

FREDERICK WATER

FINANCIAL REPORT

June 30, 2018

FREDERICK WATER

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INTRODUCTORY SECTION

FREDERICK WATER
DIRECTORY OF PRINCIPAL OFFICIALS
June 30, 2018

DIRECTORS

Gary Oates – Chairman
J. Stanley Crockett – Vice Chairman
Martha Dilg – Secretary/Treasurer

Tom Simon Christopher Collins

EXECUTIVE DIRECTOR

Eric Lawrence, AICP

INDEPENDENT AUDITORS

Brown, Edwards & Company, L.L.P.

ATTORNEYS

McGuireWoods LLP

FINANCIAL SECTION

**The Financial Section
contains Management's
Discussion and Analysis
and the Basic Financial
Statements**

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors
Frederick Water
Winchester, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of Frederick Water (the "Authority"), as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's 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 *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 auditor's 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 Authority as of June 30, 2018, and the changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Restatement of Beginning Net Position

As described in Note 11 to the financial statements, in 2018 the Authority adopted new accounting guidance, GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, and also recognized previously unrecorded liabilities. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and other required supplementary information as presented in the table of contents 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 Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The introductory section is presented for purposes of additional analysis and is not a required part of the basic financial statements. The introductory section has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on it.

Report on Comparative Information

We have previously audited the Authority's 2017 financial statements, and our report dated October 6, 2017, expressed an unmodified opinion on those financial statements. The 2017 financial information is provided for comparative purposes only. In our opinion, the comparative information presented herein as of and for the year ended June 30, 2017, is consistent, in all material respects, with the audited financial statements from which it has been derived. In addition, the amounts presented for comparative purposes have not been restated for the matters described in Note 11.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated November 6, 2018 on our consideration of the 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 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 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 Authority's internal control over financial reporting and compliance.

Brown, Edwards & Company, L.L.P.

CERTIFIED PUBLIC ACCOUNTANTS

MANAGEMENT'S DISCUSSION AND ANALYSIS

Introduction

The Frederick County Sanitation Authority dba Frederick Water is a Virginia corporation created under the Virginia Water and Waste Authorities Act on August 1, 1967, for the purpose of “acquiring, constructing, operating, and maintaining (a) an integrated water supply and distribution system in Frederick County and (b) an integrated sewer system for Frederick County.” Frederick Water is a public body, politic and corporate, deemed to be an instrumentality exercising public and essential governmental functions to provide for the public health and welfare.

Frederick Water is empowered: to acquire, construct, operate, and maintain water supply and distribution systems and sewer collection systems; operate wastewater treatment plants; to finance its projects through issuance of revenue bonds; and to fix and prescribe rates, fees, and charges for services rendered. Although Frederick Water was established by the Frederick County Board of Supervisors, the County exercises no oversight responsibility and has no accountability for Frederick Water’s fiscal matters. Frederick Water is governed by a five-member board. Each member of the Board is appointed by the Frederick County Board of Supervisors and serves a four year term. The Board of Supervisors designates where Frederick Water can provide service within the County through the Sewer and Water Service Area (SWSA) in the County’s Comprehensive Plan.

Overview of Financial Statements

This discussion and analysis is intended as an introduction to Frederick Water’s basic financial statements. Frederick Water’s basic financial statements are comprised of two components: (1) enterprise fund financial statements and (2) notes to the financial statements.

Enterprise fund financial statements. Since Frederick Water engages only in business-type activities, the *enterprise fund financial statements* and *notes* are prepared in a manner similar to a private-sector business. Frederick Water uses the accrual method to account for and report financial transactions. Revenues are recognized as they are earned and expenses are recognized as they are incurred, regardless of the timing of related cash receipts and disbursements. All assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are measurable and probable are included in the financial statements. The full acquisition costs of all capital assets are included in the Statement of Net Position and are depreciated over their estimated useful life.

The ***statement of net position*** presents information on Frederick Water’s assets, deferred outflows of resources, liabilities, and deferred inflows of resources as of June 30, 2018 and June 30, 2017, 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 Frederick Water is improving or deteriorating.

The ***statement of revenues, expenses, and changes in fund net position*** presents information showing how Frederick Water’s net position changed between fiscal years 2018 and 2017. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of cash flows. Thus, some of the revenues and expenses that are reported in this statement will only affect cash flows in future fiscal periods (e.g., earned but unused paid time off).

The ***statement of cash flows*** supplements the above two statements by presenting the changes in cash position as a result of Frederick Water’s activities over the last two fiscal years.

Notes to the financial statements. The notes provide additional information that is essential for a full understanding of the data provided in the financial statements.

Overview of Operations

Frederick Water's operations are influenced by the area's economic growth. There were 506 new water connections during the fiscal year, representing an increase of 3.3%, bringing the number of water customers serviced to over 15,870. There were 492 new sewer connections during the fiscal year, representing an increase of 3.3%, bringing the number of sewer customers serviced to over 15,360. New connections were better than expected and indications are the economy will remain strong over the next several years. Frederick Water continues its efforts to improve operations, perform infrastructure maintenance, and provide additional sources of water and wastewater treatment capacity to be prepared for future growth.

Frederick Water is utilizing mobile devices in the field for staff to have access to engineering drawings through a mobile application. The GIS staff continue to scan and geo-reference paper drawings in an effort to retain historical system information. Frederick Water continues the consolidation of its SCADA systems to a secure, easier-to-access system. Frederick Water currently utilizes social media platforms to inform customers of service disruptions and expects to roll out a Water Outage Viewer Map in 2019.

Financial Highlights

Frederick Water's financial position increased by \$3,920,987 for the fiscal year ended June 30, 2018, after considering the restatement of beginning net position discussed in Note 11. The assets and deferred outflows exceeded liabilities and deferred inflows by \$124,112,409. Frederick Water had \$93,593,024 invested in capital assets and \$30,519,385 of unrestricted net position available to meet ongoing obligations. Frederick Water's total assets and deferred outflows decreased by .1% or \$306,221, while total liabilities and deferred inflows decreased 2.7% or \$2,708,576.

In 2018, Frederick Water adopted GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. The overall effect of this new standard is to reflect Frederick Water's long-term other postretirement benefit ("OPEB") obligations directly in the financial statements. Under previous accounting guidance, these amounts were recorded incrementally over time, but were not recognized in their entirety. Instead, the total liability which has now been recorded, was only disclosed. The new standard not only changes certain measurement methodologies, but also requires certain new disclosures and that Frederick Water record a net OPEB liability directly on the statement of net position. Beginning net position has been restated as discussed in Note 11, and this has had an impact on Frederick Water's net position. However, because similar information has been disclosed in prior years, both in the notes to the financial statements and in required supplementary information, the effect of this new standard is not expected to negatively affect how most governmental entities are viewed by sophisticated readers of their financial statements. Because information to restate prior years is not readily available, the prior year comparative information included in this discussion and analysis has not been restated.

In 2018, Frederick Water recorded a \$2,500,000 liability for its obligation under a 2013 agreement with one of our water supply sources (quarry). The agreement includes a cost sharing arrangement for the construction of ball fields if mining activities result in the displacement of existing ball fields. The displacement of the ball fields will occur at the end of 2019. Frederick Water expects to complete the ball fields by spring 2020.

In 2018, several Grant in Aid of Construction agreements executed from 2001 to 2003 for the Route 11 North Industrial Service Area were identified which had not been recorded in our books. In order to properly account for these agreements, Frederick Water recorded a \$1,205,101 liability equal to the available credits offered under the agreements less any previously applied credits. Beginning net position has been restated as discussed in Note 11, and this has had an impact on Frederick Water's net

Financial Highlights (Continued)

position. Because information to restate prior years is not readily available, the prior year comparative information included in this discussion and analysis has not been restated.

Results of Operations

Frederick Water's revenues for the fiscal year ended June 30, 2018, increased 5.2% or \$1,829,728 over the previous fiscal year. The largest increase was attributable to Water and Sewer Service revenue which increased 13.7% or \$2,681,808 over the prior year. The increase is the result of a 3% base rate increase for residential customers and relative increases for larger meter sizes effective July 1, 2017. There were incremental increases in the consumption rates, as well as, the addition of a tier for consumption in excess of 100,000 gallons for large users. Another significant increase was attributable to Availability Fees. There were 538 Availability Fees recorded during the current year which represented an increase of 31.7% or \$2,307,647 over the prior year. There was also an increase in Investment Earnings of 269.2% or \$154,104 from the prior year. Higher yielding investments contributed \$123,424 and a decline in unrealized losses recorded attributable to declining fair market values compared to the prior year contributed \$28,360. These increases were offset by a 43.1% or \$3,277,975 decrease in Capital Contributions from the prior year.

Frederick Water Changes in Net Position

	2018	2017
Revenues:		
Charges for service	\$ 22,233,217	\$ 19,551,409
Capital contributions	4,325,621	7,603,596
Availability Fees	9,594,451	7,286,804
Other	349,512	385,368
Investment earnings	211,348	57,244
Total revenues	36,714,149	34,884,421
Expenses:		
Source of water supply	4,178,751	4,173,094
Water transmission and distribution	1,699,431	1,690,873
Wastewater collection	687,222	654,030
Wastewater treatment	3,307,786	3,356,618
Maintenance and operations	940,332	1,024,821
Customer accounting and collections	669,398	589,448
Engineering and planning	734,159	548,835
General and administration	4,198,183	2,422,105
Depreciation	10,790,997	10,667,332
Contractual obligation – ballfields cost sharing	2,500,000	-
(Gain) loss on sale of assets	361	(2,664)
Interest expense	3,044,273	3,066,474
Impairment loss	11,483	25,184
Other nonoperating expenses	30,786	-
Total expense	32,793,162	28,216,150
Increase in net position	3,920,987	6,668,271
Net position beginning of year (as restated)	120,191,422	115,041,783
Net position end of year	\$ 124,112,409	\$ 121,710,054

Results of Operations (Continued)

While water and sewer services were provided to our wholesale customer during fiscal year 2018, unpaid outstanding bills were reserved for during the fiscal year due to the uncertainty of their collectability. The impact of this reserve decreased revenues by \$5,797,945 and brings the total amount reserved for this customer to \$8,530,236. Frederick Water remains involved in litigation with our wholesale customer to resolve outstanding disputes.

