benefits (OPEB):

##### *Group Life Insurance*

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

# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020 (continued)

### **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 Deposits Act (the "Act") Section 2.2-4400 et. seq. of the Code of Virginia. Under the Act, banks and savings institutions holding public deposits in excess of the amount insured by the FDIC must pledge collateral to the Commonwealth of Virginia Treasury Board. Financial institutions may choose between two collateralization methodologies and depending upon that choice, will pledge collateral that ranges in the amounts from 50% to 130% of excess deposits. Accordingly, all deposits are considered fully collateralized.

#### Investments:

Statutes authorize the Authority to invest in obligations of the United States or agencies thereof, obligations of the Commonwealth of Virginia or political subdivisions thereof, obligations of the International Bank for Reconstruction and Development (World Bank), the Asian Development Bank, the African Development Bank, "prime quality" commercial paper that has received at least two of the following ratings: P-1 by Moody's Investors Service, Inc.; A-1 by Standard and Poor's; or F1 by Fitch Ratings, Inc. (Section 2.2-4502), banker's acceptances, repurchase agreements, and the State Treasurer's Local Government Investment Pool (LGIP).

The Authority has no investments at June 30, 2020.

### **NOTE 4 - ACCOUNTS RECEIVABLE:**

Accounts receivable consist of sewage treatment charges due from customers. A provision of \$188 has been made for uncollectible accounts as of June 30, 2020. This allowance is based upon specific account analysis. Liens are being placed on accounts which are substantially in arrears which totaled \$10,684 and \$10,286 at June 30, 2020 and 2019, respectively.

### **NOTE 5 - CAPITAL ASSETS:**

Capital assets consist of the following:

	Balance July 1, 2019	Increases	Decreases	Balance June 30, 2020
Capital assets not being depreciated:				
Land	\$ 10,550	\$ -	\$ -	\$ 10,550
Capital assets being depreciated:				
Wastewater treatment facility and system improvements	\$ 1,857,649	\$ -	\$ -	\$ 1,857,649
Equipment	24,378	-	-	24,378
Total capital assets being depreciated	\$ 1,882,027	\$ -	\$ -	\$ 1,882,027
Accumulated depreciation				
Wastewater treatment facility and system improvements	\$ 1,827,916	\$ 3,164	\$ -	\$ 1,831,080
Equipment	19,978	550	-	20,528
Total accumulated depreciation	\$ 1,847,894	\$ 3,714	\$ -	\$ 1,851,608
Net capital assets being depreciated	\$ 34,133	\$ (3,714)	\$ -	\$ 30,419
Net capital assets	\$ 44,683	\$ (3,714)	\$ -	\$ 40,969

## RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

### Notes to Financial Statements As of June 30, 2020 (continued)

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#### **NOTE 5 - CAPITAL ASSETS: (Continued)**

Depreciation expense was \$3,714 and \$3,954 for the years ended June 30, 2020 and 2019, respectively.

#### **NOTE 6 - RISK MANAGEMENT:**

The Authority insures for the risk of loss through the purchase of insurance through commercial insurance carriers. The risk of loss is generally confined to the amount of deductibles and co-insurance. There have been no reductions in insurance coverage or settlements in excess of insurance coverage for the past three years.

#### **NOTE 7 - RELATED PARTY TRANSACTIONS:**

The Authority reimburses the County of Rappahannock, Virginia for personnel costs incurred in the operation and maintenance of the sewage treatment facility. The amount of these costs for fiscal years 2020 and 2019 totaled \$138,583 and \$142,275, respectively. Amounts owed to Rappahannock County at June 30, 2020 and 2019 were \$13,731 and \$12,785, respectively. Rappahannock County also assumes the cost of the Authority's property and related insurance costs.

