WEST VIRGINIA
WATER DEVELOPMENT AUTHORITY

FINANCIAL REPORT

June 30, 2019

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BROWNEDWARDS
certified public accountants

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors
West Virginia Water Development Authority
Charleston, West Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the West Virginia Water Development Authority (the Authority), a component unit of the State of West Virginia, as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America 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 from material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority, as of June 30, 2019, and the changes in financial position and cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

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Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 through 7, the schedule of the proportionate share of the net pension liability, the schedule of contributions to the PERS, the schedule of the proportionate share of the net OPEB liability, the schedule of contributions to the RHBT, and the notes to required supplementary information on pages 41 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 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 Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 7, 2019, 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 Authority's internal control over financial reporting and compliance.

Brown, Edwards & Company, L.L.P.
CERTIFIED PUBLIC ACCOUNTANTS

Charleston, West Virginia
October 7, 2019

INTRODUCTION

The West Virginia Water Development Authority (the "Authority") was established in 1972 by the West Virginia Legislature as a governmental instrumentality of the State of West Virginia (the "State") a body corporate and is considered a component unit of the State for financial reporting purposes. The Authority commenced operations in 1974 and is authorized to serve as a revenue bond bank that provides financial assistance to municipalities, public service districts and other political subdivisions to meet the requirements of State and federal water pollution control and safe drinking water laws, thereby helping to protect the health of the State's citizens, improving drinking water quality, upgrading infrastructure to attract economic development and protecting the environment. The Authority operates under the supervision of the West Virginia Water Development Board, which is comprised of seven members. The Authority, also serves as fiduciary agent for two other programs which are reported separately. The Authority is self-supporting and does not receive State appropriations for operating expenses or bond programs.

The Authority maintains a variety of programs to provide long-term, short-term and private-activity financing at favorable interest rates for design, construction and/or acquisition of wastewater and/or water systems. Generally, the Authority's programs are funded with proceeds from water development bonds issued by the Authority. Moneys in the various programs are loaned to municipalities, public service districts and other political subdivisions through the purchase of revenue bonds or notes issued by these local governmental agencies. The loans are repaid from the revenues of the wastewater and/or water systems or other permanent financing. Because the Authority's bonds are considered a moral obligation of the State, the aggregate principal amount of bonds and/or notes issued by the Authority may not exceed $500 million outstanding at any time; provided that before the Authority issues bonds or notes in excess of $440 million, the Legislature must pass a resolution authorizing this action.

The Authority's long-term planning is accomplished within the confines of its authorized borrowing limit. Additionally, the Authority has used and will use other available resources to fund loans and issue bonds when a significant identifiable need arises.

This discussion and analysis of the Authority's financial activities for the year ended June 30, 2019 is designed to assist the reader in focusing on significant financial issues and activities of the Authority and to identify significant changes in financial position. We encourage readers to consider the information presented here in conjunction with the Authority's financial statements, which begin on page 8.

USING THIS REPORT

This report consists of a series of financial statements. The Statement of Net Position and Statement of Revenues, Expenses, and Changes in Fund Net Position report the Authority's net position and the annual changes in net position. The Authority's net position, which is the difference between assets and deferred outflows of resources, and liabilities and deferred inflows of resources, is one way to measure the Authority's financial health or financial position.

FINANCIAL HIGHLIGHTS

- Total assets of the Authority decreased $4.96 million or 2%. Deferred outflows of resources decreased by $639 thousand or 8%. There was a decrease in total liabilities of $9.8 million or 5%. Deferred inflows of resources decreased $28 thousand or 4%. Total net position increased $4.2 million or 6%.

FINANCIAL HIGHLIGHTS (Continued)

- Total revenues decreased $107 thousand or 1% from the previous year. This was primarily due to a decrease in charges for services of $622 thousand offset by an increase in interest and investment revenue of $478 thousand, as well as an increase in other revenue of $37 thousand.
- Total expenses decreased $1.7 million or 17%. This was primarily the combined result of a $703 thousand decrease in interest expense and a $1 million decrease in operating expenses.