Frederick Water's expenses for the fiscal year ended June 30, 2018, increased 16.2% or \$4,577,012 over the previous fiscal year.

General and administrative expenses for the fiscal year ended June 30, 2018, increased 73.3% or \$1,776,078 from the prior year. Legal services, incurred primarily for litigation with our wholesale customer, increased \$1,783,370 from the prior year.

Frederick Water's single largest expense is depreciation. Depreciation accounted for 32.9 % of total operating expenses for the fiscal year ended June 30, 2018. As well, depreciation expense increased \$123,665 from the prior year due primarily to Capital Contributions from developers in both fiscal year 2018 and 2017. Frederick Water owns \$299 million in fixed assets that are subject to annual depreciation. Straight line depreciation is used over the life expectancy of the asset which ranges from 3 to 40 years.

Contractual obligation – ball fields cost sharing expenses for the fiscal year ended June 30, 2018, increased \$2,500,000 from the prior year. This expense represents Frederick Water's cost to construct ball fields to replace those being displaced by one of our water supply sources (quarry).

Other nonoperating expenses for the fiscal year ended June 30, 2018, increased \$30,786 from the prior year. This expense was incurred for demolition and removal of a water tank no longer in use.

Capital Contributions and Assets

This area of Frederick Water's operations had substantial activity during both fiscal years 2018 and 2017.

During the fiscal year ended June 30, 2018, Frederick Water invested funds in its Opequon Initiative for design and permitting for the new water treatment plant, creek intake and well exploration, began design of a Water Loop to connect the north and south ends of our water system, completed significant SCADA upgrades at Diehl Water Treatment Plant and Crooked Run Wastewater Treatment Plant, added two Baffle Walls at the Crooked Run Wastewater Treatment Plant, and added two system servers as well as a second Customer Service Window at our Main office. Routine purchases for manhole rehabilitation, meters, fire hydrant replacements, as well as equipment and vehicle replacements occurred during the fiscal year.

Capital contributions, representing the value of assets deeded over to Frederick Water by developers, were \$4,325,621 for the fiscal year ended June 30, 2018.

Assets and Deferred Outflows of Resources

Frederick Water's total assets and deferred outflows of resources decreased during the fiscal year ended June 30, 2018, .1% or \$306,221.

Liabilities and Deferred Inflows of Resources

Frederick Water's total liabilities and deferred inflows of resources decreased during the fiscal year ended June 30, 2018, 2.7 % or \$2,708,576. This decline is attributable to decreasing bond obligation balances as a result of scheduled principal payments.

Debt

Frederick Water had total bonded debt of \$16,670,903 and obligations and leases payable of \$70,044,572 as of June 30, 2018. Overall, debt decreased by \$5,033,271, net of deferred amounts. No bonds were refunded or defeased during this fiscal year.

Frederick Water Net Position

	<u>2018</u>	<u>2017</u>
Current and other assets	\$ 40,640,609	\$ 37,093,988
Capital assets	<u>181,294,219</u>	<u>184,820,924</u>
Total assets	<u>221,934,828</u>	<u>221,914,912</u>
Deferred outflows of resources	<u>940,203</u>	<u>1,266,340</u>
Current liabilities	9,427,725	9,246,063
Long-term liabilities	<u>88,471,920</u>	<u>91,839,134</u>
Total liabilities	<u>97,899,645</u>	<u>101,085,197</u>
Deferred inflows of resources	862,977	386,001
Net position:		
Invested in capital assets, net of related debt	93,593,024	92,238,807
Unrestricted	<u>30,519,385</u>	<u>29,471,247</u>
Total net position	<u>\$ 124,112,409</u>	<u>\$ 121,710,054</u>

Requests for Information

Questions concerning any of the information provided in this report or requests for additional information should be addressed to the Executive Director at P. O. Box 1877, Winchester, Virginia 22604.

BASIC FINANCIAL STATEMENTS

FREDERICK WATER
STATEMENTS OF NET POSITION
June 30, 2018
(With Comparative Amounts as of June 30, 2017)

	2018	2017
ASSETS		
Current assets:		
Cash and cash equivalents, unrestricted (Note 2)	\$ 9,461,362	\$ 7,433,588
Cash and cash equivalents, restricted (Note 2)	206	55
Investments (Note 2)	26,783,157	25,984,918
Accounts receivable, net (Note 3)	3,881,418	3,132,961
Prepaid and other assets	174,621	170,520
Inventories	314,215	296,555
Total current assets	<u>40,614,979</u>	<u>37,018,597</u>
Noncurrent assets:		
Contract receivable	25,630	75,391
Capital assets, net (Note 4)	181,294,219	184,820,924
Total noncurrent assets	<u>181,319,849</u>	<u>184,896,315</u>
Total assets	<u>221,934,828</u>	<u>221,914,912</u>
DEFERRED OUTFLOWS OF RESOURCES		
Deferred charge on refunding	680,670	833,019
Deferred outflows related to pensions (Note 6)	221,893	433,321
Deferred outflows related to other postemployment benefits (Note 7)	37,640	-
Total deferred outflows of resources	<u>940,203</u>	<u>1,266,340</u>
LIABILITIES		
Current liabilities:		
Accounts payable and accrued expenses	1,004,099	1,402,776
Accrued interest	862,203	907,740
Unearned revenue	1,768,301	1,449,564
Current portion of compensated absences (Note 5)	533,540	485,738
Current portion of bonds, notes, and other obligations payable (Note 5)	5,259,582	5,000,245
Total current liabilities	<u>9,427,725</u>	<u>9,246,063</u>
Noncurrent liabilities:		
Customer deposits	1,418,323	1,401,268
Accrued interest (Note 5)	657,083	657,083
Compensated absences (Note 5)	133,385	121,435
Contractual obligation (Note 10)	2,500,000	-
Net pension liability (Note 6)	339,203	1,244,457
Net other postemployment benefit liability (Note 7)	301,643	-
Other long term liabilities (Note 5)	83,122,283	88,414,891
Total noncurrent liabilities	<u>88,471,920</u>	<u>91,839,134</u>
Total liabilities	<u>97,899,645</u>	<u>101,085,197</u>
DEFERRED INFLOWS OF RESOURCES		
Deferred inflows related to pensions (Note 6)	827,451	386,001
Deferred inflows related to other postemployment benefits (Note 7)	35,526	-
Total deferred inflows of resources	<u>862,977</u>	<u>386,001</u>
NET POSITION		
Net investment in capital assets	93,593,024	92,238,807
Unrestricted	30,519,385	29,471,247
Total net position	<u>\$ 124,112,409</u>	<u>\$ 121,710,054</u>

The Notes to Financial Statements are an integral part of this statement.

FREDERICK WATER
STATEMENTS OF REVENUES, EXPENSES, AND CHANGES
IN FUND NET POSITION
For the Year Ended June 30, 2018
(With Comparative Amounts for the Year Ended June 30, 2017)

	<u>2018</u>	<u>2017</u>
OPERATING REVENUES		
Charges for services:		
Water service	\$ 11,013,991	\$ 9,314,824
Sewer service	10,407,246	9,412,395
Contract water and sewer services	153,375	264,655
Penalties and surcharges	427,407	383,415
Connection fees	231,198	176,120
Miscellaneous	339,595	385,368
Total operating revenues	<u>22,572,812</u>	<u>19,936,777</u>
OPERATING EXPENSES		
Source of water supply (Note 8)	4,178,751	4,173,094
Water transmission and distribution	1,699,431	1,690,873
Wastewater collection	687,222	654,030
Wastewater treatment	3,307,786	3,356,618
Maintenance and operations	940,332	1,024,821
Customer accounting and collecting	669,398	589,448
Engineering and planning	734,159	548,835
General and administrative	4,198,183	2,422,105
Depreciation (Note 4)	10,790,997	10,667,332
Total operating expenses	<u>27,206,259</u>	<u>25,127,156</u>
Operating loss	<u>(4,633,447)</u>	<u>(5,190,379)</u>
NONOPERATING REVENUES (EXPENSES)		
Investment earnings	211,348	57,244
Availability fees	9,594,451	7,286,804
Insurance proceeds	9,917	-
Contractual obligation expense (Note 10)	(2,500,000)	-
(Loss) gain on disposal of capital assets	(361)	2,664
Interest expense	(3,044,273)	(3,066,474)
Impairment loss	(11,483)	(25,184)
Other nonoperating expenses	(30,786)	-
Total nonoperating revenues (expenses), net	<u>4,228,813</u>	<u>4,255,054</u>
Loss before contributions	(404,634)	(935,325)
CAPITAL CONTRIBUTIONS	<u>4,325,621</u>	<u>7,603,596</u>
Change in net position	3,920,987	6,668,271
NET POSITION AT JULY 1, AS RESTATED (NOTE 11)	<u>120,191,422</u>	<u>115,041,783</u>
NET POSITION AT JUNE 30	<u><u>\$ 124,112,409</u></u>	<u><u>\$ 121,710,054</u></u>

The Notes to Financial Statements are an integral part of this statement.

FREDERICK WATER
STATEMENTS OF CASH FLOWS
For the Year Ended June 30, 2018
(With Comparative Amounts for the Year Ended June 30, 2017)

	<u>2018</u>	<u>2017</u>
OPERATING ACTIVITIES		
Receipts from customers	\$ 21,891,171	\$ 20,682,592
Payments to suppliers	(13,427,092)	(11,608,873)
Payments to employees	(3,462,688)	(3,187,279)
Other operating receipts	<u>-</u>	<u>41,814</u>
Net cash provided by operating activities	<u>5,001,391</u>	<u>5,928,254</u>
CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition and construction of capital assets and water rights	(3,127,683)	(3,326,248)
Availability fees	8,708,087	7,286,804
Proceeds from sale of capital assets	2,286	19,164
Principal payments on long-term liabilities	(4,807,438)	(6,822,919)
Interest payments on long-term obligations	(3,171,744)	(2,790,391)
Insurance proceeds	<u>9,917</u>	<u>-</u>
Net cash used in capital and related financing activities	<u>(2,386,575)</u>	<u>(5,633,590)</u>
INVESTING ACTIVITIES		
Proceeds from investments	724,706	4,084,263
Purchases of investments	(1,842,813)	(8,320,908)
Investment earnings	<u>531,216</u>	<u>405,472</u>
Net cash used in investing activities	<u>(586,891)</u>	<u>(3,831,173)</u>
Net increase (decrease) in cash and cash equivalents	2,027,925	(3,536,509)
CASH AND CASH EQUIVALENTS		
Beginning at July 1	<u>7,433,643</u>	<u>10,970,152</u>
Ending at June 30	<u><u>\$ 9,461,568</u></u>	<u><u>\$ 7,433,643</u></u>
RECONCILIATION TO STATEMENT OF NET POSITION		
Cash and cash equivalents, unrestricted	\$ 9,461,362	\$ 7,433,588
Cash and cash equivalents, restricted	<u>206</u>	<u>55</u>
	<u><u>\$ 9,461,568</u></u>	<u><u>\$ 7,433,643</u></u>

The Notes to Financial Statements are an integral part of this statement.

