



Water System of the Virgin Islands Water and Power Authority

**Management's Discussion and Analysis,
Financial Statements (with Independent
Auditor's Report Thereon), Required
Supplementary Information, and
Supplementary Schedule (Unaudited)
Years Ended June 30, 2018 and 2017**

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Independent Auditor's Report

To the Governing Board
Virgin Islands Water and Power Authority

Report on the Financial Statements

We have audited the accompanying financial statements of the Water System (the Water System) of the Virgin Islands Water and Power Authority (the Authority), a major fund of the Authority, as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the Water System's basic financial statements as listed in the table of contents. The Authority is a component unit of the Government of the U.S. Virgin Islands.

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 audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of 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 the 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 Water System of the Virgin Islands Water and Power Authority, as of June 30, 2018 and 2017, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters

As discussed in Note 1 to the financial statements, these financial statements present only the Water System and do not purport to, and do not present fairly the financial position of the Authority, as of June 30, 2018 and 2017, the respective changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Also as discussed in Note 1, in 2018, the Water System adopted Governmental Accounting Standards Board Statement (GASB) No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. Our opinion is not modified with respect to these matters.

As discussed in Note 14 to the financial statements, the Authority may be adversely impacted by the outbreak of a novel strain of coronavirus, known as COVID-19, which was declared a global pandemic by the World Health Organization in March 2020. 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 management's discussion and analysis, schedule of changes in OPEB liability and related ratios, schedule of the System's share of the net pension liability, and schedule of the System's pension contributions on pages 6 through 11 and 45 through 47 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 Water System's 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 - Supplementary Schedule

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Water System's basic financial statements. The five-year comparative summary of operations is presented for purposes of additional analysis and is not a required part of the basic financial statements.



Such information 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.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated June 30, 2020, 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 solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Water System's internal control over financial reporting and compliance.

BDO USA, LLP

June 30, 2020

Management's Discussion and Analysis

Water System of the Virgin Islands Water and Power Authority

Management's Discussion and Analysis

The Virgin Islands Water and Power Authority (the Authority) owns, operates, and maintains a water production and distribution system (the Water System) and an electric generation and distribution system (the Electric System), which are separately financed and require separate accounting and reporting. Each of these systems is accounted for as a separate enterprise fund. As management of the Authority, we offer readers of the Water System financial statements this discussion and analysis of the financial activities of the Water System for the years ended June 30, 2018 and 2017, with selected comparative information for the year ended June 30, 2016. We encourage readers to consider the information presented here in conjunction with the financial statements that follow this section.

The Water System's service territory includes the islands of St. Thomas, St. Croix, and St. John. Because of the historical development of the Water System and certain characteristics unique to the U.S. Virgin Islands, the Water System serves a small portion of the potential customers in the U.S. Virgin Islands. Among such factors is a U.S. Virgin Islands building code requirement revised in 1996, that all new residential and commercial buildings have cisterns to accumulate rainwater. This requirement has reduced the demand for potable water from the Authority. In addition, because of the mountainous, rocky terrain, especially on the islands of St. Thomas and St. John, the construction of the water distribution system has been difficult and costly.

The Authority provides water service to approximately 7,000 customers (as of June 30, 2018). The Authority also provides electric service to over 33,400 customers (as of June 30, 2018). The Water System's rates are under the jurisdiction of the Virgin Islands Public Services Commission (PSC or the Commission), unlike many other municipal systems. These rates are intended to provide revenues to recover operating and maintenance expenses, funds for debt service coverage requirements, and funds for working capital and capital expenses. The Authority does not use rate base or rate of return principles for setting rates.

Financial Highlights - 2018

The Water System's net position declined by \$6.2 million, or 37% as a result of 2018 operations. There was \$24.8 million in total operating revenues and \$1.3 million in capital grant contributions, offset by \$30.3 million in operating and production expenses and \$236 thousand in total non-operating expenses.

- The Water System's fuel costs recoverable balance reversed to a fuel rate revenue refundable of \$1.6 million as the LEAC factors approved by the PSC were able to fully recover the full cost of fuel in the current period.
- During 2018, the Water System's total operating revenues decreased by \$6.5 million, or 21% decrease. The decrease is attributable mainly to decreases in customer and Government sales revenues of \$2.6 million, a decrease in fuel escalator revenues of \$3.2 million and an increase in bad debt expense of \$499 thousand.
- Operating and production expenses decreased from \$30.4 million to \$30.2 million, a 1% decrease compared to the prior year. This was due to a decrease of \$1.0 million in operating and maintenance expenses which was offset by the increase in production cost of water distributed of \$0.9 million.

Water System of the Virgin Islands Water and Power Authority

Management's Discussion and Analysis

Financial Highlights - 2017

The Water System's net position increased by \$3.4 million, or 25% as a result of 2017 operations. There was \$31.2 million in total operating revenues and \$2.8 million in capital grant contributions, offset by \$30.4 million in operating and production expenses and \$323 thousand in total non-operating expenses.

- The Water System's fuel costs recoverable balance decreased by \$154 thousand or 21% as the LEAC factors approved by the PSC still remained inadequate to recover the full cost of fuel in the current period.
- During 2017, the Water System's total operating revenues decreased by \$71 thousand, or a less than 1% decrease. The decrease is attributable mainly to decreases in fuel escalator revenues of \$788 thousand, increase in bad debt expense of \$321 thousand, offset by an increase in Water sales of \$1.0 million.
- Operating and production expenses decreased from \$30.5 million to \$30.4 million, a 1% decrease compared to the prior year. This was due to an increase of \$2.7 million in operations and maintenance expenses offset by decreases of \$699 thousand in production cost of water distributed, decrease of \$2.0 million in depreciation and amortization, and a decrease of \$311 thousand in administrative and general expenses.

Overview of the Financial Statements

Statement of Net Position

This statement includes all of the Water System's assets and deferred outflows of resources, and liabilities and deferred inflows or resources and provides information about the nature and amounts of investments in resources (assets) and the obligations to Water System creditors (liabilities). It also provides the basis for evaluating the capital structure of the Water System and assessing the liquidity and financial flexibility of the Water System.

Statement of Revenues, Expenses, and Changes in Net Position

All of the current year revenues and expenses are accounted for in this statement. This statement measures the success of the Water System's operations over the past year and can be used to determine whether the Water System has successfully recovered all of its costs through its user fees and other charges, and maintained profitability and creditworthiness.

Statement of Cash Flows

The primary purpose of this statement is to provide information about the Water System's cash receipts and cash payments during the reporting period. This statement reports cash receipts, cash payments, and net changes in cash resulting from operating, investing, and financing activities and provides answers to such questions as "where did cash come from?," "what was cash used for?," and "what was the change in cash balances during the reporting period?"

Water System of the Virgin Islands Water and Power Authority

Management's Discussion and Analysis

Notes to the Financial Statements

The notes provide additional information that is essential to fully understanding the data provided in the financial statements. The notes to the financial statements can be found on pages 17 - 44 of this report.

Financial Analysis of the Authority's Water System

One of the most important questions asked about the Water System's finances is: "Is the Water System better off or worse off as a result of the fiscal year activities?" The statement of net position and the statement of revenues, expenses, and changes in net position report information about the activities of the Water System in a way that will help answer this question. These two statements report the net position of the Water System and the changes in them. You can think of the Water System's net position - the difference between assets and liabilities - as one way to measure financial health or financial position. Over time, increases or decreases in the Water System's net position are one indicator of whether its financial health is improving or deteriorating. However, you will need to consider other nonfinancial factors such as changes in economic conditions, customer growth, and new or changed legislation and regulation to gauge overall changes in financial health.

The table below provides a comparative review of key statement of net position captions.

<i>As of June 30,</i>	2018	2017	2016
Current assets	\$ 14,649,498	\$ 12,607,908	\$ 12,069,644
Restricted assets	791,720	9,701,851	9,663,437
Other non-current assets	78,476,292	3,575,436	2,375,320
Capital assets	66,055,776	64,828,724	62,476,113
Deferred outflows of resources	11,891,672	16,804,499	15,961,309
Total assets and deferred outflows of resources	\$ 171,864,958	\$ 107,518,418	\$ 102,545,823
Long-term liabilities	\$ 140,457,685	\$ 73,907,024	\$ 75,162,827
Other liabilities	9,765,432	11,668,113	10,753,113
Deferred inflows of resources	11,049,947	5,186,400	3,263,089
Total liabilities and deferred inflows of resources	161,273,064	90,761,537	89,179,029
Net investment in capital assets	66,055,775	61,738,714	56,533,517
Restricted	649,029	9,026,073	8,921,904
Unrestricted (deficit)	(56,112,910)	(54,007,906)	(52,088,627)
Total net position	10,591,894	16,756,881	13,366,794
Total liabilities, deferred inflows of resources, and net position	\$ 171,864,958	\$ 107,518,418	\$ 102,545,823

Water System of the Virgin Islands Water and Power Authority

Management's Discussion and Analysis

At June 30, 2018, the Water System had total assets and deferred outflows of resources of \$171.9 million of which \$66.1 million or 38% represents net capital assets.

Changes in net position can be seen by reviewing the following condensed statements of revenues, expenses, and changes in net position.

<i>Years ended June 30,</i>	2018	2017	2016
Base revenues	\$ 19,229,970	\$ 21,852,730	\$ 20,875,224
Fuel escalator revenues	5,745,500	8,971,868	9,759,747
Line loss Surcharge	692,663	783,003	723,183
Investment earnings	15,744	33,029	12,922
Bad debt expense	(899,632)	(400,928)	(80,420)
Total revenues	24,784,245	31,239,702	31,290,656
Production cost of water distributed	12,045,668	11,136,598	11,835,397
Operating expenses, excluding production, depreciation, and amortization	17,003,391	18,017,386	15,540,049
Depreciation, net of amortization	1,211,667	1,198,779	3,144,304
Loss on retirement of capital assets	-	-	3,147,815
Interest expense	251,816	323,221	506,873
Total expenses	30,512,542	30,675,984	34,174,438
Income (loss) before capital grants and contributions and special item	(5,728,297)	563,718	(2,883,782)
Capital grants and contributions	1,302,659	2,826,369	1,498,989
Impairment loss on capital assets	(1,273,354)	-	-
Increase (decrease) in net position	(5,698,992)	3,390,087	(1,384,793)
Net position, beginning of year	16,290,886*	13,366,794	14,751,587
Net position, end of year	\$ 10,591,894	\$ 16,756,881	\$ 13,366,794

**As restated for implementation of GASB Statement No. 75; see Note 1*

The Water System's net position decreased by \$6.2 million during the fiscal year ended June 30, 2018. Key elements of the 2018 changes are as follows:

- Operating revenues have declined by \$6.5 million, or 21%, as base sales to customers and the Government fell dramatically post September 2017 hurricanes that devastated the islands.
- Operating expenses decreased by \$1.0 million, or 6%, mainly as a result of a \$1.0 million fall in operations and maintenance expenses tempered by a \$0.2 million increase in administrative and general expenses in 2018.
- Total production expenses have increased by \$0.9 million as compared to the prior year.