THE AUTHORITY AS A WHOLE

The analysis below focuses on Net Position (Table 1) and Changes in Net Position (Table 2):

Table 1
Net Position

	2019 WDA	2018 WDA	Increase (Decrease)
Assets			
Current assets	$ 45,345,374	$ 39,904,500	$ 5,440,874
Non current assets	192,542,701	202,941,152	(10,398,451)
Total assets	**$ 237,888,075**	**$ 242,845,652**	**$ (4,957,577)**
Deferred outflows of resources			
Deferred loss on bond refundings	$ 7,330,327	$ 7,974,054	$ (643,727)
Deferred outflows of resources from OPEB amounts	38,371	17,523	20,848
Deferred outflows of resources from pension amounts	60,942	77,174	(16,232)
Total deferred outflows of resources	**$ 7,429,640**	**$ 8,068,751**	**$ (639,111)**
Liabilities			
Current liabilities	$ 10,329,489	$ 11,096,791	$ (767,302)
Net OPEB Liability	174,309	158,520	15,789
Net Pension Liability	89,328	164,270	(74,942)
Long-term debt outstanding	162,150,877	171,084,965	(8,934,088)
Total liabilities	**$ 172,744,003**	**$ 182,504,546**	**$ (9,760,543)**
Deferred inflows of resources			
Deferred gain on refunding	$ 572,322	$ 596,143	$ (23,821)
Deferred inflows of resources from OPEB amounts	69,356	60,769	8,587
Deferred inflows of resources from pension amounts	79,040	91,488	(12,448)
Total deferred inflows of resources	**$ 720,718**	**$ 748,400**	**$ (27,682)**
Net position			
Net investment in capital assets	$ 4,063,713	$ 4,559,902	$ (496,189)
Restricted	25,333,567	23,892,386	1,441,181
Unrestricted	42,455,714	39,209,169	3,246,545
Total net position	**$ 71,852,994**	**$ 67,661,457**	**$ 4,191,537**

THE AUTHORITY AS A WHOLE (Continued)

Total assets decreased $4.96 million or 2%. Decreases to assets were the result of the use of assets to fund interest expense of $6.5 million on bonds payable, scheduled principal payments on bonds payable of $8.97 million, and general and administrative expenses of $1.2 million. The decrease to assets were substantially offset by operating revenues including revenues from interest on revenue bonds receivable reflected in the financial statements as "charges for services" of $11.2 million and interest on investments of $1.1 million. During the year, the Authority disbursed $1.5 million in loans from unrestricted resources available to the authority.

Deferred Outflows of Resources decreased by $639 thousand or 8% which was the result of current year amortizations of loss on refundings in the amount of $644 thousand, and a reduction of the deferred outflow of resources for pension expense and pension contributions in the amount of $16 thousand, which is explained further in Note 9. An increase in the deferred outflow of resources for OPEB in the amount of $21 thousand offset these decreases.

Total liabilities decreased approximately $9.8 million or approximately 5%. The majority of the decrease was in revenue bonds payable, which are presented on the balance sheet net of unamortized premiums.

Deferred Inflows of Resources decreased $28 thousand as a result of the amortizations of the gain on refunding and a reduction of the deferred inflow of resources for pension expense and other post employment benefits other than pensions.

Unrestricted net position increased $3.2 million, primarily explained by the combined result of $1.9 million net income in unrestricted accounts, a $1.3 million transfer from the restricted portion of revenue bonds receivable in the four loan programs to current assets, and a decrease of $731 thousand in the current portion of revenue bonds payable.

Restricted net position increased $1.4 million primarily due to net income of $774 thousand and a decrease in the revenue bonds payable of $731 thousand.

(Continued)

THE AUTHORITY AS A WHOLE (Continued)

Table 2
Changes in Net Position

	2019 WDA	2018 WDA	Increase (Decrease)
Revenues:			
Operating revenues:			
Charges for services	$ 11,173,672	$ 11,795,545	$ (621,873)
Other	275,701	238,920	36,781
Total operating revenues	**11,449,373**	**12,034,465**	**(585,092)**
Nonoperating revenues:			
Interest and investment revenue, net of arbitrage	1,068,731	590,450	478,281
Total revenues	**12,518,104**	**12,624,915**	**(106,811)**
Expenses:			
Operating expenses	1,794,205	2,813,226	(1,019,021)
Nonoperating expenses:			
Interest expense	6,532,362	7,235,194	(702,832)
Total expenses	**8,326,567**	**10,048,420**	**(1,721,853)**
Change in net position	**4,191,537**	**2,576,495**	**1,615,042**
Beginning net position	**67,661,457**	**65,079,277**	**2,582,180**
Cumulative effect of change in accounting principal, Beginning net position Restated	**-**	**5,685**	**(5,685)**
Ending net position	**$ 71,852,994**	**$ 67,661,457**	**$ 4,191,537**