FREDERICK WATER
STATEMENTS OF CASH FLOWS
For the Year Ended June 30, 2018
(With Comparative Amounts for the Year Ended June 30, 2017)

	<u>2018</u>	<u>2017</u>
RECONCILIATION OF OPERATING LOSS TO NET CASH PROVIDED BY OPERATING ACTIVITIES:		
Operating loss	\$ (4,633,447)	\$ (5,190,379)
Adjustments to reconcile operating loss to net cash provided by operating activities:		
Depreciation	10,790,997	10,667,332
Excess of employer contributions over pension expense	(252,376)	(94,733)
Excess of employer contributions over other postemployment benefits expense	(14,002)	-
Other nonoperating expenses	(30,786)	-
(Increase) decrease in:		
Accounts receivable	(748,457)	(297,189)
Prepays and other assets	(4,101)	(83,063)
Inventories	(17,660)	(43,115)
Contract receivable	49,761	47,829
Increase (decrease) in:		
Accounts payable and accrued expenses	(215,345)	(178,005)
Unearned revenue	-	888,314
Customer deposits	17,055	148,675
Compensated absences	59,752	62,588
	<u>\$ 5,001,391</u>	<u>\$ 5,928,254</u>
Net cash provided by operating activities		
NONCASH CAPITAL AND RELATED FINANCING		
Developer contributed capital improvements	<u>\$ 4,325,621</u>	<u>\$ 7,603,596</u>
Interest payments capitalized	<u>\$ -</u>	<u>\$ 22,986</u>
Impairment loss	<u>\$ 11,483</u>	<u>\$ 25,184</u>
Debt incurred for acquisition of capital assets	<u>\$ 8,450</u>	<u>\$ 55,858</u>
Capital assets acquired through accounts payable	<u>\$ 55,548</u>	<u>\$ 238,880</u>

The Notes to Financial Statements are an integral part of this statement.

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 1. Summary of Significant Accounting Policies

Reporting entity

Frederick Water (the “Authority”) is a Virginia Corporation organized under the provisions of the Virginia Water and Waste Authorities Act (Sec. 15.2-5100 *et. seq.* of the *Code of Virginia*, 1950, as amended). The Authority’s purpose is to acquire, construct, operate, and maintain an integrated water and sewer system for Frederick County, Virginia.

The Authority is financed and operated in a manner similar to private business enterprises. The intent of the governing body is that the costs (expenses, including depreciation) of providing services to the general public on a continuing basis be financed or recovered primarily through user charges. The accounting policies of the Authority conform to generally accepted accounting principles as applicable to governments.

Measurement focus and basis of accounting

The Authority’s financial statements are reported using the *accrual basis of accounting*. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows.

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 principal ongoing operations. The principal operating revenues 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.

When both restricted and unrestricted resources are available for use, it is the Authority’s policy to use restricted resources first, then unrestricted resources as they are needed.

Cash and cash equivalents

Cash and cash equivalents are considered to be demand deposits as well as certificates of deposit and short-term investments with original maturities three months or less from the date of acquisition.

Accounts receivable

Charges for services are determined generally through bi-monthly billings to customers. Charges for services earned but unbilled are accrued based on the last billing.

Accounts receivable are stated net of an allowance for doubtful accounts. \$40,000 of this allowance relates to routine operations. As discussed in Note 10, the Authority has billed services, penalties, and other charges to a specific customer, all of which have an allowance associated with them due to the uncertainty of collection due current litigation.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 1. Summary of Significant Accounting Policies (Continued)

Contracts receivable

The Authority enters into contracts with developers to expand water and sewer lines to future development areas. Upon completion of construction and at the time the lines are placed in service the developer pays the Authority for a portion of the costs incurred for the project. Contracts receivable consist of amounts due for completed projects. The current portion is included in accounts receivable.

Inventories

Inventories are valued at first-in/first-out historical cost.

Capital assets

Capital assets, which are recorded at cost if purchased or constructed, include property, plant, equipment, infrastructure, and contractual rights to long-term assets. Contributed assets, principally water and sewer lines, are recorded at an amount which approximates the contributor's cost. The costs of major improvements and additions are capitalized. Normal repairs and maintenance are expensed. Any gain or loss on the sale or disposition of capital assets is recognized currently. Projects not in service are carried as construction in progress.

Capital assets are depreciated using the straight-line method over the following estimated useful lives:

	<u>Years</u>
Water source of supply	7-40
Water and sewage pumping	5-40
Water transmission and distribution	15-40
Sewage collection and transmission	5-40
General plant	3-40
FWSA treatment plant rights	20

The estimated useful lives of the treatment plant rights are based on the shorter of useful lives of the underlying assets or management's expectation regarding renewals of the agreements. Failure to renew these agreements may result in a loss of any unamortized cost of the treatment plant rights. Contractual rights for water sources of supply are based on the terms of the underlying agreements.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 1. Summary of Significant Accounting Policies (Continued)

Deferred outflows and inflows of resources

In addition to assets, the statement which presents financial position reports a separate section for deferred outflows of resources. These items represent a consumption of net position that applies to future periods and so will *not* be recognized as an outflow of resources (expense) until then.

In addition to liabilities, the statement which presents financial position reports a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position that applies to future periods and so will *not* be recognized as an inflow of resources (revenue) until that time.

The Authority has the following items that qualify for reporting as deferred inflows or outflows:

- Deferred charge on refunding. A deferred loss 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. Due to the relationship with outstanding debt, these deferred outflows are included in the calculation of net position, net investment in capital assets.
- Contributions subsequent to the measurement date for pensions and OPEB; these will be applied to the net pension or OPEB liability in the next fiscal year.
- Differences between expected and actual experience for economic/demographic factors and changes of assumptions in the measurement of the total pension or OPEB liability. This difference will be recognized in pension or OPEB expense over the expected average remaining service life of all employees provided with benefits in the plan and may be reported as a deferred inflow or outflow as appropriate.
- Changes in proportion and differences between the Authority's contributions and its proportionate share of contributions for OPEB are deferred and amortized over the average expected remaining service lives of all employees provided with group life insurance benefits, and may be reported as a deferred inflow or outflow as appropriate.
- Differences between projected and actual earnings on pension and OPEB plan investments. These differences will be recognized in pension or OPEB expense over the closed five year period and may be reported as a deferred outflow or inflow as appropriate.

Compensated absences

The Authority allows its employees to accumulate personal time off based on years of service. Personal time off hours in excess of the maximum at December 31 is forfeited. Upon termination or retirement, the Authority pays accumulated personal time off subject to the maximum accrual.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 1. Summary of Significant Accounting Policies (Continued)

Pensions and Other Postemployment Benefits (OPEB)

For purposes of measuring all financial statement elements related to pension and OPEB plans, information about the fiduciary net position of the Authority's Plans and the additions to/deductions from the Authority's 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.

Net position

Net position is the difference between assets and deferred outflows of resources, liabilities, and deferred inflows of resources. Net investment in capital assets represents capital assets, less accumulated depreciation, less any outstanding debt related to those assets. Restricted net position includes amounts which are set aside for the repayment of bond principal and interest, and potential future deficiencies in accordance with applicable bond covenants.

Estimates

Management uses estimates and assumptions in preparing its financial statements. Actual results could differ from those estimates.

Fair value measurement

The Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs. Level 2 investments are valued using a matrix pricing technique, which is based on the investments' benchmark quoted prices.

Note 2. Cash 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 2.20440 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, pledge collateral that ranges between 50% and 130% of excess deposits. Accordingly, all deposits are considered fully collateralized.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 2. Cash and Investments (Continued)

Deposits (Continued)

For the purposes of this disclosure, deposits include cash and cash equivalents as well as nonnegotiable certificates of deposit with original maturities of more than three months.

Investments

Statutes authorize local governments and other public bodies 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, which include banker’s acceptances, repurchase agreements, and the Virginia Investment Pool (VIP). The VIP is not registered with the SEC but is overseen by the Treasurer of Virginia and the State Treasury Board. The fair value of the Authority’s position in the pool is the same as the value of the pool shares.

The Authority’s policy limits investments to instruments specified in Section 26-40 of the Code of Virginia.

The Authority holds deposits in the VIP which has a Standard and Poor’s pool rating of AAf/S1. The VIP invests in various security types, including U.S. Treasury notes and U.S. government agency securities, corporate bonds, and commercial paper that are typically rated ‘AA-’ or higher and have an average maturity of approximately one to three years. The ‘AAf/S1’ rating reflects the high safety level of the invested principal and the fund’s capacity to maintain a stable net asset value.

The Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. As of June 30, 2018, the Authority’s investments in federal agency bonds and notes and corporate bonds and notes were valued using Level 2 inputs.

As of June 30, 2018, the Authority had approximately \$989,000 in investments that no longer meet the minimum financial ratings required by the Commonwealth of Virginia.