Water System of the Virgin Islands Water and Power Authority

Management's Discussion and Analysis

The Water System's net position increased by \$3.4 million during the fiscal year ended June 30, 2017. Key elements of the 2017 increase are as follows:

- Operating revenues have been consistent year to year with no significant change. Operating expenses have decreased by \$3.1 million as there was no recognition of retirement of capital assets in 2017 when compared to the retirement of capital assets of \$3.1 million in 2016.
- Total production expenses have decreased by \$700 thousand as compared to the prior year.

Capital Asset and Debt Administration

Capital Assets

The Water System's capital assets as of June 30, 2018, amounted to \$66.1 million (net of accumulated depreciation and property-related gains), which reflected an increase of \$1.3 million, or 2% compared to last year. These capital assets include land, transmission, distribution and collection systems, buildings and fixed equipment, and furniture, fixtures, and equipment. The table below provides the detail of capital assets net of accumulated depreciation and property-related gains.

<i>June 30,</i>	2018	2017	2016
Land	\$ 184,225	\$ 184,225	\$ 184,225
Utility plant in service	54,598,458	54,045,096	53,497,029
Buildings and fixed equipment	3,991,763	5,884,535	4,369,550
Furniture, fixtures, and equipment	463,514	596,895	344,519
Construction in progress	6,817,816	4,117,973	4,080,790
Net utility plant	\$ 66,055,776	\$ 64,828,724	\$ 62,476,113

The major projects completed in fiscal year 2018 were the AMI (Phase 1) for \$380 thousand and Pressure Management (phase IIB) for \$603 thousand.

The Authority's fiscal year 2019 capital budget includes investing \$15.9 million in capital projects. Included in the amount of capital projects are \$8.7 million of water projects that have been identified for funding from the U.S. Department of Interior, U.S. Department of Agriculture, U.S. Environmental Protection Agency, Virgin Islands local agencies, and \$1.5 million from the Virgin Islands Government Property Capital Tax Fund. The balance of the funding for the capital program is expected to be provided from internal sources, including available cash balances. Additional information on capital assets can be found in Note 7.

Water System of the Virgin Islands Water and Power Authority

Management's Discussion and Analysis

Long-Term Debt

In fiscal year 2018, the Water System increased its long-term debt by \$71.3 million, through scheduled maturities and amortization. The table below provides the detail of long-term debt.

<i>June 30,</i>	2018	2017	2016
Revenue bonds	\$ 75,000,000	\$ 3,665,000	\$ 7,140,000
Less unamortized bond discount	-	-	(21,882)
Total	\$ 75,000,000	\$ 3,665,000	\$ 7,118,118

The Authority's ability to incur long-term indebtedness is capped by Virgin Islands statute at \$750 million for the Electric and Water Systems combined. As of June 30, 2018, combined long-term debt amounts to approximately \$523.1 million. Additional information on long-term debt can be found in Note 9.

Coronavirus COVID-19 Pandemic

In December 2019, a novel strain of coronavirus, known as COVID-19, was reported which quickly spread around the globe, including the United States and its Territories. In March 2020, the Governor of the U.S. Virgin Islands declared a state of emergency due to COVID-19. The extent of the impact of COVID-19 on the operational and financial performance of the Authority will depend on certain developments, including the duration and spread of the outbreak and impact on customers, employees, and vendors, all of which are uncertain and cannot be predicted.

Requests for Information

This financial report is designed to provide a general overview of the Water System's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Chief Financial Officer, Virgin Islands Water and Power Authority, P.O. Box 1450, St. Thomas, USVI 00804.

Financial Statements

Water System of the Virgin Islands Water and Power Authority

Statements of Net Position

<i>June 30,</i>	2018	2017
Assets		
Current assets:		
Cash and cash equivalents	\$ 3,823,060	\$ 5,227,866
Accounts receivable:		
Customers and other, net	3,560,154	693,943
Virgin Islands Government, net	1,956,162	3,289,906
Grants receivable	1,071,985	-
Fuel costs recoverable	-	593,385
Unbilled revenues	2,223,471	1,120,220
Inventories:		
Water	424,323	275,165
Materials and supplies	558,740	633,682
Prepayments and other current assets	1,031,603	773,741
Total current assets	14,649,498	12,607,908
Restricted assets:		
Cash and cash equivalents	791,720	2,043,522
Investments	-	7,658,329
Total restricted assets	791,720	9,701,851
Other noncurrent assets:		
Virgin Islands Government accounts receivable, net	3,476,292	3,575,436
Interfund advance to Electric System	75,000,000	-
Total other noncurrent assets	78,476,292	3,575,436
Capital assets:		
Utility plant in service	110,170,989	112,665,722
Less accumulated depreciation	(50,441,018)	(51,275,451)
Property-related gains, net	(676,236)	(863,745)
Net utility plant in service	59,053,735	60,526,526
Non-depreciable assets	7,002,041	4,302,198
Net capital assets	66,055,776	64,828,724
Deferred Outflows of Resources		
Pension related outflows	11,804,892	16,804,499
OPEB outflows	86,780	-
Total deferred outflows of resources	11,891,672	16,804,499
Total assets and deferred outflows of resources	\$ 171,864,958	\$ 107,518,418

Continued on next page.

Water System of the Virgin Islands Water and Power Authority

Statements of Net Position (continued)

<i>June 30,</i>	2018	2017
Liabilities, Deferred Inflows of Resources, and Net Position		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 5,542,754	\$ 5,402,326
Fuel rate revenue refundable	1,558,533	-
Lines of credit	2,521,455	2,500,000
Total current liabilities	9,622,742	7,902,326
Liabilities payable from restricted assets:		
Current installments of long-term debt	-	3,665,000
Accrued interest payable	142,690	100,787
Total liabilities payable from restricted assets	142,690	3,765,787
Long-term debt:		
Water System revenue bonds, excluding current installments	75,000,000	-
Long-term liabilities:		
Net pension liability	50,670,361	56,283,182
Net OPEB liability	9,478,955	9,956,963
Due to Electric System	5,308,369	7,666,879
Total long-term liabilities	65,457,685	73,907,024
Total liabilities	150,223,117	85,575,137
Deferred inflows of resources:		
Pension related inflows	9,562,974	5,186,400
OPEB inflows	1,486,973	-
Total deferred inflows of resources	11,049,947	5,186,400
Net position:		
Net investment in capital assets	66,055,775	61,738,714
Restricted	649,029	9,026,073
Unrestricted (deficit)	(56,112,910)	(54,007,906)
Total net position	10,591,894	16,756,881
Total liabilities, deferred inflows of resources, and net position	\$ 171,864,958	\$ 107,518,418

See accompanying notes to financial statements.

Water System of the Virgin Islands Water and Power Authority

Statements of Revenues, Expenses, and Changes in Net Position

Years Ended June 30,	2018	2017
Operating Revenues		
Water sales to customers	\$ 10,374,308	\$ 11,676,391
Water sales to Virgin Islands Government	8,386,394	9,729,815
Fuel escalator revenues	5,745,500	8,971,868
Line loss surcharge	692,663	783,003
Other operating revenues	469,268	446,524
Bad debt expense	(899,632)	(400,928)
Total operating revenues	24,768,501	31,206,673
Operating and Production Expenses		
Production cost of water distributed	12,045,668	11,136,598
Operations and maintenance	6,333,334	7,304,716
Customer service	776,402	976,983
Administrative and general	9,893,655	9,735,687
Depreciation, net of amortization	1,211,667	1,198,779
Total operating and production expenses	30,260,726	30,352,763
Operating (loss) income	(5,492,225)	853,910
Nonoperating Revenues (Expenses)		
Interest expense	(251,816)	(323,221)
Investment earnings	15,744	33,029
Total nonoperating expenses	(236,072)	(290,192)
Change in net position, before capital grants and contributions and special item	(5,728,297)	563,718
Capital grants and contributions	1,302,659	2,826,369
Impairment loss on capital assets	(1,273,354)	-
Decrease (increase) in net position	(5,698,992)	3,390,087
Net position, beginning of year, as previously reported	16,756,881	13,366,794
Change in accounting principle (see Note 1)	(465,995)	-
Net position, beginning of year, as restated	16,290,886	13,366,794
Net position, end of year	\$ 10,591,894	\$ 16,756,881

See accompanying notes to financial statements.

Water System of the Virgin Islands Water and Power Authority

Statements of Cash Flows

<i>Years Ended June 30,</i>	2018	2017
Cash Flows from Operating Activities		
Receipts from customers	\$ 22,231,927	\$ 29,682,159
Payments to suppliers	(21,480,392)	(20,469,726)
Payments to employees	(3,578,686)	(3,862,344)
Net cash (used in) provided by operating activities	(2,827,151)	5,350,089
Cash Flows from Capital and Related Financing Activities		
Principal paid on long-term debt	(3,665,000)	(3,475,000)
Proceeds from Water Bonds	75,000,000	-
Interest paid on long-term debt	(100,787)	(297,138)
Interest paid on lines of credit	(87,671)	(99,764)
Interfund advance to Electric System	(75,000,000)	-
Acquisition and construction of capital assets	(3,712,072)	(3,551,390)
Capital grants and contributions received	62,000	3,226,493
Net cash used in capital and related financing activities	(7,503,530)	(4,196,799)
Cash Flows from Investing Activities		
Interest received	15,744	33,029
Purchases, sales, and maturities of investments, net	7,658,329	(114,521)
Net cash provided by (used in) investing activities	7,674,073	(81,492)
Net change in cash and cash equivalents	(2,656,608)	1,071,798
Cash and cash equivalents, beginning of year	7,271,388	6,199,590
Cash and cash equivalents, end of year	\$ 4,614,780	\$ 7,271,388

Continued on next page.