Charges for services decreased $622 thousand. This is primarily due to repayments of loans in the portfolio being applied to principal rather than interest as they are being paid down over time.

Other increased $37 thousand primarily due to an increase in administrative fees.

Interest and investment revenue, net of arbitrage increased $478 thousand due to higher short term interest rates available to the Authority from period to period on comparable increased asset balances, as well as adding longer term investments to the portfolio with higher interest rates.

Operating expenses decreased $1 million from the prior year. The decrease in operating expense is primarily due to reductions in contractual and professional services of $161 thousand, depreciation expense of $407 thousand, and bond issuance costs of $417 thousand.

DEBT ADMINISTRATION

As a financing entity, the business of the Authority is debt issuance and administration, including servicing. By statute, the maximum amount of bonds the Authority is authorized to have outstanding includes debt issued for the Authority and by the Authority on behalf of the West Virginia Infrastructure and Jobs Development Council. While the redemption of bonds is economically prudent because of the resulting debt service savings, any reduction in the liability for long-term debt enables the Authority to manage debt capacity for future needs as well as for new programs. The Authority, therefore, continues to monitor its long-term outstanding debt for prepayment and refunding opportunities for debt service savings. At year end, the Authority had $161 million in revenue and refunding bonds outstanding versus $170 million in the prior year, a decrease of approximately 5%.

As of June 30, 2019, the 2012 Series A-I and B-I, 2012 Series A-II and B-II, 2013 Series A-II, 2016 Series A-II, and 2012 Series A-III and B-III had a Moody's rating of A1 and a Fitch rating of A+.

As of June 30, 2019, the 2018 Series A-IV, had a Standard & Poor's rating of AA-.

The Authority's underlying rating of AA- from Standard & Poor's reflects the State's moral obligation, which is one full category below the State's A rating. Ultimately, rating strength is provided by the Authority's pledge to maintain a debt service reserve fund equal to the maximum annual debt service on all outstanding bonds and servicing of underlying loans. If the amount in the reserve funds falls below the required maximum annual debt service level, the Governor, on notification by the Authority, may request the State's Legislature to appropriate the necessary funds to replenish the reserve to its required level. The State's Legislature, however, is not legally required to make such appropriation.

The Authority, as well as its underwriters and bond counsel, continue to monitor the status of its bond insurers. The 2012 Series, 2013 Series, and 2016 Series of refunding bonds were issued without an insurance policy.

ECONOMIC FACTORS THAT MAY AFFECT THE AUTHORITY

There are several unknown factors that may affect the Authority, including changes in existing Federal or State legislation, additional responsibilities for new environmental or drinking water demands, and market conditions that could affect the viability of future revenue bond issues and impact investment earnings. Additionally, the Authority invests funds not required for immediate disbursement as permitted by: statute, its bond resolutions and its "Investment Guidelines, Procedures and Controls."

CONTACTING THE AUTHORITY'S MANAGEMENT

This financial report is designed to provide a general overview of the Authority's finances and to show the Authority's accountability for the money it receives as well as its ability to pay debt service. If you have questions about this report or need additional information, contact the Executive Director or Chief Financial Officer, West Virginia Water Development Authority, 1009 Bullitt Street, Charleston, West Virginia 25301, call 304-414-6500; or visit the Authority's website (www.wvwda.org).