For the purposes of this disclosure, investments include unrestricted investments, and exclude nonnegotiable certificates of deposit with original maturities of more than three months.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 2. Cash and Investments (Continued)

Investments (Continued)

The Authority's investments consisted of the following:

Investment Type	Fair Value	S&P Credit Rating	Weighted Average Maturity *
Federal agency bonds and notes	\$ 3,674,027	AA+	2.08
Corporate bonds and notes	1,770,347	BBB to AAA	2.04
Virginia Investment Pool	13,164,026	AAf/S1	1.73
Total investments	<u>\$ 18,608,400</u>		
*-Average maturity in years			
Cash and cash equivalents	\$ 9,461,568		
Long-term certificates of deposit	8,174,757		
Total deposits	<u>\$ 17,636,325</u>		
Total deposits and investments	<u>\$ 36,244,725</u>		

Reconciliation of deposits and investments to Exhibit 1:

Cash and cash equivalents, unrestricted	\$ 9,461,362
Cash and cash equivalents, restricted	206
Investments	<u>26,783,157</u>
	<u>\$ 36,244,725</u>

Restricted assets

Cash and cash equivalents, restricted includes amounts which are set aside for the repayment of bond principal and interest, and potential future deficiencies in accordance with applicable bond covenants and other specified purposes as well as unspent bond proceeds. They are maintained in separate accounts.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 3. Accounts Receivable

Accounts receivable consisted of the following:

Billed	\$ 2,215,232
Unbilled	1,499,200
Other	117,225
Contracts receivable-current	<u>49,761</u>
	<u><u>\$ 3,881,418</u></u>

Note 4. Capital Assets

Capital asset activity for the year ended June 30, 2018 was as follows:

	<u>Beginning Balance</u>	<u>Increases</u>	<u>Decreases</u>	<u>Ending Balance</u>
Capital assets not being depreciated				
Land	\$ 4,100,841	\$ 7,719	\$ -	\$ 4,108,560
Construction in progress	<u>1,218,754</u>	<u>2,960,525</u>	<u>1,641,352</u>	<u>2,537,927</u>
Total capital assets, not being depreciated	<u>5,319,595</u>	<u>2,968,244</u>	<u>1,641,352</u>	<u>6,646,487</u>
Capital assets being depreciated				
Water source of supply	7,866,645	-	395	7,866,250
Water pumping	15,028,880	277,813	8,921	15,297,772
Sewage pumping	3,128,848	20,056	415	3,148,489
Water transmission and distribution	68,463,021	2,659,177	327,512	70,794,686
Sewage collection and transmission	78,085,786	2,552,777	3,466	80,635,097
General plant	9,703,133	430,759	73,588	10,060,304
FWSA treatment plant rights	<u>111,145,338</u>	<u>-</u>	<u>-</u>	<u>111,145,338</u>
Total capital assets being depreciated	<u>293,421,651</u>	<u>5,940,582</u>	<u>414,297</u>	<u>298,947,936</u>
Less accumulated depreciation for:				
Other capital assets	74,984,812	5,727,520	411,115	80,301,217
FWSA treatment plant rights	<u>38,935,510</u>	<u>5,063,477</u>	<u>-</u>	<u>43,998,987</u>
Total accumulated depreciation	<u>113,920,322</u>	<u>10,790,997</u>	<u>411,115</u>	<u>124,300,204</u>
Total capital assets being depreciated, net	<u>179,501,329</u>	<u>(4,850,415)</u>	<u>3,182</u>	<u>174,647,732</u>
Total capital assets, net	<u><u>\$184,820,924</u></u>	<u><u>\$ (1,882,171)</u></u>	<u><u>\$ 1,644,534</u></u>	<u><u>\$ 181,294,219</u></u>

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 4. Capital Assets (Continued)

Frederick-Winchester Service Authority (FWSA) treatment plant rights

As described in Note 5, the Authority and the FWSA have entered into agreements for the Authority to operate certain wastewater treatment plants of the FWSA. The Authority is not authorized to hold legal title to these assets, and thus, the FWSA holds title to these assets. Through long-term contracts, the risks and benefits of operating and maintaining the assets have been transferred to the Authority, and represent intangible capital assets. The Authority is responsible for a portion of the debt incurred for these facilities.

During 2007, a developer contributed a \$4,500,000 wastewater treatment plant to the FWSA. Based on a 2001 agreement between the FWSA and the Authority, the Authority operates this plant, resulting in additional treatment plant rights. Ninety-five percent of availability fees collected for use of capacity for this system will be paid to the developer until certain capacity thresholds are met or 15 years after conveyance.

During 2008, the FWSA issued debt for the upgrade and expansion of the Parkins Mill Wastewater Treatment Plant. During 2010, this project was completed and the Authority assumed responsibility for the operations of this plant as well as the related debt service in the approximate amount of \$37,930,000.

During 2008 and 2009, the FWSA issued debt for the upgrade and expansion of the Opequon Water Reclamation Facility. During 2011, this project was completed and the Authority assumed responsibility for a portion of the related debt service in the approximate amount of \$25,230,000.

During 2015, the FWSA issued refunding debt to reduce future debt service requirements and the Authority assumed its responsibility for a portion of the related debt service in the amount of \$7,846,051.

In November 2013, the Authority, along with the FWSA, the County of Frederick, and the City of Winchester, approved the Green Energy Project (the "Project") for the purpose of implementing a series of capacity and efficiency improvements to the Opequon Water Reclamation Facility. To finance this project, the FWSA authorized the issuance of \$53,000,000 in bonds. In late fiscal year 2017, the Project began accepting waste. The Authority has assumed responsibility for a portion of the related debt service in the approximate amount of \$25,092,500.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 5. Long-Term Liabilities

The following is a summary of changes in long-term liabilities:

	Beginning Balance	Increases	Decreases	Ending Balance	Due Within One Year
Obligations payable – FWSA	\$ 73,445,733	\$ -	\$ 3,412,068	\$ 70,033,665	\$ 3,668,241
Revenue bonds	18,062,063	-	1,391,160	16,670,903	1,416,705
Capital leases	6,666	8,450	4,209	10,907	2,963
Issuance premiums	1,900,674	-	234,284	1,666,390	171,673
	<u>93,415,136</u>	<u>8,450</u>	<u>5,041,721</u>	<u>88,381,865</u>	<u>5,259,582</u>
Compensated absences	607,173	401,388	341,636	666,925	533,540
Total long-term liabilities	<u>\$ 94,022,309</u>	<u>\$ 409,838</u>	<u>\$ 5,383,357</u>	<u>\$ 89,048,790</u>	<u>\$ 5,793,122</u>

The annual requirements to amortize long-term debt and related interest are as follows:

Fiscal Year	Obligations Payable – FWSA		Revenue Bonds		Capital Leases		Totals	
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
2019	\$ 3,668,241	\$ 2,346,939	\$ 1,416,705	\$ 707,112	\$ 2,963	\$ 414	\$ 5,087,909	\$ 3,054,465
2020	3,933,995	2,234,132	1,477,257	645,998	2,783	322	5,414,035	2,880,452
2021	3,773,994	2,113,483	1,547,819	578,460	2,382	191	5,324,195	2,692,134
2022	3,891,368	1,993,016	1,584,121	508,193	1,731	98	5,477,220	2,501,307
2023	4,022,550	1,865,764	1,640,000	433,256	1,048	17	5,663,598	2,299,037
2024-2028	22,212,027	7,217,988	5,940,000	1,282,730	-	-	28,152,027	8,500,718
2029-2033	15,121,639	3,876,611	1,375,000	449,383	-	-	16,496,639	4,325,994
2034-2038	10,929,585	1,779,659	1,160,000	241,924	-	-	12,089,585	2,021,583
2039-2040	2,480,266	59,219	530,001	31,236	-	-	3,010,267	90,455
	<u>\$ 70,033,665</u>	<u>\$ 23,486,811</u>	<u>\$ 16,670,903</u>	<u>\$ 4,878,292</u>	<u>\$ 10,907</u>	<u>\$ 1,042</u>	<u>\$ 86,715,475</u>	<u>\$ 28,366,145</u>

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 5. Long-Term Liabilities (Continued)

Details of long-term indebtedness are as follows:

	Issue Date	Maturity Date	Authorized and Issued	Interest Rate	Amount Outstanding
<u>Obligations Payable – FWSA</u>					
FWSA Opequon Water Facility Loans	04/01/2004	05/01/2020	\$ 5,960,160	3.50 %	\$ 818,579
2010 FWSA Parkins Mill Expansion	03/01/2010	09/01/2029	37,930,386	2.52	24,764,521
2011 FWSA Opequon Facility Expansion I	03/01/2008	10/01/2018	12,169,600	4.70	297,135
2011 FWSA Opequon Facility Expansion II	03/01/2009	03/01/2031	12,613,293	2.65	9,209,025
2015 FWSA Refunding Debt	05/28/2015	10/01/2038	7,840,530	3.22-5.13	7,786,215
FWSA Series 2014A	05/07/2014	10/01/2038	15,055,000	3.13-4.83	14,857,500
FWSA Series 2014B	07/29/2014	10/01/2038	10,037,500	3.65-5.13	9,930,000
FWSA Series 2016B	07/27/2017	10/01/2038	2,402,640	2.71-5.13	2,370,690
					<u>\$ 70,033,665</u>
<u>Revenue Bonds</u>					
Virginia Water Facilities Revolving Fund	03/16/2001	09/01/2021	\$ 649,352	1.50 %	\$ 130,903
VML/VACO Recovery Zone Bond	02/01/2010	02/01/2040	4,980,000	2.10-7.02	4,160,000
Virginia Infrastructure Revenue Bonds	11/14/2010	10/01/2022	5,460,000	3.10-5.10	2,795,000
Virginia Water and Sewer Refunding Bonds	05/28/2015	10/01/2027	6,020,000	3.13-5.13	6,020,000
Virginia Infrastructure Refunding Bonds	11/18/2015	10/01/2028	4,045,000	3.08-5.13	3,565,000
					<u>\$ 16,670,903</u>
<u>Capital Lease</u>					
Lease for equipment	09/01/2013	12/01/2018	\$ 5,950	4.56 %	\$ 525
Lease for equipment	10/01/2015	01/01/2021	5,950	4.62	3,011
Lease for equipment	11/01/2017	02/01/2023	8,450	4.89	7,371
					<u>\$ 10,907</u>

Accrued interest

During 2009, certain notes with Frederick County dated 1976 and 1987 were satisfied in exchange for availability fees. Long-term interest payable of \$657,083 related to those notes is still outstanding with no specified repayment date and no additional accrual of interest.