Water System of the Virgin Islands Water and Power Authority

Statements of Cash Flows (continued)

Years Ended June 30,	2018	2017
Cash and cash equivalents		
Unrestricted	\$ 3,823,060	\$ 5,227,866
Restricted	791,720	2,043,522
	\$ 4,614,780	\$ 7,271,388
Reconciliation of Operating (Loss) Income to Net Cash (Used in) Provided by Operating Activities		
Operating (loss) income	\$ (5,492,225)	\$ 853,910
Adjustments to reconcile operating (loss) income to net cash (used in) provided by operating activities:		
Depreciation	1,399,176	1,386,288
Amortization of deferred property-related gains	(187,509)	(187,509)
Changes in operating assets and liabilities:		
Accounts receivable, net	(2,536,574)	(1,524,514)
Inventories	(74,216)	(56,347)
Prepayments and other current assets	(257,862)	(106,713)
Fuel costs recoverable/ fuel rate revenue refundable	2,151,918	154,309
Due to Electric System	(2,358,510)	(1,086,444)
Accounts payable and accrued liabilities	309,101	1,363,229
Net pension liability	(6,078,816)	3,238,604
Deferred outflows of resources	4,912,827	(843,190)
Deferred inflows of resources	5,863,547	1,923,311
Net OPEB liability	(478,008)	235,155
Net cash (used in) provided by operating activities	\$ (2,827,151)	\$ 5,350,089

See accompanying notes to financial statements.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

1. Reporting Entity and Summary of Significant Accounting Policies

Reporting Entity

The Virgin Islands Water and Power Authority (the Authority) is an instrumentality that was created by the government of the United States Virgin Islands (the Government) in 1964. The Authority was created to operate a water production and distribution system (the Water System) and an electric generation and distribution system (the Electric System) in the United States Virgin Islands. The Authority is governed by a nine member board, three of whom are appointed by the Governor of the Virgin Islands from his Cabinet, and six of whom are nominated by the Governor of the Virgin Islands and confirmed by the Virgin Islands Legislature. As such, as the Government has determined that the Authority is a component unit. The Water and Electric Systems are separately financed and each system's indebtedness is repayable from its net revenues. The Authority is required by its bond resolutions to maintain separate accounting for each system. Each system is a major fund of the Authority for financial reporting purposes.

The Water System of the Authority accounts for all activities associated with the production and distribution of water to customers. The accompanying financial statements include only the financial activities of the Water System major fund and are not intended to present fairly the financial position and changes in net position of the Authority.

Measurement Focus and Basis of Accounting

The Authority complies with all applicable pronouncements of the Governmental Accounting Standards Board (GASB). The operations of the Authority are presented as an enterprise fund and as such, the financial statements are reported using the economic measurement focus and the accrual basis of accounting. Under this basis, revenues are recognized in the period earned and expenses are recognized in the period incurred regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

In accordance with the Water System Revenue Bond Resolution (Bond Resolution), rates are designed to cover debt service, capital expenditures, and other operating expense requirements, excluding depreciation and other noncash expense items. This method of rate setting results in costs being included in the determination of rates in different periods rather than when these costs are recognized for financial statement purposes.

Rates and Regulation

The Authority is regulated by the Virgin Islands Public Services Commission (PSC or the Commission). The Commission has the authority to approve, modify, or deny any proposed rate changes made by the Authority.

The Authority is further subject to the provisions of GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements* which address accounting rules for regulated operations. This standard allows regulated entities such as the Authority to record certain assets or liabilities as a result of the regulated ratemaking process.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Regulatory assets generally represent incurred costs that have been capitalized because such costs are probable of future recovery in customer rates and for the Water System, these comprise of fuel costs recoverable.

Regulatory liabilities generally represent obligations to make refunds to customers for previous collections for costs that are not likely to be incurred or items that will be credited to customers in future periods and for the Water System, these include fuel rate revenue refundable and unamortized property-related gains.

At June 30, 2017, the fuel costs recoverable balance was \$593 thousand which represent an under-collection of actual fuel costs incurred and not yet recovered through the Levelized Energy Adjustment Clause (LEAC). At June 30, 2018, the fuel rate revenue refundable balance was \$1.6 million which represent an excess collection of the LEAC over the actual fuel costs incurred and will be refunded to customers in subsequent billings. Regulatory liabilities also include property-related gains, net of accumulated amortization, of \$676 thousand and \$864 thousand as of June 30, 2018 and 2017, respectively, which are being amortized over future periods as approved by the Commission.

In order for a rate-regulated entity to continue to apply the provisions of GASB Statement No. 62, it must meet the following three criteria: (1) the enterprise's rates for regulated services provided to customers must be established by an independent 3rd party regulator or its own governing board empowered by a statute to establish rates that bind customers, (2) the regulated rates must be designed to recover the specific enterprise's costs of providing the regulated services, and (3) in the view of the demand for the regulated services and level of competition, it is reasonable to assume that rates, set at levels that will recover the enterprise's costs, can be charged and collected from customers.

Management believes that the Authority currently meets the criteria for continued application of GASB Statement No. 62, but will continue to evaluate significant changes in the regulatory and competitive environment to assess the ability to continue to apply GASB Statement No. 62. If the Authority no longer applied GASB Statement No. 62 due to competition, regulatory changes, inadequate rates, or other reasons, the Authority would make certain adjustments that would include the write-off of all or a portion of its regulatory assets and liabilities, the evaluation of utility plant, contracts, and commitments, and the recognition, if necessary, of any losses to reflect market conditions.

Cash and Cash Equivalents

For purposes of reporting cash flows, cash and cash equivalents include cash on hand, bank demand accounts, money market accounts, certificates of deposit, and overnight repurchase agreements. The Authority considers all investments with an original maturity of three months or less to be cash equivalents.

Inventories

Water, materials, and supplies inventories are stated at cost using the weighted-average unit cost method, which approximates the first-in, first-out method. Obsolete and unusable inventory is reduced to estimated salvage value. The cost of fuel oil used for water production is charged to expense as consumed through allocation of costs from the Electric System.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Investments

Investments are reported at fair value in the accompanying Statements of Net Position. All changes in the fair value of investments are recognized as gains or losses in the Statements of Revenues, Expenses, and Changes in Net Position.

Prepayments and Other Current Assets

Prepayments and other current assets consist primarily of amounts paid by the Authority for services not yet provided by vendors, which primarily relate to property and liability insurance.

Capital Assets

Capital assets are recorded at cost, which includes material, payroll-related costs, overhead, and an allowance for borrowed funds used during construction. Capital expenditures of \$1,000 or more are capitalized. Maintenance and repairs are charged to operating expense as incurred. The cost of depreciable plant retired is eliminated from the utility plant accounts, and such costs, plus cost of removal less salvage, are charged to accumulated depreciation.

Depreciation of capital assets is computed using the straight-line method over estimated service lives ranging from 3 to 100 years. Depreciation expense is net of the property-related gain amortization of \$188 thousand for each of the years ended June 30, 2018 and 2017. Depreciation, net of property-related gain amortization, was equivalent to 0.75% and 1.06% of average depreciable property for the years ended June 30, 2018 and 2017, respectively.

In accordance with accounting principles generally accepted in the United States of America, management reviews the estimated useful lives of capital assets on a periodic basis. The results of an engineering condition assessment and depreciation rate review indicated the lives of certain utility plant assets were longer than the estimated useful lives used for depreciation purposes in the Water System's financial statements. As a result, effective July 1, 2013, estimates of the useful lives were changed to better reflect the estimated periods during which these assets will remain in service.

The Authority reviews the carrying value of its capital assets to determine if circumstances exist indicating impairment. If facts or circumstances support the possibility of impairment, management follows the guidance in GASB Statement No. 42, *Accounting and Financial Reporting for Impairment of Capital Assets and for Insurance Recoveries*. If impairment is indicated, an adjustment is made to the carrying value of the capital assets. Also see Notes 2 and 7.

Property-Related Gains

Insurance and Federal Emergency Management Agency (FEMA) proceeds exceeded the net book value of assets retired as a result of damages sustained from Hurricane Hugo in September 1989 and Hurricane Marilyn in September 1995. To account for these excess proceeds, the Authority recorded property-related gains to be recovered in future periods as mandated by the Commission. The property-related gains are being amortized and offset against depreciation expense over the estimated useful lives of the replacement assets. At June 30, 2018 and 2017, property-related gains, net of accumulated amortization, totaled \$676 thousand and \$864 thousand, respectively.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Deferred Outflows of Resources

Deferred outflows of resources represent a consumption of net position that applies to a future period(s) and will not be recognized as an outflow of resources (expense) until that time. Deferred outflows of resources for the Water System consist of unrecognized items not yet charged to pension expense and OPEB expense and contributions from the employer after the measurement date but before the end of the employer's reporting period, as may be applicable.

Compensated Absences

The Authority accrues for compensated absences in accordance with accounting principles generally accepted in the United States of America. The Authority allows vesting of permanent employee annual leave, which is governed by the period of employment. Vested annual leave in excess of 480 hours is transferred to the Employees' Retirement System of the Government of the Virgin Islands (GERS) for retirement service credit.

Net Pension Liability

For purposes of measuring the net pension liability, deferred outflows and inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the pension plans, as well as additions to and deductions from the pension plan fiduciary net position have been determined on the same basis as they are reported in the financial statements of GERS. Employer contributions are recognized when due and the employer has a legal requirement to provide the contributions. Also see Note 10.

Other Postemployment Benefits (OPEB) Liability

The Authority provides certain postemployment health care benefits to retired employees under a single employer health insurance plan (OPEB plan). The Authority has an established trust for its OPEB obligations (OPEB Trust) that is held by an independent custodian. The OPEB Trust issues a stand-alone financial report.

The Authority's net OPEB liability was measured as of June 30, 2017, and was determined by an actuarial valuation as of that date. For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, OPEB expenses, information about the fiduciary net position of the OPEB Trust, and additions to/deductions from the OPEB Trust's fiduciary net position have been determined on the same basis as they are reported by the Authority's OPEB plan as of the same measurement date. For this purpose, the Authority's OPEB plan recognizes benefit payments when due and payable in accordance with the benefit terms.

Bond Issuance and Refunding

Bonds and notes premiums and discounts are deferred and amortized over the life of the debt using the effective interest method and are reported net of the applicable bond premium or discount.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

When issuing new debt for refunding purposes, the difference between the reacquisition price of the new debt and the net carrying amount of the refunded debt is recognized as either a deferred outflow of resources or deferred inflow of resources and amortized using the straight-line method as a component of interest expense over the remaining life of the old debt or the life of the new debt, whichever is shorter.

Inter-System Transactions

As of June 30, 2018 and 2017, the Water System had a payable to the Electric System in the amount of \$5.3 million and \$7.7 million, respectively, as a result of transfer of cash to pay for fuel costs incurred, and other allocated operating, maintenance, and administrative expenses. As of June 30, 2018, an interfund advance receivable from the Electric System amounting to \$75.0 million was recorded as a result of an intersystem loan transaction. These intersystem balances are noninterest-bearing and have no set repayment date. The Authority has classified these balances as noncurrent because it did not expect to collect such amounts within 12 months of the respective fiscal year-ends.