WEST VIRGINIA WATER DEVELOPMENT AUTHORITY

STATEMENT OF NET POSITION
June 30, 2019

ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$	25,217,687
Investments		6,151,500
Receivables:		
Revenue bonds, net of unamortized discount of $41,323		9,812,114
Interest		2,748,922
Administrative fees		1,717
Due from other agencies		409,775
Total unrestricted current assets		44,341,715
Restricted current assets:		
Prepaid insurance		3,659
Investments		1,000,000
Total current assets		45,345,374
NONCURRENT ASSETS		
Revenue bonds		8,443,488
Capital assets, net		4,063,713
Total unrestricted noncurrent assets		12,507,201
Restricted assets:		
Cash and cash equivalents		13,709,385
Revenue bonds, net of unamortized discount of $795,009		166,249,242
Prepaid insurance		76,873
Total restricted noncurrent assets		180,035,500
Total assets	$	237,888,075
DEFERRED OUTFLOWS OF RESOURCES		
Deferred loss on bond refundings	$	7,330,327
Deferred outflows of resources from OPEB amounts		38,371
Deferred outflows of resources from pension amounts		60,942
Total deferred outflows of resources	$	7,429,640

(Continued)

WEST VIRGINIA WATER DEVELOPMENT AUTHORITY

STATEMENT OF NET POSITION
(Continued)
June 30, 2019

LIABILITIES		
CURRENT LIABILITIES		
Accounts payable	$	26,159
Current portion of revenue bonds payable, including unamortized net premium of $712,093		8,950,091
Accrued interest payable		1,353,239
Total current liabilities		10,329,489
NONCURRENT LIABILITIES		
Accrued employee benefits		66,020
Net OPEB liability		174,309
Net pension liability		89,328
Liabilities payable from restricted assets:		
Noncurrent portion of revenue bonds payable, including unamortized net premium of $9,180,855		162,084,857
Total noncurrent liabilities		162,414,514
Total liabilities	$	172,744,003
DEFERRED INFLOWS OF RESOURCES		
Deferred gain on refunding	$	572,322
Deferred inflows of resources from OPEB amounts		69,356
Deferred inflows of resources from pension amounts		79,040
Total deferred inflows of resources	$	720,718
NET POSITION		
Restricted	$	25,333,567
Unrestricted		42,455,714
Net investment in capital assets		4,063,713
Total net position	$	71,852,994

The accompanying notes are an integral part of these financial statements.

WEST VIRGINIA WATER DEVELOPMENT AUTHORITY

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN FUND NET POSITION
Year Ended June 30, 2019

OPERATING REVENUES	
Charges for services	$ 11,173,672
Miscellaneous	275,701
Total operating revenues	11,449,373
OPERATING EXPENSES	
Depreciation and amortization	587,386
General and administrative	1,206,819
Total operating expenses	1,794,205
Operating income	9,655,168
NONOPERATING REVENUES (EXPENSES)	
Interest and investment revenue	1,068,731
Interest expense	(6,532,362)
Total nonoperating expenses	(5,463,631)
CHANGE IN NET POSITION	4,191,537
Total net position, beginning of year	67,661,457
Total net position, end of year	$ 71,852,994

The accompanying notes are an integral part of these financial statements.

WEST VIRGINIA WATER DEVELOPMENT AUTHORITY

STATEMENT OF CASH FLOWS
Year Ended June 30, 2019

OPERATING ACTIVITIES	
Receipts of principal on bonds receivable	$ 8,716,581
Receipts of interest on bonds receivable	11,263,300
Receipts of administrative fees on bonds receivable	275,652
Receipts of reimbursements from other agencies	1,025,218
Disbursements from issuance of bonds receivable	(1,515,791)
Disbursements of general and administrative expense	(577,444)
Disbursements on behalf of employees	(664,983)
Disbursements on behalf of other agencies	(1,176,210)
Net cash provided by operating activities	17,346,323
CAPITAL AND RELATED FINANCING ACTIVITIES	
Acquisition of capital assets	(87,538)
NONCAPITAL FINANCING ACTIVITIES	
Principal paid on revenue and refunding bonds	(8,969,000)
Interest paid on revenue and refunding bonds	(6,676,866)
Net cash used in noncapital financing activities	(15,645,866)
INVESTING ACTIVITIES	
Proceeds from sale of investments	(2,482,757)
Investment earnings	1,056,972
Net cash used in investing activities	(1,425,785)
Net increase in cash and cash equivalents	187,134
CASH AND CASH EQUIVALENTS, beginning	38,739,938
CASH AND CASH EQUIVALENTS, ending	$ 38,927,072
Cash and cash equivalents consist of:	
Cash and cash equivalents	$ 25,217,687
Restricted cash and cash equivalents	13,709,385
	$ 38,927,072