Prior defeasance of debt

In prior years, the Authority defeased certain outstanding revenue bonds payable. The proceeds were placed in trust to fund all future debt service payments. Accordingly, the trust account assets and liabilities for the defeased bonds are not included in the Authority's financial statements. At June 30, 2018, the following bonds are considered defeased:

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 5. Long-Term Liabilities (Continued)

Prior defeasance of debt (continued)

	Beginning Balance	Increases	Decreases	Ending Balance
VPFP Series 2005C	\$ 4,325,000	\$ -	\$ 275,000	\$ 4,050,000
VPFP Series 2007B	6,320,000	-	-	6,320,000
	<u>\$ 10,645,000</u>	<u>\$ -</u>	<u>\$ 275,000</u>	<u>\$ 10,370,000</u>

FWSA obligations

The Authority and the FWSA have entered multiple agreements for the Authority to operate certain sewage treatment facilities owned by the FWSA (See Note 4).

Note 6. Defined Benefit Pension Plan

Plan Description

All full-time, salaried permanent employees of the Authority, (the “Political Subdivision”) are automatically covered by VRS Retirement Plan upon employment. This agent multi-employer plan is 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.

The System administers three different benefit structures for covered employees – Plan 1, Plan 2, and Hybrid. Each of these benefit structures has a different eligibility criteria. The specific information for each plan and the eligibility for covered groups within each plan are as follows:

Plan 1 - Plan 1 is a defined benefit plan. The retirement benefit is based on a member’s age, creditable service, and average final compensation at retirement using a formula. Employees are eligible for Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013 and have not taken a refund.

- **Hybrid Opt-In Election** - VRS non-hazardous duty covered Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014. The Hybrid Retirement Plan’s effective date for eligible Plan 1 members who opted in was July 1, 2014. If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan. Members who were eligible for an optional retirement plan (ORP) and had prior service under Plan 1 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 1 or ORP.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 6. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Plan 1 (Continued)

- **Retirement Contributions** - Employees contribute 5.00% of their compensation each month to their member contribution account through a pre-tax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.
- **Creditable Service** - Creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.
- **Vesting** - Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least five years (60 months) of creditable service. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund. Members are always 100% vested in the contributions that they make.
- **Calculating the Benefit** - The Basic Benefit is calculated based on a formula using the member's average final compensation, a retirement multiplier, and total service credit at retirement. It is one of the benefit payout options available to a member at retirement. An early retirement reduction factor is applied to the Basic Benefit if the member retires with a reduced retirement benefit or selects a benefit payout option other than the Basic Benefit.
- **Average Final Compensation** - A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.
- **Service Retirement Multiplier** - The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier is 1.70%.
- **Normal Retirement Age** - Age 65.
- **Earliest Unreduced Retirement Eligibility** - Age 65 with at least five years (60 months) of creditable service or at age 50 with at least 30 years of creditable service.
- **Earliest Reduced Retirement Eligibility** - Age 55 with at least five years (60 months) of creditable service or age 50 with at least 10 years of creditable service.

(Continued)

FREDERICK WATER

NOTES TO FINANCIAL STATEMENTS

June 30, 2018

Note 6. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Plan 1 (Continued)

- **Cost-of-Living Adjustment (COLA) in Retirement** - The Cost-of-Living Adjustment (COLA) matches the first 3.00% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4.00%) up to a maximum COLA of 5.00%.
 - **Eligibility** – For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of creditable service, the COLA will go into effect on July 1 after one full calendar year from the retirement date. For members who retire with a reduced benefit and who have less than 20 years of creditable service, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.
 - **Exceptions to COLA Effective Dates** – The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances:
 - The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013.
 - The member retires on disability.
 - The member retires directly from short-term or long-term disability under the Virginia Sickness and Disability Program (VSDP).
 - The member is involuntarily separated from employment for causes other than job performance or misconduct and is eligible to retire under the Workforce Transition Act or the Transitional Benefits Program.
 - The member dies in service and the member's survivor or beneficiary is eligible for a monthly death-in-service benefit. The COLA will go into effect on July 1 following one full calendar year (January 1 to December 31) from the date the monthly benefit begins.
- **Disability Coverage** – Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.70% on all service, regardless of when it was earned, purchased, or granted.
- **Purchase of Prior Service** – Members may be eligible to purchase service from previous public employment, active duty military service, an eligible period of leave or VRS refunded service as creditable service in their plan. Prior creditable service counts toward vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. Members also may be eligible to purchase periods of leave without pay.

(Continued)

FREDERICK WATER

NOTES TO FINANCIAL STATEMENTS

June 30, 2018

Note 6. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Plan 2 - Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service, and average final compensation at retirement using a formula. Employees are eligible for Plan 2 if their membership date is 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.

- **Hybrid Opt-In Election** - Eligible Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014. The Hybrid Retirement Plan's effective date for eligible Plan 2 members who opted in was July 1, 2014. If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan. Members who were eligible for an optional retirement plan (ORP) and have prior service under Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 2 or ORP.
- **Retirement Contributions** - Employees contribute 5.00% of their compensation each month to their member contribution account through a pre-tax salary reduction.
- **Creditable Service** - Same as Plan 1.
- **Vesting** - Same as Plan 1.
- **Calculating the Benefit** - See definition under Plan 1.
- **Average Final Compensation** - A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.
- **Service Retirement Multiplier** - Same as Plan 1 for service earned, purchased, or granted prior to January 1, 2013. For members the retirement multiplier is 1.65% for creditable service earned, purchased, or granted on or after January 1, 2013.
- **Normal Retirement Age** - Normal Social Security retirement age.
- **Earliest Unreduced Retirement Eligibility** - Normal Social Security retirement age with at least five years (60 months) of creditable service or when their age and service equal 90.
- **Earliest Reduced Retirement Eligibility** - Age 60 with at least five years (60 months) of creditable service.
- **Cost-of-Living Adjustment (COLA) in Retirement** - The Cost-of-Living Adjustment (COLA) matches the first 2.00% increase in the CPI-U and half of any additional increase (up to 2.00%), for a maximum COLA of 3.00%.
 - **Eligibility** - Same as Plan 1.
 - **Exceptions to COLA Effective Dates** - Same as Plan 1.
- **Disability Coverage** - Same as Plan 1 except that the retirement multiplier is 1.65%.
- **Purchase of Prior Service** - Same as Plan 1.

(Continued)

FREDERICK WATER

NOTES TO FINANCIAL STATEMENTS

June 30, 2018

Note 6. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Hybrid Retirement Plan - The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. Most members hired on or after January 1, 2014 are in this plan, as well as Plan 1 and Plan 2 members who were eligible and opted into the plan during a special election window. The defined benefit is based on a member's age, creditable service, and average final compensation at retirement using a formula. The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions. In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.

- **Eligible Members** - Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes political subdivision employees; members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1 through April 30, 2014; the plan's effective date for opt-in members was July 1, 2014.
- **Non-Eligible Members** - Some employees are not eligible to participate in the Hybrid Retirement Plan. They include political subdivision employees who are covered by enhanced benefits for hazardous duty employees. Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.
- **Retirement Contributions** - A member's retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee's creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.
- **Creditable Service** –
 - **Defined Benefit Component** – Under the defined benefit component of the plan, creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.
 - **Defined Contributions Component** – Under the defined contribution component, creditable service is used to determine vesting for the employer contribution portion of the plan.

(Continued)

FREDERICK WATER

NOTES TO FINANCIAL STATEMENTS

June 30, 2018

Note 6. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Hybrid Retirement Plan (Continued)

- **Vesting –**
 - **Defined Benefit Component** – Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of creditable service. Plan 1 or Plan 2 members with at least five years (60 months) of creditable service who opted into the Hybrid Retirement Plan remain vested in the defined benefit component.
 - **Defined Contributions Component** – Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan. Members are always 100% vested in the contributions that they make. Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service. After two years, a member is 50% vested and may withdraw 50% of employer contributions. After three years, a member is 75% vested and may withdraw 75% of employer contributions. After four or more years, a member is 100% vested and may withdraw 100% of employer contributions. Distribution is not required by law until age 70½.
- **Calculating the Benefit -**
 - **Defined Benefit Component** – See definition under Plan 1.
 - **Defined Contribution Component** – The benefit is based on contributions made by the member and any matching contributions made by the employer, plus net investment earnings on those contributions.
- **Average Final Compensation** - Same as Plan 2 for the defined benefit component of the plan.
- **Service Retirement Multiplier** – The retirement multiplier for the defined benefit component 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.
- **Normal Retirement Age –**
 - **Defined Benefit Component** – Same as Plan 2.
 - **Defined Contribution Component** – Members are eligible to receive distributions upon leaving employment, subject to restrictions.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 6. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

Hybrid Retirement Plan (Continued)

- **Earliest Unreduced Retirement Eligibility –**
 - **Defined Benefit Component** – Normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90.
 - **Defined Contribution Component** – Members are eligible to receive distributions upon leaving employment, subject to restrictions.
- **Earliest Reduced Retirement Eligibility –**
 - **Defined Benefit Component** – Members may retire with a reduced benefit as early as age 60 with at least five years (60 months) of creditable service.
 - **Defined Contribution Component** – Members are eligible to receive distributions upon leaving employment, subject to restrictions.
- **Cost-of-Living Adjustment (COLA) in Retirement**
 - **Defined Benefit Component** – Same as Plan 2.
 - **Defined Contribution Component** – Not Applicable.
 - **Eligibility** – Same as Plan 1 and 2.
 - **Exceptions to COLA Effective Dates** – Same as Plan 1 and 2.
- **Disability Coverage** - Employees of political subdivisions (including Plan 1 and Plan 2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides an employer-paid comparable program for its members. Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VLDP are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.
- **Purchase of Prior Service –**
 - **Defined Benefit Component** – Same as Plan 1, with the following exceptions:
 - Hybrid Retirement Plan members are ineligible for ported service.
 - **Defined Contribution Component** – Not Applicable.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 6. Defined Benefit Pension Plan (Continued)

Employees Covered by Benefit Terms

As of the June 30, 2016 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	<u>Number</u>
Inactive members or their beneficiaries currently receiving benefits	<u>25</u>
Inactive members:	
Vested inactive members	3
Non-vested inactive members	7
Inactive members active elsewhere in VRS	<u>1</u>
Total inactive members	11
Active members	<u>63</u>
Total covered employees	<u><u>99</u></u>

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. Prior to July 1, 2012, all or part of the 5.00% member contribution may have been assumed by the employer. Beginning July 1, 2012 new employees were required to pay the 5.00% member contribution. In addition, for existing employees, employers were required to begin making the employee pay the 5.00% member contribution. This could be phased in over a period of up to 5 years and the employer is required to provide a salary increase equal to the amount of the increase in the employee-paid member contribution.