Deferred Inflows of Resources

Deferred inflows of resources represent an acquisition of net position that applies to a future period(s) and will not be recognized as an inflow of resources (revenue) until that time. Deferred inflows of resources for the Water System consist of the unamortized portion of the net differences between projected and actual earnings on pension plan and OPEB plan investments, changes in assumptions, and other differences between expected and actual experience.

Net Position

Net position represents the difference between assets, deferred outflows of resources, liabilities, and deferred inflows of resources. Net investment in capital assets consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of any borrowings used for the acquisition or construction of those assets. Net position is reported as restricted when there are limitations imposed on its use, either through legislation or external restrictions imposed by creditors, grantors, laws, or regulations. Unrestricted Net Position consists of assets which do not meet the definition of the two preceding categories.

Revenue Recognition

Revenues are recorded as service is provided to customers. The Water System accrues the nonfuel portion of base revenues for services rendered but unbilled. The cost of fuel for the Water System is passed directly through to its customers. Every six months, the Commission establishes a LEAC rate that is designed to true-up the fuel costs recovered through the Water System's base rates.

If the amount recovered through rates exceeds actual fuel costs, the Water System records fuel costs refundable as a regulatory liability, plus interest at 8.75%, for amounts to be refunded through future rates over the following six-month period. If the amount recovered through rates is less than the actual fuel costs, the Water System records fuel costs recoverable as a regulatory asset, without interest, for amounts to be collected through future rates, generally over the following six-month period.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

The Water System distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering water, in connection with the Water System's principal ongoing operations. The principal operating revenues for the Water System are charges to customers for sales and services. Operating expenses for the Water System include the cost of sales and services, administrative expenses, and depreciation on utility plant. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

Capital Grants and Contributions

The United States Government and the Virgin Islands Government appropriate and make available to the Authority grant funds for the construction and improvement of water production and distribution facilities. The Authority also receives capital contributions from customers (nongovernment) for construction and improvement of the facilities. The Authority maintains ownership and operation of the facilities. For the years ended June 30, 2018 and 2017, the Water System recognized capital grants of \$1.1 million and \$2.3 million, respectively, from the United States Government and \$169 thousand and \$561 thousand, respectively, from the Virgin Islands Government.

Cost Allocation

The Water and Electric Systems share administrative and operating personnel. Payroll and a substantial portion of other operating expenses are initially incurred by the Electric System and are subsequently allocated to the Water System based on labor costs and hours. The operating costs allocated to the Water System for the years ended June 30, 2018 and 2017, amounted to \$6.5 million and \$5.5 million, respectively.

Expenses incurred for common or integrated facilities are allocated between the systems using an engineering study that is based on monthly production statistics and the Water System's power consumption. The production costs allocated to the Water System for the years ended June 30, 2018 and 2017, amounted to \$2.5 million and \$3.8 million, respectively.

Commitments and Contingencies

The Authority accrues liabilities for loss contingencies, including deductibles for insurance claims and environmental remediation costs, arising from claims, assessments, litigation, fines and penalties, and other sources when it is probable that a liability has been incurred and the amount of the claim, assessment, and/or remediation can be reasonably estimated.

Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, deferred outflows of resources, liabilities, deferred inflows of resources, and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Adoption of New Accounting Pronouncements

In June 2015, GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. This Statement improves accounting and financial reporting by state and local governments for postemployment benefits other than pensions. It also improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities. The requirements of this Statement are effective for the Authority's financial statements for the year ended June 30, 2018. The Authority has evaluated this Statement and restated the financial statements to reflect the beginning OPEB liability, deferred outflows and inflows of resources, and the recognition of OPEB expense and contributions made between the start of the measurement period and the Authority's prior fiscal year. Also see Note 11.

The following details the restatement to net position as of July 1, 2017 as a result of the adoption of GASB Statement No. 75.

Net position, July 1	\$ 16,756,881
Adoption of GASB Statement No. 75	(465,995)
<hr/>	
Net position, July 1, as restated	\$ 16,290,886

In March 2016, the GASB issued Statement No. 81, *Irrevocable Split-Interest Agreements*. This Statement improves accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement. The requirements of this Statement are effective for the Authority's financial statements for the year ended June 30, 2018. The Authority has evaluated this Statement and has determined there is no impact on the financial statements.

In March 2017, the GASB issued Statement No. 85, *Omnibus 2017*. This Statement addresses practical issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits. The requirements of this Statement are effective for the Authority's financial statements for the year ended June 30, 2018. The Authority has evaluated this Statement and has determined there is no impact on the financial statements.

In May 2017, the GASB issued Statement No. 86, *Certain Debt Extinguishments Issues*. This Statement improves consistency in accounting and financial reporting for in-substance defeasance of debt. The Statement provides guidance for transactions in which cash and other monetary assets acquired with existing resources are placed in an irrevocable trust for the sole purpose of extinguishing debt. The requirements of this Statement are effective for the Authority's financial statements for the year ended June 30, 2018. The Authority has evaluated this Statement and has determined there is no impact on the financial statements.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Following are statements issued by GASB that are effective in future years. In light of the COVID-19 pandemic, on May 8, 2020, the GASB issued Statement No. 95, *Postponement of the Effective Dates of Certain Authoritative Guidance*, to provide relief to governments. This Statement, which was effective upon issuance, postpones the effective dates of certain provisions in these upcoming pronouncements for one year, except for GASB Statement No. 87 which is postponed for eighteen months.

GASB Statement No.		Adoption Effective in Fiscal Year (as Revised)
83	Certain Asset Retirement Obligations	2020
84	Fiduciary Activities	2021
87	Leases	2022
88	Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements	2020
89	Accounting for Interest Cost Incurred Before the End of a Construction Period	2022
90	Majority Equity Interests - An Amendment of GASB Statements No. 14 and No. 61	2021
91	Conduct Debt Obligations	2023
92	Omnibus 2020	2022
93	Replacement of Interbank Offered Rates	2022
94	Public-Private and Public-Public Partnerships and Availability Payment Arrangements	2023

Certain provisions of GASB Statement No. 92 are excluded from GASB Statement No. 95. Additionally, GASB Statement No. 95 excludes provisions in GASB Statement No. 93 related to lease modifications and excludes GASB Statement No. 94 since the GASB considered the pandemic in determining effective dates. Earlier application of the standards is permitted to the extent specified in each pronouncement as originally issued. The Authority is currently evaluating the impact of these statements.

2. Natural Disasters - Hurricanes Irma and Maria

On September 6 and 19, 2017, the United States Virgin Islands were struck by two Category 5 hurricanes. The extent and severity of the storms was unprecedented and resulted in catastrophic damage to the Territory, as a whole.

The Authority's water distribution storage tanks, in general, suffered minor damages except for one tank which lost approximately 20% of its doom roof plate as a result of flying debris. There were no complete tank failures to the water storage tanks on the Territory. As a result, the Authority was able to provide water service to customers at low elevations immediately after the storm events.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

On or about September 7 and 20, 2017, the President of the United States declared the United States Virgin Islands a disaster area and eligible for Federal Emergency Management Agency (FEMA) recovery assistance. As such, to further aid with storm related losses caused by the hurricanes, reimbursement of expenditures will be secured through Federal assistance and other contributions. Also see Notes 9 and 14.

3. Deposits and Investments

In accordance with its policies and Revenue Bond Resolution, the Authority is authorized, with certain restrictions, to invest in open accounts, time deposits, certificates of deposit, repurchase agreements, obligations of the United States Government, and obligations of any state within the United States, mutual funds, and corporate commercial paper.

At June 30, 2017, the Water System had approximately \$7.7 million in investments which were invested in a U.S. Treasury fund with a AAA rating and a maturity of less than a year. There were no such investments at June 30, 2018. The Water System held certificates of deposits of approximately \$3.2 million and \$3.9 million as of June 30, 2018 and 2017, respectively, with a maturity date of less than a year. Cash deposits were \$1.4 million and \$3.3 million as of June 30, 2018 and 2017, respectively.

Interest Rate Risks - As a means of limiting its exposure to fair value losses from rising interest rates, the Authority has an investment practice for operating funds which is structured to provide sufficient liquidity to pay obligations as they come due and (1) limits 80% of investments to not more than one-year maturities and (2) requires that the portfolio have no more than 20% in securities maturing in or having an average life of more than ten years. Bond proceeds and reserve funds are managed in accordance with bond covenants and funding needs which could result in maturities longer than ten years.

Credit Risks and Concentration of Credit Risks - As of June 30, 2018, the Water System's exposure to credit risk is evaluated by the ratio of investments including deposits and investments in U.S. government securities, certificates of deposit, and cash deposits. The Authority places no limit on the amount the Water System may invest in any one permitted investment type.

As of June 30, 2018, 69% of the Water System's cash and investments are invested in certificates of deposit and 31% are in cash deposits. As of June 30, 2017, 51% of the Water System's cash and investments were in U.S. Treasury Funds, 26% were invested in certificates of deposit, and 23% in cash deposits.

Custodial Risks - Custodial credit risk is the risk that in the event of bank failure, the Authority's deposit may not be returned. The Authority does not have a custodial risk policy. The Authority maintains its deposits at several financial institutions, which, at times may exceed federally insured limits. Generally, the Federal Deposit Insurance Corporation insures depositor funds up to \$250,000. The Authority places both Water and Electric System cash and cash equivalents with some of the same high credit quality financial institutions that are federally insured. Therefore, in the event of a loss, federal insurance recoveries would have to be allocated among the two systems. As such, the potential amounts held in excess of the FDIC limits for the Water System were \$2.4 million at June 30, 2018. The Authority has not experienced any losses in such accounts and believes it is not exposed to any significant credit risk on its cash and cash equivalents.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Fair Value Measurements

The Authority categorizes the fair market measurements of its investments within the fair value hierarchy established which further provides the framework for measuring fair value by establishing a three-level fair value hierarchy that describes inputs that are used to measure assets and liabilities as follows:

- Level 1: Inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets that an organization can access at the measurement date.
- Level 2: Inputs are other than quoted prices included within Level 1 that are observable for an asset or liability, that are either directly or indirectly observable.
- Level 3: Inputs are significant unobservable units.