#### **NOTE 8 - PENSION PLAN:**

##### ***Plan Description***

All full-time, salaried permanent employees of Rappahannock County Water and Sewer Authority are automatically covered by VRS Retirement Plan upon employment, through the County of Rappahannock, Virginia. 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. However, several entities participate in the VRS plan through the County of Rappahannock, Virginia and the participating entities report their proportionate information on the basis of a cost-sharing plan. 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 service credit or age 50 with at least 30 years of service credit. Non-hazardous duty employees may retire with a reduced benefit as early as age 55 with at least 5 years of service credit or age 50 with at least 10 years of service credit.

## RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

### Notes to Financial Statements As of June 30, 2020 (continued)

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#### **NOTE 8 - PENSION PLAN: (Continued)**

##### ***Benefit Structures: (Continued)***

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

##### ***Average Final Compensation and Service Retirement Multiplier***

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

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

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



# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020 (continued)

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### **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 15.15% 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 \$8,754 and \$8,485 for the years ended June 30, 2020 and June 30, 2019, respectively.

#### ***Net Pension Liability***

At June 30, 2020, the Authority reported a liability of \$39,582 for its proportionate share of the net pension liability. The Authority's 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 and rolled forward to the measurement date of June 30, 2019. The Authority's proportionate share of the same was calculated using creditable compensation as of June 30, 2019 and 2018 as a basis for allocation. At June 30, 2019 and 2018, the Authority's proportion was 1.7545% and 1.9074%, respectively.

#### ***Actuarial Assumptions - General Employees***

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

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

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

# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020 (continued)

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### 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 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%



# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020 (continued)

### 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:

<u>Asset Class (Strategy)</u>	<u>Target Allocation</u>	<u>Arithmetic Long-term Expected Rate of Return</u>	<u>Weighted Average Long-term Expected Rate of Return*</u>
Public Equity	34.00%	5.61%	1.91%
Fixed Income	15.00%	88.00%	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	<u>100.00%</u>		<u>5.13%</u>
		Inflation	2.50%
		Expected arithmetic nominal return*	<u>7.63%</u>

\* 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 40<sup>th</sup> 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

# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020 (continued)

### NOTE 8 - PENSION PLAN: (Continued)

#### *Discount Rate: (Continued)*

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.

#### *Sensitivity of the Authority's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate*

The following presents the Authority's proportionate share of the net pension liability using the discount rate of 6.75%, as well as what the Authority's proportionate share of the 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%
Authority's proportionate share of the County of Rappahannock Retirement Plan Net Pension Liability (Asset) \$	76,594	\$ 39,582	\$ 10,045

#### *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 \$10,754.

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 Resources
Differences between expected and actual experience	\$ 1,094	\$ 1,577
Change in assumptions	5,052	-
Net difference between projected and actual earnings on pension plan investments	-	2,274
Employer contributions subsequent to the measurement date	8,754	-
Total	<u>\$ 14,900</u>	<u>\$ 3,851</u>

# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020 (continued)

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### **NOTE 8 - PENSION PLAN: (Continued)**

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

\$8,754 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 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:

<b>Year Ended June 30</b>		
2021	\$	3,109
2022		(882)
2023		(62)
2024		130
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 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 - MAINTENANCE PLAN:**

The Authority is in the process of creating a maintenance plan that will document and define the Authority's basic approach to a maintenance philosophy. The plan will be based on the DEQ permitting which runs for five years.

### **NOTE 10 - MEDICAL, DENTAL, AND LIFE INSURANCE - PAY-AS-YOU-GO (OPEB PLAN):**

#### ***Plan Description***

All full-time, salaried permanent employees of Rappahannock County Water and Sewer Authority are covered by OPEB Plan upon employment, through the County of Rappahannock, Virginia. The County of Rappahannock, Virginia administers a single-employer defined benefit healthcare plan and Rappahannock County Water and Sewer Authority reports their proportionate information on the basis of a cost-sharing plan. The plan provides postemployment health care benefits to all eligible permanent employees who meet the requirements under the County's pension plans. The plan does not issue a publicly available financial report.