The political subdivision's contractually required contribution rate for the year ended June 30, 2018 was 6.64% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015.

This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employee during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the political subdivision were \$221,893 and \$211,875 for the years ended June 30, 2018 and 2017, respectively.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 6. Defined Benefit Pension Plan (Continued)

Net Pension Liability

The political subdivision's net pension liability was measured as of June 30, 2017. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2016, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2017.

Actuarial Assumptions – General Employees

The total pension liability for General Employees in the Political Subdivision's Retirement Plan was based on an actuarial valuation as of June 30, 2016, 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, 2017.

Inflation	2.50%
Salary increases, including inflation	3.50 – 5.35%
Investment rate of return	7.00%, 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 rate for GASB purposes of slightly more than the assumed 7.0%. However, since the difference was minimal, and a more conservative 7.0% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0% to simplify preparation of pension liabilities.

Mortality rates: General employees – 15 to 20% of deaths are assumed to be service related. Public Safety Employees – 60% of deaths are assumed to be service related. Mortality is projected using the applicable RP-2014 Mortality Table Projected to 2020 with various set backs or set forwards for both males and females.

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

General Employees - Largest 10 – Non-Hazardous Duty and All Others (Non 10 Largest): Update mortality table; lowered retirement rates at older ages, changed final retirement from 70 to 75; lowered disability rates, no change to salary scale, increased rate of line of duty disability from 14% to 20%.

(Continued)

FREDERICK WATER

NOTES TO FINANCIAL STATEMENTS

June 30, 2018

Note 6. Defined Benefit Pension Plan (Continued)

Long-Term Expected Rate of Return

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

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

- * The above allocation provides for 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 rate of 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 2.5%.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 6. Defined Benefit Pension Plan (Continued)

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2019, the rate contributed by the employer for the Political Subdivision Retirement Plan will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2019 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

Changes in Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balances at June 30, 2016	\$ 9,864,758	\$ 8,620,301	\$ 1,244,457
Changes for the year:			
Service cost	318,484	-	318,484
Interest	675,153	-	675,153
Differences between expected and actual experience	(282,765)	-	(282,765)
Change of assumptions	(196,240)	-	(196,240)
Contributions – employer	-	211,875	(211,875)
Contributions – employee	-	161,565	(161,565)
Net investment income	-	1,053,419	(1,053,419)
Benefit payments, including refunds of employee contributions	(439,431)	(439,431)	-
Administrative expenses	-	(6,035)	6,035
Other changes	-	(938)	938
Net changes	75,201	980,455	(905,254)
Balances at June 30, 2017	\$ 9,939,959	\$ 9,600,756	\$ 339,203

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 6. Defined Benefit Pension Plan (Continued)

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

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

	1.00% Decrease (6.00%)	Current Discount Rate (7.00%)	1.00% Increase (8.00%)
Political subdivision's net pension liability (asset)	\$ 1,525,862	\$ 339,203	\$ (656,360)

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

For the year ended June 30, 2018, the political subdivision recognized pension expense (income) of (\$30,483). At June 30, 2018, the political subdivision 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	\$ -	\$ (524,019)
Changes of assumptions	-	(159,899)
Net difference between projected and actual earnings on pension plan investments	-	(143,533)
Employer contributions subsequent to the measurement date	221,893	-
Total	\$ 221,893	\$ (827,451)

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 6. Defined Benefit Pension Plan (Continued)

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

The Authority reported deferred outflows of resources related to pensions resulting from the Political Subdivision's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended June 30, 2018. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ending June 30,	Increase (Reduction) to Pension Expense
2019	\$ (268,660)
2020	(144,461)
2021	(177,327)
2022	(201,523)
2023	(35,480)
Thereafter	-

Pension Plan Data

Information about the VRS Political Subdivision Retirement Plans is also available in the separately issued VRS 2017 Comprehensive Annual Financial Report (CAFR). A copy of the 2017 VRS CAFR may be downloaded from the VRS website at <http://www.varetire.org/Pdf/Publications/2017-annual-report.pdf> or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

Note 7. Other Postemployment Benefits Liability – Virginia Retirement System Plans

In addition to their participation in the pension plans offered through the Virginia Retirement System (VRS), the Authority also participates in various cost-sharing and agent multi-employer other postemployment benefit plans, described as follows.

Plan Descriptions

Group Life Insurance Program

All full-time teachers and employees of political subdivisions are automatically covered by the VRS Group Life Insurance (GLI) Program upon employment.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 7. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

Optional Group Life Insurance Program

In addition to the Basic Group Life Insurance Benefit, members are also eligible to elect additional coverage for themselves as well as a spouse or dependent children through the Optional Group Life Insurance 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.

Specific information for the GLI is available at <https://www.varetire.org/members/benefits/life-insurance/basic-group-life-insurance.asp>

The GLI plan is administered by the VRS, along with pensions and other OPEB plans, for public employer groups in the Commonwealth of Virginia. This plan is considered a multiple employer, cost sharing plan.

General Employee Health Insurance Credit Program

The General Employee Health Insurance Credit Program (HIC) is available for all full time, salaried employees of local government entities other than Teachers. The General Employee HIC provides all the same benefits as the Teacher HIC, except that this plan is considered a multi-employer agent plan.

As of the June 30, 2016 actuarial valuation, the following employees were covered by the benefit terms of the General Employee Health Insurance Credit Program:

	<u>Number</u>
Inactive members or their beneficiaries currently receiving benefits	<u>11</u>
Inactive members:	
Vested inactive members	-
Non-vested inactive members	-
Inactive members	<u>-</u>
Total inactive members	11
Active members	<u>63</u>
Total covered employees	<u><u>74</u></u>

(Continued)

FREDERICK WATER

NOTES TO FINANCIAL STATEMENTS

June 30, 2018

Note 7. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

Contributions

Contributions to the VRS OPEB programs were based on actuarially determined rates from actuarial valuations as of June 30, 2015. The actuarially determined rates were expected to finance the cost of benefits earned by employees during the year, with an additional amount to fund any unfunded accrued liability. Specific details related to the contributions for the VRS OPEB programs are as follows:

Group Life Insurance Program

Governed by:	<i>Code of Virginia</i> 51.1-506 and 51.1-508 and may be impacted as a result of funding provided to school divisions and governmental agencies by the Virginia General Assembly.
Total rate:	1.31% of covered employee compensation. Rate allocated 60/40; 0.79% employee and 0.52% employer. Employers may elect to pay all or part of the employee contribution.
June 30, 2018 Contribution	\$18,626
June 30, 2017 Contribution	\$17,312

General Employee Health Insurance Credit Program

Governed by:	<i>Code of Virginia</i> 51.1-1402(E) and may be impacted as a result of funding provided to governmental agencies by the Virginia General Assembly.
Total rate:	0.14% of covered employee compensation.
June 30, 2018 Contribution	\$5,014
June 30, 2017 Contribution	\$4,652

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

The net OPEB liabilities were measured as of June 30, 2017 and the total OPEB liabilities used to calculate the net OPEB liabilities were determined by actuarial valuations as of that date. The covered employer's proportion of the net OPEB liabilities were based on the covered employer's actuarially determined employer contributions for the year ended June 30, 2017 relative to the total of the actuarially determined employer contributions for all participating employers.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 7. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

Group Life Insurance Program

June 30, 2018 proportionate share of liability	\$272,000
June 30, 2017 proportion	0.01805%
June 30, 2016 proportion	0.01708%
June 30, 2018 expense	\$6,000

Since there was a change in proportionate share between measurement dates, a portion of the OPEB expense above was related to deferred amount from changes in proportion. The 2018 expense for the Health Insurance Credit Program was \$3,638.

General Employee Health Insurance Credit Program

Changes in net OPEB liability of the General Employee Health Insurance Credit Program were as follows:

	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) – (b)
Balances at June 30, 2016	\$ 94,765	\$ 58,582	\$ 36,183
Changes for the year:			
Service cost	2,588	-	2,588
Interest	6,514	-	6,514
Changes of assumptions	(3,883)	-	(3,883)
Contributions – employer	-	4,652	(4,652)
Net investment income	-	6,878	(6,878)
Benefit payments, including refunds of employee contributions	(3,422)	(3,422)	-
Administrative expenses	-	(114)	114
Other changes	-	343	(343)
Net changes	1,797	8,337	(6,540)
Balances at June 30, 2017	\$ 96,562	\$ 66,919	\$ 29,643

(Continued)

FREDERICK WATER

NOTES TO FINANCIAL STATEMENTS

June 30, 2018

Note 7. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

At June 30, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources.

Group Life Insurance Program

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ -	\$ (6,000)
Changes of assumptions	-	(14,000)
Net difference between projected and actual earnings on OPEB plan investments	-	(10,000)
Changes in proportionate share	14,000	-
Employer contributions subsequent to the measurement date	18,626	-
Total	<u>\$ 32,626</u>	<u>\$ 30,000</u>

General Employee Health Insurance Credit Program

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of assumptions	\$ -	\$ (3,345)
Net difference between projected and actual earnings on OPEB plan investments	-	(2,181)
Employer contributions subsequent to the measurement date	5,014	-
Total	<u>\$ 5,014</u>	<u>\$ 5,526</u>

The deferred outflows of resources related to OPEB resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the net OPEB liability in the year ended June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 7. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

Group Life Insurance Program

Year Ending June 30,	Increase (Reduction) to OPEB Expense
2019	\$ (3,296)
2020	(3,296)
2021	(3,296)
2022	(3,296)
2023	(1,943)
Thereafter	(873)

General Employee Health Insurance Credit Program

Year Ending June 30,	Increase (Reduction) to OPEB Expense
2019	\$ (1,083)
2020	(1,083)
2021	(1,083)
2022	(1,084)
2023	(538)
Thereafter	(655)

Actuarial Assumptions and Other Inputs

The total OPEB liability was determined using the following assumptions based on an actuarial valuation date of June 30, 2016, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2017:

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 7. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

Inflation	2.5%
Salary increases, including inflation:	
• Locality- general employees	3.5 – 5.35%
Investment rate of return, net of expenses, including inflation*	GLI & HIC: 7.0%

- * 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 rate for GASB purposes of slightly more than the assumed percent above. However, since the difference was minimal, and a more conservative 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 the percent noted above to simplify preparation of OPEB liabilities.