The fair value hierarchy gives the highest priority to Level 1 and the lowest priority to Level 3 inputs. If a price for an identical asset is not observable, an organization may evaluate fair market value using another valuation technique that maximizes the use of relevant observable inputs and minimizes the use of unobservable inputs. If the fair value of an asset is measured using inputs from more than one level of the fair market value hierarchy, the measurement is considered to be based on the lowest level input that is significant to the entire measurement.

There were no investments required to be measured at fair value as of June 30, 2018. The Authority has investments in U.S. Governmental Agency Fund measured at net asset value of \$7.7 million as of June 30, 2017.

4. Accounts Receivable

Accounts receivable, current and non-current, at June 30, 2018 and 2017, consists of the following:

	2018	2017
Customers	\$ 10,404,423	\$ 6,920,199
Other	3,106	3,106
Less allowance for doubtful accounts	(6,847,375)	(6,229,362)
Customers and other, net	3,560,154	693,943
Virgin Islands Government	5,476,042	6,908,930
Less allowance for doubtful accounts	(43,588)	(43,588)
Virgin Islands Government, net	5,432,454	6,865,342
Grants	1,071,985	-
Unbilled revenues	2,223,471	1,120,220
Accounts receivable, net	\$ 12,288,064	\$ 8,679,505

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Management of the Authority has been working with the Government and its various instrumentalities in an attempt to obtain payment on outstanding receivable balances and to increase the percentage of remittances on current billings for services.

The Authority has made certain arrangements with specific governmental agencies concerning the collection of past due accounts receivable. As of June 30, 2018 and 2017, the Authority has classified Government accounts receivable of approximately \$3.5 million and \$3.6 million, respectively, as noncurrent because these balances are expected to take longer than one year from the statement of net position dates to be paid by the various government agencies.

5. Restricted Assets

The Water System Revenue Bond Resolution, as amended, and certain Commission regulatory orders establish the following funds and accounts, which are restricted as to their usage:

Construction and Rehabilitation Funds - Amounts in the Construction and Rehabilitation Funds shall be used to pay the cost of construction of plant and equipment used in the production and distribution of water. The Construction and Rehabilitation Funds are held by the Authority.

Renewal and Replacement Fund - Amounts maintained in the Renewal and Replacement Fund are to be utilized for certain projects, extraordinary operation, maintenance, renewal or replacement costs and payment of certain contingencies. The Renewal and Replacement Fund is held by the bond trustee.

Debt Service Fund - The Authority is required to make monthly deposits into the Debt Service Fund to accumulate the required debt service amounts payable to bondholders prior to the next interest and/or principal payment date. The Debt Service Fund is held by the bond trustee who makes the required payments on behalf of the Authority.

Debt Service Reserve Fund - The Authority is required to maintain a balance in the Debt Service Reserve Fund equal to the maximum annualized debt service requirement remaining on any outstanding revenue bonds. The Debt Service Reserve Fund is held by the bond trustee.

Line Loss Fund - Amounts maintained in the Line loss Fund are to be utilized for projects that address losses on the Water System.

Water System revenues and all funds established by the Bond Resolution are pledged for payment of bond principal and interest. The trustee funds as outlined above include the Renewal and Replacement Fund, the Debt Service Fund, and the Debt Service Reserve Fund, and consist primarily of cash equivalents and investments in U.S. government securities stated at fair value. Other funds specified by the Bond Resolution and the Commission are primarily in cash and cash equivalents.

It is the Authority's policy to first apply restricted resources when an expense is incurred for purposes for which both restricted and unrestricted assets are available.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Restricted assets at June 30, 2018 and 2017, consist of the following:

	2018	2017
Rehabilitation Fund	\$ 516,512	\$ 515,219
Construction Fund	155,533	155,221
Renewal and Replacement Fund	-	753,407
Debt Service Fund	-	3,773,246
Debt Service Reserve Fund	-	3,885,084
Line Loss Fund	119,675	619,674
	\$ 791,720	\$ 9,701,851

6. Advances on Grants

The Authority received advance grant funding from the Government to improve the water distribution system and to extend the water lines to Anna's Retreat and Smith Bay for the purpose of making potable water available to customers on the eastern end of St. Thomas. As of June 30, 2018 and 2017, the Authority expended \$193 thousand and \$543 thousand of the advances, respectively.

7. Capital Assets

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

Description	Beginning Balance	Additions	Transfers	Impairment, Disposals, and Other	Ending Balance
Non-depreciable assets:					
Land and land right	\$ 184,225	\$ -	\$ -	\$ -	\$ 184,225
Construction in progress	4,117,973	3,008,906	(280,284)	(28,779)	6,817,816
Total non-depreciable assets	4,302,198	3,008,906	(280,284)	(28,779)	7,002,041
Depreciable assets:					
Utility plant	112,665,722	731,946	280,284	(3,506,963)	110,170,989
Accumulated depreciation	(51,275,451)	(1,399,176)	-	2,233,609	(50,441,018)
Property-related gains	(863,745)	-	-	187,509	(676,236)
Total depreciable assets, net	60,526,526	(667,230)	280,284	(1,085,845)	59,053,735
Capital assets, net	\$ 64,828,724	\$ 2,341,676	\$ -	\$ (1,114,624)	\$ 66,055,776

As indicated earlier, the Authority was impacted by Hurricanes Irma and Maria and certain assets sustained physical damage, were destroyed, and other assets required considerable effort to restore their service utility.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

The Authority evaluated its capital assets in accordance with GASB Statement No. 42 and realized a loss from impairment of \$1.3 million. The amount of the impairment loss for damaged capital assets is based on calculations using a combination of the restoration cost approach and the physical verification approach. Under the restoration cost approach, the amount of impairment is derived from the estimated costs to restore the utility of the capital asset. The estimated restoration cost can be converted to historical cost either by restating the estimated restoration cost using an appropriate cost index or by applying a ratio of the estimated restoration cost over estimated replacement cost to the carrying value of the capital asset. The Authority also conducted physical inspections of its assets to determine and estimate the extent of the damages. Assets fully depreciated prior to the hurricanes would have an impairment loss of \$0, regardless of the damage.

Actual repairs to damaged capital assets are expected to far exceed the calculated impairment losses. The impairment loss is reported as a special item in the accompanying Statements of Revenues, Expenses, and Changes in the Net Position.

Capital assets activity for the year ended June 30, 2017, was as follows:

Description	Beginning Balance	Additions	Transfers	Impairment, Disposals, and Other	Ending Balance
Non-depreciable assets:					
Land and land right	\$ 184,225	\$ -	\$ -	\$ -	\$ 184,225
Construction in progress	4,080,790	3,104,001	(3,066,818)	-	4,117,973
Total non-depreciable assets	4,265,015	3,104,001	(3,066,818)	-	4,302,198
Depreciable assets:					
Utility plant	109,151,515	447,389	3,066,818	-	112,665,722
Accumulated depreciation	(49,889,163)	(1,386,288)	-	-	(51,275,451)
Property-related gains	(1,051,254)	-	-	187,509	(863,745)
Total depreciable assets, net	58,211,098	(938,899)	3,066,818	187,509	60,526,526
Capital assets, net	\$ 62,476,113	\$ 2,165,102	\$ -	\$ 187,509	\$ 64,828,724

8. Lines of Credit

The Authority has available bank lines of credit of \$2.5 million for the Water System. Interest on amounts borrowed is payable quarterly at a variable interest rate of prime plus 1.0%, London Inter-Bank Offer Rate (LIBOR) plus 1.75%, or 175 basis points above the interest rate on three-year United States Government treasury notes.

The Authority has the option to select the variable interest rate to utilize for any borrowings on these notes. At both June 30, 2018 and 2017, there was \$2.5 million outstanding under the lines of credit for the Water System. The lines were extended to have a maturity of July 2020. Furthermore, there are certain financial reporting covenants that the Authority must comply with. The agreements require the Authority to deliver audited financial statements within 180 days after the end of its fiscal year. The banks have granted the Authority a waiver from this requirement for the year ended June 30, 2018.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

9. Long-Term Liabilities

Long-term debt consists of the following at June 30:

	2018	2017
1998 Series, Water System Revenue and Refunding Bonds, interest payable semiannually at 5.5%, maturing semiannually through July 1, 2017. Interest is paid in January and July.	\$ -	\$ 3,665,000
2018 Series, Water System Revenue and Refunding Bonds, interest payable semiannually at 2.3% - 2.9%, maturing semiannually through July 1, 2033. Interest is paid in January and July.	75,000,000	-
Less current installments	-	(3,665,000)
Long-term debt, excluding current installments	\$ 75,000,000	\$ -

In December 1998, the Authority issued \$44.2 million principal amount of 1998 Series Water System Revenue and Refunding Bonds. The proceeds from the bonds were used to repay the 1990 Series A Water System Revenue Bonds at a redemption price of 100% and to refund the 1992 Series B Water System Revenue Bonds, repay outstanding lines of credit balances, pay underwriters' costs, provide funding for a Renewal and Replacement Reserve Fund, and to purchase obligations of the United States government, which were placed in an irrevocable trust with an escrow agent to provide all future debt service on the remaining principal amount of the 1992 Series B Bonds which have since been paid off.

Payment of principal and interest on the 1998 Series Bonds is secured by an irrevocable lien on the Authority's net revenues (exclusive of any funds that may be established pursuant to the Bond Resolution for certain other specified purposes) and funds established under the Bond Resolution, including investment securities. To provide additional security, the Authority has conveyed to the bond trustee a subordinate lien and security interest in the Water System's net revenues. The Authority is also required to make deposits in a debt service reserve fund in accordance with the Bond Resolution. The 1998 Series Bonds maturing on or after July 1, 2010, are subject to redemption prior to their stated maturity date, at the option of the Authority, as a whole or in part at any time. The Water System Revenue Bonds are subject to mandatory redemption if (1) any significant part of the Water System shall be damaged, destroyed, taken, or condemned or (2) any for-profit, nongovernmental investor shall acquire an ownership interest in some or all assets of the Authority.

The Authority's Bond Resolution requires the Authority under Section 606(1), for as long as the bonds are outstanding, to establish rates "... so that in each fiscal year the net water revenues shall at all times be at least 1.25 the aggregate debt service requirement for such fiscal year." For the year ended June 30, 2017, the Authority's Debt Service Coverage ratio was 2.00. The 1998 bonds were fully repaid during the year ended June 30, 2018.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

In November 2017, in order to fund its working capital needs in the aftermath of Hurricanes Irma and Maria, the Authority obtained \$31.0 million under the Community Disaster Loan program administered by FEMA. In March 2018, the Authority entered into another loan for \$44.0 million and refinanced the existing \$31.0 million for a combined loan of \$75.0 million, secured now as a first lien of the Water System's revenues. The proceeds of these loans were used to provide working capital mostly for fuel invoices, payroll, and other critical operating expenses. While the loan is reflected under the Water System, the payment of principal and interest is subject to an intercompany agreement whereby 17% will be allocated to the Water System and 83% to the Electric System. The Authority may request draw-downs periodically. The interest rate varies with each draw-down, ranging from 2.3% to 2.9%.