Notes to Financial Statements  
As of June 30, 2020 (continued)

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**NOTE 10 - MEDICAL, DENTAL, AND LIFE INSURANCE - PAY-AS-YOU-GO (OPEB PLAN): (Continued)**

***Benefits Provided***

Postemployment benefits are provided to eligible retirees include Medical, Dental, and Life insurance. The benefits that are provided for active employees are the same for eligible retirees, spouses and dependents of eligible retirees. All permanent employees of the Authority who meet eligibility requirements of the pension plan are eligible to receive postemployment health care benefits. In addition, the Authority provides a fixed basic death benefit for all retirees.

***Contributions***

The board 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 Board. The amount paid by the Authority for OPEB as the benefits came due during the year ended June 30, 2020 was \$538.

***Total OPEB Liability***

The Authority’s total OPEB liability was measured as of July 1, 2018. The total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date. At June 30, 2019, the Authority reported a liability of \$11,655 for its proportionate share of the net OPEB liability. The Authority’s proportionate share of the liability was calculated using credible compensation as of June 30, 2019 as a basis for allocation. At June 30, 2019, the Authority’s proportion was 1.7545%.

***Actuarial Assumptions***

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

Inflation	2.50% per year as of June 30, 2020
Discount Rate	3.13% for accounting and funding disclosures as of June 30, 2019

The date of the most recent actuarial experience study for which significant assumptions were based is not available.

***Discount Rate***

The discount rate used when OPEB plan investments are insufficient to pay for future benefit payments is based on an index rate for 20-Year tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher. This rate was 3.13% as of June 30, 2019.

RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

Notes to Financial Statements  
As of June 30, 2020 (continued)

**NOTE 10 - MEDICAL, DENTAL, AND LIFE INSURANCE - PAY-AS-YOU-GO (OPEB PLAN): (Continued)**

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

The following amounts present the Authority's proportionate share of the total OPEB liability using the discount rate of 3.13%, as well as what the Authority's proportionate share of the total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.13%) or one percentage point higher (4.13%) than the current discount rate:

Rate		
1% Decrease (2.13%)	Current Discount Rate (3.13%)	1% Increase (4.13%)
\$ 13,635	\$ 11,655	\$ 10,090

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

The following presents the Authority's proportionate share of the total OPEB liability using a healthcare cost trend rate of 4.00%, as well as what the Authority's proportionate share of the total OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower (3.00%) or one percentage point higher (5.00%) than the current healthcare cost trend rates:

Rates		
1% Decrease (3.00%)	Healthcare Cost Trend (4.00%)	1% Increase (5.00%)
\$ 9,824	\$ 11,655	\$ 14,060

***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 \$628. 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 Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 31	\$ 676
Changes in assumptions	-	543
Employer contributions subsequent to the measurement date	538	-
Total	\$ 569	\$ 1,219

# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020 (continued)

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### **NOTE 10 - MEDICAL, DENTAL, AND LIFE INSURANCE - PAY-AS-YOU-GO (OPEB PLAN): (Continued)**

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

\$538 reported as deferred outflows of resources related to the OPEB resulting from the employer's contributions subsequent to the measurement date will be recognized as a reduction of the Net OPEB Liability in the fiscal year ending June 30, 2021. Amounts reported as deferred outflows of resources and deferred inflows of resources will be recognized in OPEB expense in future reporting periods as follows:

<u>Year Ended June 30</u>	
2021	\$ (444)
2022	(445)
2023	(152)
2024	(147)
2025	-
Thereafter	-

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

### **NOTE 11 - GROUP LIFE INSURANCE (GLI) PLAN (OPEB PLAN):**

#### ***Plan Description***

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

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

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

#### ***Eligible Employees***

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

# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020 (continued)

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### **NOTE 11 - GROUP LIFE INSURANCE (GLI) PLAN (OPEB PLAN): (Continued)**