Mortality rates used for the various VRS OPEB plans are the same as those used for the actuarial valuations of the VRS pension plans. The mortality rates are discussed in detail at Note 6.

Net OPEB Liabilities

The net OPEB liabilities represent each program's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of June 30, 2017, net OPEB liability amounts for the various VRS OPEB programs are as follows (amounts expressed in thousands):

	Group Life Insurance Program
Total OPEB Liability	\$ 2,942,426
Plan fiduciary net position	1,437,586
Employers' net OPEB liability (asset)	\$ 1,504,840
Plan fiduciary net position as a percentage of total OPEB liability	48.86%

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

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 7. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

Long-Term Expected Rate of Return

Group Life Insurance and Health Insurance Credit Programs

The long-term expected rate of return on VRS 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 OPEB investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

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

- * The above allocation provides for 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 rate of 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 2.5%.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 7. Other Postemployment Benefits Liability – Virginia Retirement System Plans (Continued)

Discount Rate

The discount rate used to measure the GLI and HIC OPEB liabilities was 7.00%. The discount rate used to measure the LODA OPEB liability was 3.56%. The projection of cash flows used to determine the discount rate assumed that System 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 ending June 30, 2019, the rate contributed by the employer for the OPEB liabilities will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2019 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the OPEB plans' 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 OPEB liability.

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

The following presents the net OPEB liabilities of the Authority, as well as what the Authority's net OPEB liabilities would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current discount rate:

	1.00% Decrease (6.00%)	Current Discount Rate (7.00%)	1.00% Increase (8.00%)
GLI Net OPEB liability	\$ 351,317	\$ 272,000	\$ 207,020
General Employee HIC Net OPEB liability	\$ 39,245	\$ 29,643	\$ 21,431

OPEB Plan Fiduciary Net Position

Information about the various VRS OPEB plan fiduciary net position is available in the separately issued VRS 2017 Comprehensive Annual Financial Report (CAFR). A copy of the 2017 VRS CAFR may be downloaded from the VRS website at <http://www.varetire.org/Pdf/Publications/2017-annual-report.pdf>, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

(Continued)

FREDERICK WATER

NOTES TO FINANCIAL STATEMENTS

June 30, 2018

Note 8. Water Contracts

The Authority obtains water from the City of Winchester under a 1971 contract most recently amended in 2002. The amended contract expires April 30, 2022, and includes rate adjustments, subject to certain limitations. The Authority also obtains water from Carmeuse Lime & Stone under a 2013 contract that expires in 2020. Purchases amounted to \$4,174,726 for 2018.

Note 9. 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; and natural disasters. The Authority participates with other localities in the Virginia Association of Counties Liability Pool, a public entity risk pool for its coverage of general liability, auto insurance, and workers' compensation. Each member of this risk pool jointly and severally agrees to assume, pay, and discharge any liability. The Authority pays the contributions and assessments based upon classification and rates into a designated cash reserve fund out of which expenses of the pool, claims and awards are to be paid. In the event of a loss deficit and depletion of all available excess insurance, the pool may assess all members in the proportion in which the premium of each bears to the total premiums of all members in the year in which such deficit occurs. The Authority carries commercial insurance for all other risks of loss. Settled claims resulting from these risks have not exceeded commercial coverage in the past three years and there have not been any significant reductions in coverage from the previous year.

Note 10. Commitments and Contingencies

Availability Agreements

The Authority has entered various agreements to provide availability to water and sewer systems. Fees collected in exchange for these contracts are unearned until the availability is provided.

During 2017, the Authority entered into an agreement with a developer of multi-family dwelling units. The Authority has agreed to reserve capacity for the developer for a period of 10 years. The Authority held, as of June 30, 2018, an irrevocable letter of credit for \$1.87 million for an agreed upon number of connections. This letter of credit was released to the Authority on October 15, 2018, at which point an unearned revenue liability was recognized. The developer has 10 years to make the actual connections to the Frederick Water system. Revenue will be recognized as connections are made.

Settlement Agreements

During 2013, the Authority entered into a settlement agreement with a water supply source (quarry) which is effective for at least seven years and replaced an existing lease which had provided water rights at three separate locations. The agreement provides the Authority with a minimum of 2.2 million gallons of water per day (subject to force majeure) and requires the Authority to purchase water for at least seven years at annually increasing rates and a minimum of 1.8 million gallons of water per day on an annual average. The Authority was required to pay \$4,000,000 as part of the agreement and has capitalized these costs as an intangible water right.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 10. Commitments and Contingencies (Continued)

Settlement Agreements (Continued)

The agreement also requires the Authority to find a substitute location if and when its current plant site interferes with the water supply source's mining operations. A significant portion of the equipment at the current site would be available for use at a new location.

Additionally, the agreement includes a cost sharing arrangement for the construction of ball fields. Per the agreement, in the event mining activities result in the displacement of existing ball fields within the time period during which the Authority purchases water or for a period of ten years from April 24, 2013 (whichever occurs later), Frederick County may require the Authority pay the cost of construction of new ball fields, excluding land costs. The displacement of existing ball fields is expected to occur at the end of 2019, and as a result, the Authority must have the ball fields ready for use in the spring of 2020. The Authority has recorded a liability for the estimated costs to complete the ball fields of \$2,500,000.

Litigation

At June 30, 2018, the Authority was the defendant in a lawsuit relating to a dispute regarding its use of a water source. On October 9, 2018, the parties reached an agreement on a set of terms for settlement. The terms have been approved by resolution of the Board of Directors of Authority and the Town Council, and the parties are currently working towards memorializing those terms in settlement documents. Due to uncertainty of the fair value of the settlement terms, as well as uncertainty of ultimate collection, the Authority has recorded an allowance for the entire June 30, 2018 receivable balance due from the plaintiff of \$8,530,236 related to billings from 2018 and prior. As of June 30, 2018, this balance was comprised of \$1,233,993 related to billings for water, wastewater, and debt service charges, and \$7,296,243 for late fees and penalties.

The Authority is the defendant in a lawsuit relating to a claim by a developer seeking reimbursement for the costs of a water line upgrade it performed, as well as challenging the methodology the Authority uses to derive its availability fees. Management and legal counsel are of the opinion that an outcome of the case cannot be reasonably determined. Management estimates that, if unsuccessful in the litigation, the Authority could be liable for approximately \$1,320,000.

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 11. Restatement of Net Position

In the current year the Authority adopted GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. This standard replaces the requirements of GASB Statement No. 45 as it relates to governments that provide postemployment benefits other than pensions. The new Statement requires governments providing defined benefit postemployment benefits to recognize the long-term obligation for those benefits as a liability for the first time, and to more comprehensively and comparably measure the annual costs of other postemployment benefits. The Statement also enhances accountability and transparency through revised and new note disclosures and required supplementary information, including disclosing descriptive information about the types of benefits provided, how contributions to the plans are determined, and assumptions and methods used to calculate the liability. Comparative prior year information, to the extent presented, has not been restated because the necessary information is not available.

Additionally, certain previously unrecorded liabilities related to contractual obligations were identified during fiscal year 2018. In order to properly account for these agreements, the Authority has recognized unearned revenue liability as of July 1, 2017.

The following is a summary of the restatements to net position:

Net position, July 1, 2017, as previously reported	\$ 121,710,054
Recognition of other postemployment benefit related liabilities and related deferred outflows/inflows in accordance with GASB No. 75	(313,531)
Recognition of unearned revenue from previously unrecorded contractual obligations	(1,205,101)
	<hr/>
Net position, July 1, 2017, as restated	<u>\$ 120,191,422</u>

Note 12. New Accounting Standards

The Governmental Accounting Standards Board (GASB) has issued the following Statements which are not yet effective.

The GASB issued **Statement No. 83**, Certain Asset Retirement Obligations in November 2016. This Statement establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for asset retirement obligations. The requirements of this Statement are effective for periods beginning after June 15, 2018.

(Continued)

FREDERICK WATER

NOTES TO FINANCIAL STATEMENTS

June 30, 2018

Note 12. New Accounting Standards (Continued)

The GASB issued **Statement No. 84**, *Fiduciary Activities* in January 2017. This Statement establishes standards of accounting and financial reporting for fiduciary activities. The requirements of this Statement are effective for periods beginning after December 15, 2018.

The GASB issued **Statement No. 87**, *Leases* in June 2017. This Statement establishes standards of accounting and financial reporting for leases by lessees and lessors. The requirements of this Statement are effective for periods beginning after December 15, 2019.

The GASB issued **Statement No. 88**, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements* in March 2018. This Statement improves the information that is disclosed in notes to government financial statements related to debt, including direct borrowing and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. This Statement defines debt for purposes of disclosure in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. The requirements of this Statement are effective for periods beginning after June 15, 2018.

The GASB issued **Statement No. 90**, *Major Equity Interests, an amendment of GASB Statements No. 14 and No. 61* in August 2018. This Statement improves the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and improves the relevance of financial statement information for certain component units. It defines a majority equity interest and specifies that a majority equity interest in a legally separate organization should be reported as an investment if a government's holding of the equity interest meets the definition of an investment. A majority equity interest that meets the definition of an investment should be measured using the equity method, unless it is held by a special-purpose government engaged only in fiduciary activities, a fiduciary fund, or an endowment (including permanent and term endowments) or permanent fund. Those governments and funds should measure the majority equity interest at fair value.

For all other holdings of a majority equity interest in a legally separate organization, a government should report the legally separate organization as a component unit, and the government or fund that holds the equity interest should report an asset related to the majority equity interest using the equity method. This Statement establishes that ownership of a majority equity interest in a legally separate organization results in the government being financially accountable for the legally separate organization and, therefore, the government should report that organization as a component unit.

This Statement also requires that a component unit in which a government has a 100 percent equity interest account for its assets, deferred outflows of resources, liabilities, and deferred inflows of resources at acquisition value at the date the government acquired a 100 percent equity interest in the component unit. Transactions presented in flows statements of the component unit in that circumstance should include only transactions that occurred subsequent to the acquisition.