The first interest payment is due July 1, 2019 with subsequent payments due semiannually. The first principal payment is due January 1, 2022 with subsequent payments due semiannually.

The following is a schedule of changes in long-term debt for the year ended June 30, 2018:

Description	Beginning Balance	Increases	Decreases	Ending Balance	Due Within One Year
Revenue bonds	\$ 3,665,000	\$ 75,000,000	\$ (3,665,000)	\$ 75,000,000	\$ -

The following is a schedule of changes in long-term debt for the year ended June 30, 2017:

Description	Beginning Balance	Increases	Decreases	Ending Balance	Due Within One Year
Revenue bonds	\$ 7,140,000	\$ -	\$ (3,475,000)	\$ 3,665,000	\$ 3,665,000
Unamortized discount	(21,882)	-	21,882	-	-
Total long-term debt	\$ 7,118,118	\$ -	\$ (3,453,118)	\$ 3,665,000	\$ 3,665,000

Future debt service requirements to maturity as of June 30, 2018, on the revenue bonds are as follows:

Year Ending June 30,	Principal	Interest	Total
2019	\$ -	\$ -	\$ -
2020 - 2024	12,000,620	11,770,059	23,770,679
2025 - 2029	30,947,495	6,617,459	37,564,955
2030 - 2034	32,051,885	2,186,576	34,238,461
Total	\$ 75,000,000	\$ 20,574,094	\$ 95,574,094

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

10. Pension Plan

Following is a description of the pension plan and accounting for pension expense, liabilities, and deferred outflows/inflows of resources. As required, the Authority follows the provisions of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions - an amendment of GASB Statement No. 27*, as amended by GASB Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date - an amendment of GASB Statement No. 68* and GASB Statement No. 82, *Pension Issues - an amendment of GASB Statements No. 67, No. 68, and No. 73*.

Plan Description and Benefits

Full time employees of the Authority are members of the Government Employees' Retirement System of the U.S. Virgin Islands (GERS), a cost sharing multi-employer, defined benefit pension plan (the plan) established as of October 1, 1959 Title 3, Chapter 27 of the Virgin Islands Code to provide retirement, death, and disability benefits. Benefits may be extended to beneficiaries of plan members.

The plan covers all employees of the Authority, except employees compensated on a contract fee basis, casual, per diem or provisional, and part time employees who work less than 20 hours per week. Persons over the age of 55 may opt out of the plan by providing formal notification to the plan. Vesting of benefits occurs after 10 years of service. Benefits may be extended to beneficiaries of plan members.

There are two tiers within the plan:

Tier I: Employees hired prior to September 30, 2005

Tier II: Employees hired on or after October 1, 2005

Regular Tier I employees who have completed thirty (30) years of credited service or have attained age sixty (60) with at least ten (10) years of credited service are eligible for a full-service retirement annuity. Regular Tier II employees who have attained age sixty-five (65) with at least ten (10) years of service are eligible for a full-service retirement annuity. Members who are considered "safety employees" as defined in the Code are eligible for full-service retirement benefits under Tier I when they have earned at least twenty (20) years of government service or have reached the age of fifty-five (55) with at least ten (10) years of credited service. Under Tier II, safety employees are eligible for full retirement when they have earned at least twenty-five (25) years of government service and have reached age fifty-eight (58) or have reached age (60) with at least ten (10) years of service.

The monthly annuity benefit payment is determined by applying a stipulated benefit ratio to the member's average compensation. Average compensation for regular and safety Tier I members is determined by averaging the five highest years of credited service within the last ten years of service, subject to the maximum salary limitations in effect during such service. Average compensation for regular and safety Tier II members is based on career average salary, subject to the maximum salary limitations in effect during the service. The maximum annual salary that can be used in this computation is \$65,000.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

In 1995, the Early Retirement Incentive Training and Promotion Act was amended by the Legislature to allow a member with a combined aggregate number of years of service and age of at least seventy-five (75) years to retire without a reduction in their annuity. Early retirement benefits provided under the Act vary depending upon age of retirement, type of employment, and credited years of service.

GERS is a separate and independent agency that is included for financial reporting purposes as a blended pension trust fund of the Government. GERS issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained by writing to the Employees' Retirement System of the Government of the Virgin Islands, 3438 Kronprindsens Gade, St. Thomas, Virgin Islands 00802.

Funding and Contribution Policy

Contributions to GERS are established by the Board of Trustees of GERS. The Government's required employer contribution for Tier I and Tier II members effective January 1, 2015, was 20.50% of the member's annual salary.

Employee contribution rates (as a percentage of payroll) for fiscal years 2018 and 2017 were as follows:

	<u>Tier 1</u>	<u>Tier 2</u>
Regular Employees	11.0%	11.5%
Public Safety Employees	13.0%	13.625%

Prior to June 29, 2000, member contributions were refundable without interest upon withdrawal from employment before retirement. Effective July 1, 2009, GERS' Board of Trustees approved an effective annual interest rate on refunded contributions of 2.00% per annum.

Both the plan and the Authority have a September fiscal year end. GASB Statement No. 68 requires that the reported results must pertain to liability and asset information within certain defined time frames. For this report, the following time frames are used:

	2018	2017
Valuation Date	October 1, 2017	October 1, 2016
Measurement Date	September 30, 2017	September 30, 2016
Measurement Period	October 1, 2016 - September 30, 2017	October 1, 2015 - September 30, 2016

The Authority is considered an employer of the plan with a proportionate share of 6.8044% and 7.156% as of the measurement dates of September 30, 2017 and 2016, respectively. The Authority's percentage was estimated by management based on the average of each employer's contributions during the period October 1, 2013 through September 30, 2017. Management has determined an allocation percentage to apply to the Electric System and Water System based on those systems' employment burdens to the Authority as a whole (approximately 83% and 17%, respectively).

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

The Authority's proportionate share of employer contributions recognized by GERS was \$5.1 million for each of the plan's fiscal years ended September 30, 2017 and 2016. The Water System's allocated share of employer contributions for the same period was \$0.9 million per fiscal year.

Pension Liabilities, Expense, and Deferred Outflows/Inflows of Resources

As of June 30, 2018 and 2017, the Authority's proportionate share of the net pension liability of the Plan was \$298.1 million and \$331.1 million, respectively, and the allocation to the Water System was \$50.7 million and \$56.3 million, respectively. The net pension liability of the plan is measured as of September 30, 2017 and 2016, and the total pension liability for the plan used to calculate the net pension liability was determined by an actuarial valuation as of October 1, 2017 and 2016, respectively.

For the years ended June 30, 2018 and 2017, the Authority recognized pension expense of \$22.1 million and \$25.4 million, respectively, inclusive of amortization of deferred outflows of pension related items. Of those amounts, \$3.8 million and \$4.3 million was allocated to the Water System's pension expense, respectively.

Following is a schedule of deferred outflows of resources and deferred inflows of resources allocated to the Water System in the computation of net pension liability for the year ended June 30, 2018:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in assumptions	\$ 8,357,110	\$ 3,585,821
Net difference between projected and actual earnings on pension plan investments	287,465	-
Difference between expected and actual experience	1,533,027	-
Changes in proportionate share	1,051,514	5,977,153
Contributions made subsequent to measurement date	575,776	-
	\$ 11,804,892	\$ 9,562,974

Following is a schedule of deferred outflows of resources and deferred inflows of resources allocated to the Water System in the computation of net pension liability for the year ended June 30, 2017:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in assumptions	\$ 11,610,488	\$ -
Net difference between projected and actual earnings on pension plan investments	677,208	65,123
Difference between expected and actual experience	1,770,798	-
Changes in proportionate share	2,103,028	5,121,277
Contributions made subsequent to measurement date	642,977	-
	\$ 16,804,499	\$ 5,186,400

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Amounts reported as deferred outflows and inflows, exclusive of contributions made after the measurement date, will be recognized in pension expense as follows:

Year ending June 30,

2019	\$ 351,709
2020	668,042
2021	629,133
2022	90,047
2023	96,395
Thereafter	(189,183)
	\$ 1,646,143

Actuarial Assumptions

A summary of the actuarial assumptions and methods used to calculate the total pension liability as of the measurement dates at September 30, 2017 and 2016 is provided below, including any assumptions that differ from those used in the corresponding October 1, 2017 and 2016 actuarial valuations. Refer to the October 1, 2017 and 2016 actuarial valuation reports for a complete description of all other assumptions, which can be found on GERS' website.

<i>September 30,</i>	2017	2016
Inflation Rate	2.50%	2.50%
Salary Increases	3.25% including inflation	3.25% including inflation
Actuarial Cost Method	Entry age normal	Entry age normal
Expected Rate of Return	7.00%	7.00%
Municipal Bond Yield	3.64%	3.06%
Discount Rate	3.74%	3.20%
Mortality Table	RP-2014 Blue Collar	RP-2014 Blue Collar

The demographic assumptions for the 2017 actuarial valuation are based on the results of an actuarial experience study for the period October 1, 2011 through September 30, 2015.

Investment Rate of Return

The long-term expected rates of return of 7.00% for the years ending 2017 and 2016, respectively, on plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan 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.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Best estimates of arithmetic real rates of return for each major asset class included in the plan's target asset allocation, as of the measurement date at September 30, 2017, are summarized below:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic equity	29%	6.21%
International equity	12%	7.21%
Fixed income	27%	1.56%
Cash	2%	0.91%
Alternative	30%	5.50%

Best estimates of arithmetic real rates of return for each major asset class included in the plan's target asset allocation, as of the measurement date at September 30, 2016, are summarized below:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic equity	29%	6.59%
International equity	12%	8.29%
Fixed income	27%	1.59%
Cash	2%	0.99%
Alternative	30%	5.50%

Discount Rate

The discount rate used to measure the total pension liability was 3.74% as of the measurement date at September 30, 2017, and 3.20% as of the measurement date at September 30, 2016. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate, including the future increases in the employee contribution rates legislated. Based on those assumptions, the plan's fiduciary net position was not projected to be available to make all projected future benefit payments of current plan members.