#### ***Benefit Amounts***

The GLI Plan is a defined benefit plan with several components. The natural death benefit is equal to the employee's covered compensation rounded to the next highest thousand and then doubled. The accidental death benefit is double the natural death benefit. In addition to basic natural and accidental death benefits, the plan provides additional benefits provided under specific circumstances that include the following: accidental dismemberment benefit, safety belt benefit, repatriation benefit, felonious assault benefit, and accelerated death benefit option. The benefit amounts are subject to a reduction factor. The benefit amount reduces by 25% on January 1 following one calendar year of separation. The benefit amount reduces by an additional 25% on each subsequent January 1 until it reaches 25% of its original value. For covered members with at least 30 years of service credit, the minimum benefit payable was set at \$8,000 by statute in 2015. This will be increased annually based on the VRS Plan 2 cost-of-living calculation. The minimum benefit adjusted for COLA was \$8,463 as of June 30, 2020.

#### ***Contributions***

The contribution requirements for the GLI Plan are governed by §51.1-506 and §51.1-508 of the Code of Virginia, as amended, but may be impacted as a result of funding provided to state agencies and school divisions by the Virginia General Assembly. The total rate for the GLI Plan was 1.31% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.79% ( $1.31\% \times 60\%$ ) and the employer component was 0.52% ( $1.31\% \times 40\%$ ). 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 Plan from the entity were \$305 and \$317 for the years ended June 30, 2020 and June 30, 2019, respectively.

#### ***GLI OPEB Liabilities, GLI OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the GLI Plan OPEB***

At June 30, 2020, the entity reported a liability of \$4,654 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 as of that date. The covered employer's proportion of the Net GLI OPEB Liability was based on the covered employer's actuarially determined employer contributions to the GLI Plan for the year ended June 30, 2019 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2019, the participating employer's proportion was 0.00029% as compared to 0.00029% at June 30, 2018.



# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020 (continued)

### NOTE 11 - GROUP LIFE INSURANCE (GLI) PLAN (OPEB PLAN): (Continued)

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

For the year ended June 30, 2020, the participating employer recognized GLI OPEB expense of \$122. 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:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 310	\$ 60
Net difference between projected and actual earnings on GLI OPEB plan investments	-	96
Change in assumptions	294	140
Changes in proportion	335	177
Employer contributions subsequent to the measurement date	<u>305</u>	<u>-</u>
Total	<u>\$ 1,244</u>	<u>\$ 473</u>

\$305 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:

<u>Year Ended June 30</u>	
2021	\$ 31
2022	31
2023	72
2024	137
2025	152
Thereafter	43



# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020 (continued)

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### NOTE 11 - GROUP LIFE INSURANCE (GLI) PLAN (OPEB PLAN): (Continued)

#### *Actuarial Assumptions*

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

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

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

#### **Mortality Rates - Non-Largest Ten Locality Employers - General Employees**

##### Pre-Retirement:

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

##### Post-Retirement:

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

##### Post-Disablement:

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

# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020 (continued)

### NOTE 11 - GROUP LIFE INSURANCE (GLI) PLAN (OPEB PLAN): (Continued)

#### *Actuarial Assumptions: (Continued)*

#### **Mortality Rates - Non-Largest Ten Locality Employers - General Employees: (Continued)**

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

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

#### **NET GLI OPEB Liability**

The net OPEB liability (NOL) for the GLI Plan represents the plan's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of the measurement date of June 30, 2019, NOL amounts for the GLI Plan are as follows (amounts expressed in thousands):

	<b>Group Life Insurance OPEB Plan</b>
Total GLI OPEB Liability	\$ 3,390,238
Plan Fiduciary Net Position	1,762,972
GLI Net OPEB Liability (Asset)	\$ <u>1,627,266</u>
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability	52.00%

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

# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020 (continued)

### NOTE 11 - 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:

<u>Asset Class (Strategy)</u>	<u>Target Allocation</u>	<u>Arithmetic Long-term Expected Rate of Return</u>	<u>Weighted Average Long-term Expected Rate of Return*</u>
Public Equity	34.00%	5.67%	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	<u>100.00%</u>		<u>5.13%</u>
		Inflation	<u>2.50%</u>
		Expected arithmetic nominal return*	<u>7.63%</u>

\*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 40<sup>th</sup> 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.

# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Financial Statements As of June 30, 2020 (continued)

### NOTE 11 - 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%)
Authority's proportionate share of the GLI Plan			
Net OPEB Liability	\$ 6,114	\$ 4,654	\$ 3,470

#### *GLI Plan Fiduciary Net Position*

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

### NOTE 12 - AGGREGATE OPEB TOTALS:

OPEB Plan	Deferred Outflows	Net OPEB Liability	Deferred Inflows	OPEB Expense
Medical, Dental, and Life Insurance Plan	\$ 569	\$ 11,655	\$ 1,219	\$ 628
Group Life Insurance Plan	1,244	4,654	473	122
Total	<u>\$ 1,813</u>	<u>\$ 16,309</u>	<u>\$ 1,692</u>	<u>\$ 750</u>

**- Required Supplementary Information -**

**RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY**

**Schedule of Authority's Proportionate Share of the Net Pension Liability  
For the Measurement Dates of June 30, 2014 through June 30, 2019**

<b>Date (1)</b>	<b>Proportion of the Net Pension Liability (NPL) (2)</b>	<b>Proportionate Share of the NPL (3)</b>	<b>Covered Payroll (4)</b>	<b>Proportionate Share of the NPL as a Percentage of Covered Payroll (3)/(4) (5)</b>	<b>Pension Plan's Fiduciary Net Position as a Percentage of Total Pension Liability (6)</b>
2019	1.7545%	\$ 39,582	\$ 56,054	70.61%	86.38%
2018	1.9074%	38,372	55,000	69.77%	87.21%
2017	1.8300%	32,854	50,000	65.71%	87.86%
2016	1.7800%	43,135	50,000	86.27%	83.09%
2015	1.6200%	31,825	45,525	69.91%	85.75%
2014	1.4700%	25,939	44,050	58.89%	86.48%

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.

**RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY**

**Schedule of Employer Contributions - Pension Plan  
Years Ended June 30, 2015 through June 30, 2020**

<b>Date</b>	<b>Contractually Required Contribution (1)</b>	<b>Contributions in Relation to Contractually Required Contribution (2)</b>	<b>Contribution Deficiency (Excess) (3)</b>	<b>Employer's Covered Payroll (4)</b>	<b>Contributions as a % of Covered Payroll (5)</b>
2020	\$ 8,754	\$ 8,754	\$ -	\$ 57,783	15.15%
2019	8,485	8,485	-	56,054	15.14%
2018	6,446	6,446	-	55,000	11.72%
2017	5,860	5,860	-	50,000	11.72%
2016	6,205	6,205	-	50,000	12.41%
2015	5,682	5,682	-	45,525	12.48%

Schedule is intended to show information for 10 years. Since 2015 is the first year for this presentation, no other data is available. However, additional years will be included as they become available.

RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

Notes to Required Supplementary Information - Pension Plan  
Year Ended June 30, 2020

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**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, valuations 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 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%



**RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY**

**Schedule of Authority's Share of Total OPEB Liability  
Health Insurance Plan  
Year Ended June 30, 2020**

<b>Date</b> <b>(1)</b>	<b>Employer's Proportion of the Total OPEB Liability (Asset) (2)</b>	<b>Employer's Proportionate Share of the Total OPEB Liability (Asset) (3)</b>	<b>Employer's Covered Payroll (4)</b>	<b>Employer's Proportionate Share of the Total OPEB Liability (Asset) as a Percentage of Covered Payroll (3)/(4) (5)</b>	<b>Plan Fiduciary Net Position as a Percentage of Total OPEB Liability (6)</b>
2019	1.7545%	\$ 11,655	\$ N/A	N/A	N/A
2018	1.9074%	12,887	N/A	N/A	N/A
2017	1.8300%	11,610	N/A	N/A	N/A

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.

# RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

## Notes to Required Supplementary Information - Health Insurance Plan Year Ended June 30, 2020

Valuation Date: 7/1/2019  
Measurement Date: 7/1/2019

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

### *Methods and assumptions used to determine OPEB liability:*

Actuarial Cost Method	Entry age normal level % of salary
Discount Rate	3.13% as of June 30, 2019
Inflation	2.50% per year as of June 30, 2019
Healthcare Trend Rate	The healthcare trend rate assumption starts at 4.70% in 2020 and gradually increases to 5.20% by the year 2030; and decreases to 4.00% by 2075.
Salary Increase Rates	VRS Public Safety (employees receiving enhanced hazardous duty benefits) and general employees salary increase assumptions were used.
Retirement Age	The average age at retirement is 62
Mortality Rates	The mortality assumption was updated to that recommended by the SOA study for general employees and the most recently release mortality improvement (MP2019) scale. For the OPEB valuation, used the head count weighted version of the table.

**RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY**

**Schedule of Authority's Share of Net OPEB Liability  
Group Life Insurance Plan  
For the Measurement Dates of June 30, 2017 through June 30, 2019**

<b>Date (1)</b>	<b>Employer's Proportion of the Net GLI OPEB Liability (Asset) (2)</b>	<b>Employer's Proportionate Share of the Net GLI OPEB Liability (Asset) (3)</b>	<b>Employer's Covered Payroll (4)</b>	<b>Employer's Proportionate Share of the Net GLI OPEB Liability (Asset) as a Percentage of Covered Payroll (3)/(4) (5)</b>	<b>Plan Fiduciary Net Position as a Percentage of Total GLI OPEB Liability (6)</b>
2019	0.00029%	\$ 4,654	\$ 56,054	8.30%	52.00%
2018	0.00029%	4,387	55,000	7.98%	51.22%
2017	0.00028%	4,075	50,000	8.15%	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.

**RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY**

**Schedule of Employer Contributions  
Group Life Insurance Plan**

**Years Ended June 30, 2017 through June 30, 2020**

<b>Date</b>	<b>Contractually Required Contribution (1)</b>	<b>Contributions in Relation to Contractually Required Contribution (2)</b>	<b>Contribution Deficiency (Excess) (3)</b>	<b>Employer's Covered Payroll (4)</b>	<b>Contributions as a % of Covered Payroll (5)</b>
2020	\$ 305	\$ 305	\$ -	\$ 57,783	0.52%
2019	317	317	-	56,054	0.52%
2018	274	274	-	55,000	0.52%
2017	260	260	-	50,000	0.52%

Schedule is intended to show information for 10 years. Information prior to 2017 is not available. However, additional years will be included as they become available.

## RAPPAHANNOCK COUNTY WATER AND SEWER AUTHORITY

### Notes to Required Supplementary Information Group Life Insurance Plan Year Ended June 30, 2020

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**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, valuations 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 July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows:

#### Non-Largest Ten Locality Employers - General Employees

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

- Compliance -

**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON  
COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS  
PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

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To the Board of Directors  
Rappahannock County Water and Sewer Authority  
Sperryville, 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 Rappahannock County Water and Sewer Authority, as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise Rappahannock County Water and Sewer Authority's basic financial statements and have issued our report thereon dated July 23, 2021.

**Internal Control over Financial Reporting**

In planning and performing our audit of the financial statements, we considered Rappahannock County Water and Sewer Authority's internal control over financial reporting (internal control) as the basis for designing the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Rappahannock County Water and Sewer Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of Rappahannock County Water and Sewer Authority's internal control.

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

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

## Compliance and Other Matters

As part of obtaining reasonable assurance about whether Rappahannock County Water and Sewer Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

### Purpose of this Report

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

*Robinson Taven Cox Associates*

Charlottesville, Virginia

July 23, 2021