(Continued)

FREDERICK WATER
NOTES TO FINANCIAL STATEMENTS
June 30, 2018

Note 12. New Accounting Standards (Continued)

The requirements of this Statement are effective for periods beginning after December 15, 2018. The requirements should be applied retroactively, except for the provisions related to (1) reporting a majority equity interest in a component unit and (2) reporting a component unit if the government acquires a 100 percent equity interest. Those provisions should be applied on a prospective basis.

Management has not determined the effects these new GASB Statements may have on prospective financial statements

REQUIRED SUPPLEMENTARY INFORMATION

FREDERICK WATER

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
June 30, 2018

	Plan Year Ended June 30,			
	2017	2016	2015	2014
Total Pension Liability				
Service cost	\$ 318,484	\$ 294,234	\$ 287,609	\$ 286,002
Interest on total pension liability	675,153	651,099	643,148	610,394
Difference between expected and actual experience	(282,765)	(159,986)	(383,245)	-
Changes of assumptions	(196,240)	-	-	-
Benefit payments, including refunds of employee contributions	(439,431)	(444,009)	(423,840)	(433,133)
Net change in total pension liability	75,201	341,338	123,672	463,263
Total pension liability - beginning	9,864,758	9,523,420	9,399,748	8,936,485
Total pension liability - ending	9,939,959	9,864,758	9,523,420	9,399,748
Plan Fiduciary Net Position				
Contributions - employer	211,875	281,381	267,322	277,708
Contributions - employee	161,565	150,593	143,454	138,417
Net investment income	1,053,419	151,265	374,931	1,112,963
Benefit payments, including refunds of employee contributions	(439,431)	(444,009)	(423,840)	(433,133)
Administrative expenses	(6,035)	(5,224)	(5,062)	(5,963)
Other	(938)	(63)	(77)	58
Net change in plan fiduciary net position	980,455	133,943	356,728	1,090,050
Plan fiduciary net position - beginning	8,620,301	8,486,358	8,129,630	7,039,580
Plan fiduciary net position - ending	9,600,756	8,620,301	8,486,358	8,129,630
Net pension liability - ending	\$ 339,203	\$ 1,244,457	\$ 1,037,062	\$ 1,270,118
Plan fiduciary net position as a percentage of total pension liability	97%	87%	89%	86%
Covered payroll	\$ 3,322,990	\$ 3,068,409	\$ 2,891,892	\$ 2,780,545
Net pension liability as a percentage of covered payroll	10%	41%	36%	46%

The plan years above are reported in the entity's financial statements in the fiscal year following the plan year - i.e., plan year 2014 was presented in the entity's fiscal year 2015 financial report.

This schedule is intended to show information for 10 years. Since fiscal year 2015 (plan year 2014) was the first year for this presentation, no earlier data is available. Additional years will be included as they become available.

The Notes to Required supplementary Information are an integral part of this schedule.

FREDERICK WATER

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF PENSION CONTRIBUTIONS
June 30, 2018

Entity Fiscal Year Ended June 30	Actuarially Determined Contribution	Contributions in Relation to Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2018	\$ 221,893	\$ 221,893	\$ -	\$ 3,581,847	6.19%
2017	211,875	211,875	-	3,322,990	6.38%
2016	281,381	281,381	-	3,068,409	9.17%
2015	268,657	268,657	-	2,891,892	9.29%

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

The covered payroll amounts above are for the Authority's fiscal year - i.e., the covered payroll on which required contributions were based for the same year.

FREDERICK WATER

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN NET OPEB LIABILITY AND RELATED RATIOS

June 30, 2018

VRS Health Insurance Credit - General Employees	Plan Year Ended June 30, 2017
Total OPEB Liability	
Service cost	\$ 2,588
Interest on total OPEB liability	6,514
Changes of assumptions	(3,883)
Benefit payments	(3,422)
	<hr/>
Net change in total OPEB liability	1,797
Total OPEB liability - beginning	<hr/> 94,765
Total OPEB liability - ending	<hr/> 96,562
 Plan Fiduciary Net Position	
Contributions - employer	4,652
Net investment income	6,878
Benefit payments	(3,422)
Administrative expenses	(114)
Other	343
	<hr/>
Net change in plan fiduciary net position	8,337
Plan fiduciary net position - beginning	<hr/> 58,582
Plan fiduciary net position - ending	<hr/> 66,919
 Net OPEB liability - ending	 <hr/> <hr/> \$ 29,643
 Plan fiduciary net position as a percentage of total OPEB liability	 <hr/> <hr/> 69%
 Covered payroll	 <hr/> <hr/> \$ 3,322,990
 Net OPEB liability as a percentage of covered payroll	 <hr/> <hr/> 1%

The plan years above are reported in the entity's financial statements in the fiscal year following the plan year - i.e., plan year 2017 was presented in the entity's fiscal year 2018 financial report.

This schedule is intended to show information for 10 years. Since fiscal year 2018 (plan year 2017) is the first year for this presentation, no earlier data is available. Additional years will be included as they become available.

The Notes to Required Supplementary Information are an integral part of this schedule.

FREDERICK WATER

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER'S SHARE OF NET OPEB LIABILITY
June 30, 2018

Plan Year Ended June 30	Employer's Proportion of the Net OPEB Liability (Asset)	Employer's Proportionate Share of the Net OPEB Liability (Asset)	Employer's Covered Payroll	Employer's Proportionate Share of the Net OPEB Liability (Asset) as a Percentage of its Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability
Virginia Retirement System - Group Life Insurance - General Employees					
2017	0.01805%	\$ 272,000	\$ 3,322,990	8.19%	48.86%

The plan years above are reported in the entity's financial statements in the fiscal year following the plan year - e.g., plan year 2017 information was presented in the entity's fiscal year 2018 financial report.

Schedule is intended to show information for 10 years. Since 2018 was the first year for this presentation, no earlier data is available. However, additional years will be included as they become available.

FREDERICK WATER

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF OPEB CONTRIBUTIONS

June 30, 2018

Entity Fiscal Year Ended June 30	Contractually Required Contribution	Contributions in Relation to Contractually Required Contribution	Contribution Deficiency (Excess)	Employer's Covered Payroll	Contributions as a Percentage of Covered Payroll
VRS Health Insurance Credit - General Employees					
2018	\$ 5,014	\$ 5,014	\$ -	\$ 3,581,847	0.14%
VRS Group Life Insurance - General Employees					
2018	18,626	18,626	-	3,581,847	0.52%

Schedule is intended to show information for 10 years. Since 2018 was the first year for this presentation, only one year of data is available. Additional years will be included as they become available.

The covered payroll amounts above are for the Authority's fiscal year - i.e., the covered payroll on which required contributions were based for the same year.

FREDERICK WATER

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION June 30, 2018

Note 1. Changes of Benefit Terms

Pension

There have been no actuarially material changes to the Virginia Retirement System (System) benefit provisions since the prior actuarial valuation. The 2014 valuation includes Hybrid Retirement Plan members for the first time. The hybrid plan applies to most new employees hired on or after January 1, 2014 and not covered by enhanced hazardous duty benefits. Because this was a new benefit and the number of participants was relatively small, the impact on the liabilities as of the measurement date of June 30, 2017 are not material.

Other Postemployment Benefits (OPEB)

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

Note 2. Changes of Assumptions

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

Largest 10 – Non-Hazardous Duty:

- Update mortality table
- Lowered in rates of service retirement
- Update withdrawal rates to better fit experience
- Lowered in rates of disability retirement
- No changes to salary rates
- Increase Line of Duty Disability rates
- Applicable to: Pension, GLI OPEB, and HIC OPEB

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

- Update mortality table
- Lowered rates of retirement at older ages and changed final retirement from 70 to 75
- Update withdrawal rates to better fit experience
- Lowered disability rates
- No changes to salary rates
- Increased Line of Duty disability rates from 14% to 15%
- Applicable to: Pension and GLI OPEB

COMPLIANCE SECTION

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

To the Board of Directors
Frederick Water
Winchester, Virginia

We have audited, 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 *Specifications for Audits of Authorities, Boards, and Commissions* issued by the Auditor of Public Accounts of the Commonwealth of Virginia, the financial statements of Frederick Water (the "Authority"), as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated November 6, 2018.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the 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 the Authority's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. **The results of our tests disclosed one instance of noncompliance or other matters that is required to be reported under *Government Auditing Standards* and which is described in the accompanying schedule of findings and responses as item 2014-001.**

Response to Findings

The Authority's response to the finding identified in our audit is described in the accompanying schedule of findings and responses. The Authority's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on the response.

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.

Brown, Edwards & Company, L.L.P.

CERTIFIED PUBLIC ACCOUNTANTS

Harrisonburg, Virginia
November 6, 2018

FREDERICK WATER
SUMMARY OF COMPLIANCE MATTERS
June 30, 2018

As more fully described in the Independent Auditor's 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*, we performed tests of the Authority's compliance with certain provisions of laws, regulations, contracts, and grants shown below:

STATE COMPLIANCE MATTERS

Code of Virginia:

Cash and Investment Laws

Conflicts of Interest Act

Debt Provisions

Local Retirement Systems

Procurement Laws

Uniform Disposition of Unclaimed Property Act

FREDERICK WATER
SCHEDULE OF FINDINGS AND RESPONSES
Year Ended June 30, 2018

A. FINDINGS – COMMONWEALTH OF VIRGINIA

2014-001: Legality of Investments

Condition:

During our review of investments, we noted instances of funds invested in corporate notes that were not rated at least “Aa” by Moody’s Investors Service, Inc., and “AA” by Standard and Poor’s, Inc. in accordance with § 2.2-4510 of the *Code of Virginia*, the purpose of which is to safeguard public funds held in the Commonwealth.

Recommendation:

All investments in corporate notes must be rated at least “Aa” by Moody’s Investors Service, Inc., and “AA” by Standard and Poor’s, Inc.

Management’s Response: The auditee concurs with this finding; however, the corporate notes were rated at least “Aa” by Moody’s Investors Services, Inc., and “AA” by Standard and Poor’s, Inc. in accordance with § 2.2-4510 of the *Code of Virginia* when purchased, but the ratings subsequently fell below the levels required.