Therefore, the long-term expected rate of return on plan investments of 7.00% was applied to all periods of projected benefit payments that are covered by projected assets. For periods where projected future benefit payments are not covered by projected assets, the yield on a 20-year AA Municipal Bond Index was applied, which was 3.64% and 3.06% as of the measurement date at September 30, 2017 and 2016, respectively.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

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

The following presents the Water System's allocation of the Authority's proportionate share of the net pension liability (NPL) for the plan, calculated using the discount rate, as well as what the Water System's allocation of the Authority's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate for the year ended June 30, 2018:

1.0% Decrease - Share of NPL @ 2.74%	Share of NPL @ 3.74%	1.0% Increase - Share of NPL @ 4.74%
\$ 58,783,677	\$ 50,670,361	\$ 43,975,369

The following presents the Water System's allocation of the Authority's proportionate share of the net pension liability (NPL) for the plan, calculated using the discount rate, as well as what the Authority's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1.0% lower or 1.0% higher than the current rate for the year ended June 30, 2017:

1.0% Decrease - Share of NPL @ 2.20%	Share of NPL @ 3.20%	1.0% Increase - Share of NPL @ 4.20%
\$ 65,817,976	\$ 56,283,182	\$ 48,461,054

Detailed information about the pension plan's fiduciary net position is available in the separately issued GERS financial report.

11. Other Post-Employment Benefits (OPEB) Plan

Plan Description and Benefits

The Authority provides certain post-employment health care benefits to retirees under a health insurance plan. These benefits are extended at the discretion of the Authority, which reserves the right to change or terminate benefits and to change premium contributions required from retirees in the future as circumstances change. All employees who are eligible for service retirement with the GERS (see Note 10) qualify for the Authority's post-employment health care benefits. An OPEB trust, the Virgin Islands Water and Power Authority Voluntary Employees' Beneficiary Association Trust, was established during the measurement period ended on June 30, 2017.

The post-employment benefits include continued access to coverage for the retiree and dependents in the medical, prescription, and dental plan sponsored by the Authority.

At June 30, 2018, the following current and former employees were covered by the benefit terms:

Active employees	513
Inactive employees or beneficiaries	407
Total participants	920

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Net OPEB Liability

The Authority employs an actuary to assist in estimating the OPEB liability for the Authority as a whole and then allocates that liability and related cost systematically to the Water and Electric Systems. The Authority's net OPEB liability was measured as of June 30, 2017. Allocations between the Water and Electric Systems were made based on the actuarial accrued liability on the valuation date.

The following table shows the components of the Authority's changes in the total OPEB liability, the plan fiduciary net position, and the net OPEB liability during the measurement period ended June 30, 2017.

	Increase (Decrease)		
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
Beginning balances, as restated	\$ 11,453,816	\$ -	\$ 11,453,816
Changes for the year:			
Service cost	456,666	-	456,666
Interest	342,993	-	342,993
Changes to assumptions	(1,724,693)	-	(1,724,693)
Contributions - employer	-	1,030,858	(1,030,858)
Net investment income	-	18,969	(18,969)
Benefit payments	-	(328,327)	328,327
Distributions - other	(328,327)	-	(328,327)
Net changes	(1,253,361)	721,500	(1,974,861)
Ending balances	\$ 10,200,455	\$ 721,500	\$ 9,478,955

Actuarial Assumptions

The total OPEB liability in the June 30, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Valuation date:	June 30, 2017
Measurement date:	June 30, 2017
Actuarial Cost Method:	Entry Age Normal
Inflation:	2.50%
Salary Increases:	3.25%, including inflation
Investment rate of return:	4.00%
Healthcare cost trend rates:	Based on the Getzen Model, with trend starting at 0.00% in FY 2018 to reflect actual premiums, 6.75% in FY 2019, and gradually decreasing to an ultimate trend rate of 4.51%. The ultimate trend value includes a 0.27% load for excise tax.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Mortality: For pre-retirement mortality and post-retirement healthy mortality, 110% of the RP-2014 Blue Collar Employee Mortality Table with generational projection from 2015 using Scale MP-2015. For post-retirement disabled lives, 125% of the RP-2014 Disabled Annuitant Mortality Table with generational projection from 2015 using Scale MP-2015.

Discount Rate

GASB Statement No. 75 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the total OPEB liability (TOL). This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses, and investment returns are projected into the future. The projected plan fiduciary net position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. For years when assets are projected to be on hand to meet benefit payments, the assumed net long-term rate of return is used as the discount rate. For years when assets are not projected to be sufficient to meet benefit payments, the use of a specific municipal yield is used as the discount rate, as described in the following paragraph.

The Single Discount Rate (SDR) is equivalent to applying the following two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on OPEB plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by Fidelity) as of the measurement date (to the extent that the projected plan fiduciary net position based on the long-term expected rate of return is insufficient to pay benefits).

For the purpose of this measurement, the expected rate of return on OPEB plan investments is 4.00% as of June 30, 2017; the municipal bond rate is 3.56% as of June 30, 2017. The Authority does not have a formal funding policy. However, the Authority has a track record of paying benefits out of its general revenue in addition to depositing ad hoc amounts into the OPEB trust. It was assumed that the Authority would continue this practice. Based on the current pattern, the OPEB plan's fiduciary net position together with the future contributions are expected to be available to finance all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments 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 Water System's allocation of the Authority's net OPEB liability (NOL) to changes in the Single Discount Rate, calculated using a Single Discount Rate of 4.00%, as well as what the Water System's allocation of the Authority's net OPEB liability would be if it were calculated using a Single Discount Rate that is 1% lower or 1% higher:

1.0% Decrease - Share of NOL @ 3.00%	Share of NOL @ 4.00%	1.0% Increase - Share of NOL @ 5.00%
\$ 11,075,099	\$ 9,478,955	\$ 8,196,838

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

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

Regarding the sensitivity of the net OPEB liability to changes in the healthcare cost trend rates, the following presents the Water System's allocation of the Authority's net OPEB liability, calculated using the same trend rates as employed in the most recent funding valuation as well as what the plan's net OPEB liability would be if it were calculated using a sequence of rates that are 1% lower or 1% higher:

1.00% Decrease	Current healthcare cost Trend Rate Assumption Baseline	1.00% Increase
\$ 8,045,797	\$ 9,478,955	\$ 11,302,378

OPEB Plan Fiduciary Net Position.

Detailed information about the OPEB plan's fiduciary net position is available in the separately issued Trust financial report

OPEB Expense and Deferred Outflows/Inflows of Resources Related to OPEB

For the year ended June 30, 2018, the Authority recognized OPEB expense of \$3.2 million of which \$0.5 million was allocated to the Water System. Following is a schedule of deferred outflows of resources and deferred inflows of resources allocated to the Water System in the computation of net OPEB liability for the year ended June 30, 2018:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in assumptions	\$ -	\$ 1,478,308
Net difference between projected and actual earnings on pension plan investments	-	8,665
Contributions made subsequent to measurement date	86,780	-
	\$ 86,780	\$ 1,486,973

Amounts reported as deferred outflows and inflows, exclusive of contributions made after the measurement date, will be recognized in OPEB expense as follows:

Year ending June 30,

2019	\$ (248,551)
2020	(248,551)
2021	(248,551)
2022	(248,551)
2023	(246,385)
Thereafter	(246,384)
	\$ (1,486,973)

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Payable to the OPEB Plan

At June 30, 2017, the Water System reported a payable of \$86,780 for the outstanding amount of contributions to the Plan required for the year ended June 30, 2018.

12. Commitments and Contingencies

Litigation

The Authority is involved in various claims and legal actions arising in the ordinary course of business. In the opinion of management, the ultimate disposition of these matters will not have a material adverse effect on the Water System's financial position, changes in net position, or liquidity. Additionally, Title 30, Section 111(a) of the Virgin Islands Code exempts the Authority's Water System property from lien, levy, and sale as the result of any judgment against the Authority, except by bondholders.

Grant Funds

In connection with Federal and state government grant programs, the Authority is obligated to administer and spend the grant monies in accordance with regulatory restrictions, and is subject to audit by the grantor agencies. In cases of non-compliance, the agencies involved may require the Authority to refund program monies. Management believes these non-compliance instances, if any, should not materially affect the Authority's financial position.

Insurance Program

The Water System is exposed to various risks of loss related to damage and destruction of assets, errors and omissions, injuries to employees, and natural disasters. The Authority mitigates this risk of loss by purchasing commercial insurance, including general liability, excess liability, workers' compensation, property, and employee health, life, and accident.

The Authority's commercial insurance policies cover catastrophic exposures, as well as those risks required to be insured by law or contract. It is the policy of the Authority to retain a significant portion of certain losses related primarily to physical loss to property, business interruption resulting from such loss, and comprehensive general and vehicle liability. There were no reductions in coverage from the prior year, and the amount of settlements has not exceeded insurance coverage for each of the past three years. Also see Notes 2 and 7.

Construction Contracts

During the normal course of business, the Authority contracts with various construction companies to help the Authority maintain, replace, and expand its utility plant. These construction costs are expected to be paid for using proceeds from government grants, contributions from developers, and cash from operations.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Agreements with Seven Seas Corporation

The Authority has signed two agreements with Seven Seas Corporation to build, operate, and maintain two reverse osmosis facilities, one on St. Croix and one on St. Thomas, and sell the water from the facilities to the Water System. The agreements both have 20-year terms expiring through 2032. The amounts paid by the Water System to Seven Seas Corporation under the agreements were \$8.8 million and \$8.4 million for 2018 and 2017, respectively.

Operating Leases

During the normal course of business, the Authority leases various property and equipment to support Water System operations. The leases are generally short term in nature and lease payments are not significant to the overall operations of the Water System.

13. Regulatory Matters

In April 1998, the Governor signed into law Virgin Islands Act No. 6224, which provides that the Authority, as well as certain other instrumentalities of the Government, make a payment to the Government in lieu of taxes equal to 10% of net revenues or \$500,000, whichever is greater. The term “net revenues” is not defined in the legislation. Subject to further clarification from the Legislature, the Authority has interpreted net revenues as net income calculated in accordance with accounting principles generally accepted in the United States of America. For the years ended June 30, 2018 and 2017, the Water System did not incur any expenses related to this tax.

14. Subsequent Events

Federal Assistance - Hurricanes Irma and Maria

In August 2018, in order to continue to fund its working capital needs in the aftermath of the hurricanes, the Authority increased the loan amount obtained under the Community Disaster Loan program administered by FEMA from \$75.0 million to \$91.0 million. The proceeds of these loans were used to provide working capital mostly for fuel invoices, payroll, and other critical operating expenses.