(Continued)

WEST VIRGINIA WATER DEVELOPMENT AUTHORITY

STATEMENT OF CASH FLOWS
(Continued)
Year Ended June 30, 2019

Reconciliation of operating income to net cash provided by operating activities:	
Operating income	$ 9,655,168
Adjustments to reconcile operating income to net cash provided by operating activities	
Depreciation and amortization expense	587,386
Pension expense	(14,647)
OPEB expense	32,273
OPEB contribution support	(11,012)
Changes in operating accounts:	
Due from other agencies	(150,992)
Revenue bonds receivable	7,157,460
Accrued interest receivable	132,958
Administrative fees receivable	(49)
Accounts payable	16,016
Accrued employee benefits	16,006
Deferred outflows of resources due to pension contributions	(56,511)
Deferred outflows of resources due to OPEB contributions	(17,733)
Net cash provided by operating activities	$ 17,346,323

The accompanying notes are an integral part of these financial statements.

Note 1. Reporting Entity

The West Virginia Water Development Authority (the Authority) is a governmental instrumentality of the State of West Virginia (the State) and a body corporate, created under the provisions of Chapter 22C, Article 1 of the Code of West Virginia, 1931, as amended, and known as the West Virginia Water Development Act. The Authority's mission is to provide West Virginia communities effective financial assistance for development of wastewater, water and economic infrastructure that will improve health, protect the streams of the State, improve drinking water quality and encourage economic growth. This is accomplished by administering and managing the West Virginia Water Development Revenue Bond Programs, serving as the State-designated fiduciary of the West Virginia Infrastructure Fund, managing the Bureau for Public Health's Drinking Water Treatment Revolving Fund, administering the Department of Environmental Protection's Clean Water State Revolving Fund, and being an active member of the West Virginia Infrastructure and Jobs Development Council.

The Authority's Water Development Revenue Bond Programs are funded with proceeds of water development bonds issued by the Authority. Moneys in the programs are loaned to municipalities, public service districts and other political subdivisions through the purchase by the Authority of revenue bonds or notes issued by those entities, who repay the loans from the revenues of the systems or other permanent financing.

The Authority receives no appropriations from the State; however, as the State is able to impose its will over the Authority, the Authority is considered a component unit of the State.

In evaluating how to define the Authority for financial reporting purposes, management has considered all potential component units. The decision to include a potential component unit in the reporting entity is made by applying the criteria set forth in accounting principles generally accepted (GAAP) in the United States of America for governments. GAAP defines component units as those entities which are legally separate governmental organizations for which the appointed members of the Authority are financially accountable or other organizations for which the nature and significance of their relationship with the Authority are such that exclusion would cause the Authority's financial statements to be misleading. Because no such organizations exist which meet the above criteria, the Authority has no component units.

Note 2. Significant Accounting Policies

Basis of presentation

The Authority is accounted for as a proprietary fund special purpose government engaged in business type activities. In accordance with GAAP, the financial statements are prepared on the accrual basis of accounting, using the flow of economic resources measurement focus. Under this basis of accounting, revenues are recognized when earned and expenses are recognized when incurred.

The Authority is included in the State's financial statements as a discretely presented component unit proprietary fund and business type activity. There may be differences between the amounts reported in these financial statements and the financial statements of the State as a result of major fund determination.

(Continued)

Note 2. Significant Accounting Policies (Continued)

Cash and cash equivalents

Cash and cash equivalents include deposits with the West Virginia Treasurer's office and investments with original maturities of less than ninety days and are carried at amortized costs.

Allowance for uncollectible loans and service charges

The Authority established an allowance for uncollectible revolving loans and service charges based on the estimated age of revolving loans and service charges and their anticipated collectability. The Authority has not established an allowance for uncollectible loans in the Water Development Revenue Bond Programs because of remedies available to it in the loan agreements that exist between the Authority and the various entities.