FEMA’s Public Assistance Grant Program (PA) provides federal support to include assistance for debris removal, life-saving emergency protective measures, and the repair, replacement, or restoration of disaster-damaged facilities. As of June 2020, the Authority has been approved for approximately \$529.5 million in grant funding for emergency restoration work.

In addition to incurring significant storm related expenses, recurring operating revenues of the Authority have been reduced. In the interim, the Authority has revised its fiscal years 2019 and 2020 budgets. In a further effort to close potential shortfalls and to serve returning citizens, the Authority continues to work closely with Federal agencies, to maximize its recovery from all available sources. While inflows of Federal and private funds continue to bolster the reconstruction activity, the eventual amount and timing for receipt of such funds cannot be predicted at this time.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Rate Case

In November 2019, the Authority proposed a reduction in the Water System LEAC from \$6.350 per KGAL to \$5.030 per KGAL to the Public Services Commission. In its December 2019 meeting, the Commission voted to approve the reduced LEAC rates. The decreased Water System LEAC rates went into effect on all bills issued on or after January 1, 2020.

Global Pandemic

In March 2020, the Governor of the U.S. Virgin Islands declared a state of emergency due to the coronavirus pandemic known as COVID-19. The state of emergency was approved by the President of the United States under the provisions of the Stafford Act and the National Emergencies Act. A federally approved state of emergency activates federal assistance to states in the form of financial, logistical, and technical assistance. The state of emergency also activates other emergency response protocols and systems to protect citizenry such as stay-at-home orders, travel restrictions, and social distancing requirements.

The extent of the impact of COVID-19 on the operational and financial performance of the Authority will depend on certain developments, including the duration and spread of the outbreak. Prolonged travel and social gathering restrictions could negatively impact the Authority's vendors and customers due to business disruptions and increased unemployment. The pandemic has had some impact on the Authority's operations as energy consumption started to trend downward as peak loads decreased. Revenue collections have also begun to decrease despite the stimulus payments the Territory's residents have been receiving. Accordingly, the Authority has adjusted its operations in compliance with Government directives and has received federal assistance to fund the pandemic related operating expenses.

Although the Authority cannot estimate the length or gravity of the impact of the COVID-19 outbreak at this time, if the pandemic continues, it may have an adverse effect on the Authority's results of future operations, financial position, and liquidity. The Authority continues to monitor the long-term effects of the pandemic and will revise the Authority's revenue and expense projections accordingly. Nonetheless, the Authority believes that it will have the necessary resources to fund essential services and make timely debt service payments.

Economic Relief Legislation

Also, in March 2020, the President of the United States signed into law the "Coronavirus Aid, Relief, and Economic Security (CARES) Act." The CARES Act, among other things, appropriated funds for the Coronavirus Relief Fund to be used to make payments for specified uses to state, territorial, local, and tribal governments.

In May 2020, the Authority received \$15.5 million from the Government of the U.S. Virgin Islands in funding from the Coronavirus Relief Fund. The Authority implemented the Your Energy Stimulus (YES) program providing credits in the amount of \$250 to electric residential accounts and \$500 for electric business accounts during its May 2020 billing cycle. The Authority continues to examine the impact that the CARES Act may have on its operations.

Water System of the Virgin Islands Water and Power Authority

Notes to the Financial Statements

Management's Evaluation

Management has evaluated any events or transactions occurring after June 30, 2018, the statement of net position date, through June 30, 2020, the date the financial statements were available to be issued, and noted that there have been no additional events or transactions which would require adjustments to or disclosure in the Water System's financial statements for the year ended June 30, 2018.

**Required
Supplementary Information**

Water System of the Virgin Islands Water and Power Authority

Schedule of Changes in OPEB Liability and Related Ratios

<i>Measurement year ending June 30,</i>	<i>2017</i>
Total OPEB Liability:	
Service Cost	\$ 2,686,270
Interest on the Total OPEB Liability	2,017,603
Changes in Benefit Terms	-
Difference Between Expected and Actual Experience	-
Assumption Changes	(10,145,248)
Benefit Payments	(1,931,335)
Net Change in Total OPEB Liability	(7,372,710)
Total OPEB Liability - Beginning*	67,375,387
Total OPEB Liability - Ending (a)	\$ 60,002,677
Plan Fiduciary Net Position:	
Employer Contributions (Trust Deposits)	\$ 4,324,854
Employer Contributions (Benefits Paid Outside the Trust)	1,739,016
OPEB Plan Net Investment Income	111,584
Benefit Payments	(1,931,335)
OPEB Plan Administrative Expenses	-
Net Change in Plan Fiduciary Net Position	4,244,119
Plan Fiduciary Net Position - Beginning	-
Plan Fiduciary Net Position - Ending (b)	\$ 4,244,119
Net OPEB Liability (Asset) - Ending (a) - (b)	55,758,558
Plan Fiduciary Net Position as a percentage of Total OPEB Liability	7.07%
Covered-Employee Payroll	\$ 30,176,778
Net OPEB Liability as a Percentage of Covered-Employee Payroll	184.77%

This schedule is intended to show a 10-year trend. Additional years will be reported as they become available.

** An OPEB trust was established during the measurement period ended June 30, 2017. Consequently, the beginning total OPEB liability was calculated using a discount rate of 2.92% based on municipal bond rates prevailing on June 30, 2016.*

Water System of the Virgin Islands Water and Power Authority

Schedule of the System's Share of the Net Pension Liability

<i>Fiscal Year</i>	2018	2017	2016	2015
Water System's proportion of the net pension liability	1.1567%	1.2165%	1.2924%	1.4591%
Water System's proportionate share of the net pension liability	\$ 50,670,361	\$ 56,283,182	\$ 53,044,578	\$ 45,026,931
Water System's covered-employee payroll	\$ 4,347,492	\$ 3,665,263	\$ 3,275,222	\$ 3,275,222
Water System's proportionate share of the net pension liability as a percentage of its covered-employee payroll	1166%	1536%	1620%	1375%
Plan fiduciary net position as a percentage of the total pension liability	16.18%	16.54%	19.58%	27.26%

This schedule is intended to show a 10-year trend. Additional years will be reported as they become available. The amounts presented for each fiscal year are as of the measurement date (September 30 of the previous year).

Water System of the Virgin Islands Water and Power Authority

Schedule of the System's Pension Contributions

<i>Fiscal Year</i>	2018	2017	2016	2015
Actuarially required contributions	\$ 3,651,478	\$ 3,587,192	\$ 3,030,406	\$ 2,919,510
Contributions in relation to the actuarially required contributions	753,841	735,017	597,521	793,748
Contribution deficiency (excess)	\$ 2,897,637	\$ 2,852,175	\$ 2,432,885	\$ 2,125,762
Covered-employee payroll	\$ 4,347,492	\$ 4,347,492	\$ 3,665,263	\$ 3,275,222
Contributions as a percentage of covered-employee payroll	17.34%	16.54%	16.30%	24.23%

This schedule is intended to show a 10-year trend. Additional years will be reported as they become available. The amounts presented for each fiscal year are as of the latest fiscal year.

Supplementary Schedule

Water System of the Virgin Islands Water and Power Authority

Five-Year Comparative Summary of Operations (Unaudited)

<i>Years ended June 30,</i>	2018	2017	2016	2015	2014
Operating revenues:					
Water sales to customers	\$ 10,843,576	\$ 12,122,915	\$ 12,651,258	\$ 11,437,836	\$ 10,794,675
Water sales to Virgin Islands Government	8,386,394	9,729,815	8,223,966	9,503,662	10,383,518
Fuel escalator revenues	5,745,500	8,971,868	9,759,747	11,332,551	10,343,859
Line loss surcharge	692,663	783,003	723,183	756,256	395,485
Bad debt (expense) recovery	(899,632)	(400,928)	(80,420)	72,960	(415,486)
Total operating revenues	24,768,501	31,206,673	31,277,734	33,103,265	31,502,051
Operating and production expenses:					
Production cost of water distributed	12,045,668	11,136,598	11,835,397	13,502,213	12,128,267
Operations and maintenance	6,333,334	7,304,716	8,886,167	13,212,720	7,944,279
Customer service	776,402	976,983	925,581	1,248,120	1,352,112
Administrative and general	9,893,655	9,735,687	5,728,301	5,118,068	5,099,855
Depreciation and amortization	1,211,667	1,198,779	3,144,304	3,409,422	3,413,191
Total operating and production expenses	30,260,726	30,352,763	30,519,750	36,490,543	29,937,704
Operating income (loss)	(5,492,225)	853,910	757,984	(3,387,278)	1,564,347
Nonoperating revenues (expenses):					
Loss on retirement of capital assets	-	-	(3,147,815)	-	-
Interest expense	(251,816)	(323,221)	(506,873)	(695,573)	(864,360)
Investment earnings	15,744	33,029	12,922	9,844	28,546
Total nonoperating expense	(236,072)	(290,192)	(3,641,766)	(685,729)	(835,814)
Change in net position, before capital grants and contributions and special item	(5,728,297)	563,718	(2,883,782)	(4,073,007)	728,533
Capital grants and contributions	1,302,659	2,826,369	1,498,989	29,238	3,007,146
Impairment loss on capital assets	(1,273,354)	-	-	-	-
Increase (decrease) in net position	\$ (5,698,992)	\$ 3,390,087	\$ (1,384,793)	\$ (4,043,769)	\$ 3,735,679
Water revenues:					
Residential	\$ 4,453,075	\$ 4,713,748	\$ 4,548,624	\$ 4,354,561	\$ 4,193,223
Commercial	5,497,031	6,583,707	7,072,209	6,311,550	6,089,829
Virgin Islands Government	3,592,244	3,872,803	2,829,962	3,684,954	4,356,682
Other governments	4,794,150	5,857,011	5,394,004	5,818,708	6,026,836
Standpipe	424,202	378,936	547,669	292,751	91,154
Fuel escalator revenues	5,745,500	8,971,868	9,759,747	11,332,551	10,343,859
Line Loss Surcharge	692,663	783,003	723,183	756,256	395,485
Other	469,268	446,525	482,757	478,974	420,469
Total	\$ 25,668,133	\$ 31,607,601	\$ 31,358,155	\$ 33,030,305	\$ 31,917,537
Water sales (gallons) (in thousands):					
Residential	261,665	209,727	240,443	216,134	207,681
Commercial	181,238	278,953	286,867	262,335	400,747
Virgin Islands Government	149,547	184,051	133,699	185,874	208,866
Other governments	322,926	431,611	369,202	285,783	288,051
Standpipe	20,965	20,759	29,992	15,601	5,055
Total	936,341	1,125,101	1,060,203	965,727	1,110,400
Number of customers at year-end	6,927	12,723	12,441	12,441	12,311