Investments

Investments are carried at fair value which is based upon quoted market prices. Gains and losses are reported as a component of investment income.

Restricted assets

Proceeds of revenue bonds, as well as certain resources set aside for their repayment, are classified as restricted assets on the balance sheet because their use is limited by bond covenants. When both restricted and unrestricted resources are available for use, it is generally the Authority's policy to use restricted resources first, and then unrestricted resources as they are needed.

Capital assets

Capital assets are stated at cost. Depreciation and amortization are computed using the straight-line method over an estimated economic useful life. The table below details the capital asset categories and related economic useful lives for assets in excess of $1,000 with useful lives in excess of 1 year.

Furniture and equipment	5 years
Building	40 years
Building improvements	10 years
Intangible assets	5 years
Land improvements	15 years

Accrued employee benefits

In accordance with State policy, the Authority permits employees to accumulate earned but unused vacation benefits. A liability for vacation pay is accrued when earned.

Bond premiums, discounts, and issuance costs

Bond premiums and discounts are amortized using the straight-line method over the varying terms of the bonds issued. The straight-line method is not in accordance with GAAP, but the difference in amortization using the straight-line method, versus the effective interest method which is in accordance with GAAP, is not material to the financial statements as a whole. Bond issuance costs are expensed as incurred.

Note 2. Significant Accounting Policies (Continued)

Arbitrage rebate payable

The United States Internal Revenue Code of 1986, as amended (the "Code"), prescribes restrictions applicable to the Authority as issuer of Water Development Revenue and Refunding Bonds. Among those include restrictions on earnings on the bond proceeds. The Code requires payment to the federal government of investment earnings on certain bond proceeds in excess of the amount that would have been earned if the proceeds were invested at a rate equal to the yield on the bonds. As of June 30, 2019, the Authority is not liable to the federal government as a result of arbitrage.

Deferred outflows of resources / deferred inflows of resources

The statement of net position reports a separate financial statement element called *deferred outflows of resources*. This financial statement element represents a consumption of net position that applies to a future period and so will *not* be recognized as an outflow of resources (expense) until that time. The Authority reports losses on bond refunding as deferred outflows of resources and deferred outflows of resources related to pensions and OPEB.

The statement of net position reports a separate financial statement element called *deferred inflows of resources*. This financial statement element represents an acquisition of net position that applies to a future period and so will *not* be recognized as an inflow of resources (revenue) until that time. The Authority reports gains on bond refundings as deferred inflows of resources and deferred inflows of resources related to pensions and OPEB.

Pension

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

Postemployment benefits other than pensions (OPEB)

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the West Virginia Retiree Health Benefit Trust OPEB Plan (RHBT) and additions to/deductions from RHBT's fiduciary net position have been determined on the same basis as they are reported by RHBT. For this purpose, RHBT recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value, except for certain pooled investments, money market investments and participating interest-earning investment contracts that have a maturity at the time of purchase of one year or less, which are reported at amortized cost.

(Continued)

Note 2. Significant Accounting Policies (Continued)

Net position

Net position is presented as unrestricted, restricted, or as the net investment in capital assets. The net investment in capital assets consists of all capital assets, less accumulated depreciation. Restricted net position represents assets restricted for the repayment of bond proceeds, by bond covenants, or for retirement of other long term obligations. All remaining net position is considered unrestricted. When an expense is incurred for purposes for which both restricted and unrestricted net position is available, restricted resources are applied first.

Note 3. Deposit and Investment Risk Disclosures

The General Revenue Bond Resolutions and the Authority's investment guidelines authorize the Authority to invest all bond proceeds in obligations of the United States and certain of its agencies, certificates of deposit, public housing bonds, direct and general obligations of states which are rated in either of the two highest categories by Standard & Poor's Corporation, advance-refunded municipal bonds and repurchase agreements relating to certain securities. Investments are managed by the financial institutions serving as trustees for the Authority.

Interest rate risk

As of June 30, 2019, the Authority had the following investments (which include certain cash equivalents) and maturities:

		Maturities (in Years)		
Type	Carrying Value	Less Than 1	1-5	6-10
U.S. Treasury	$ 7,151,500	$ 7,151,500	$ -	$ -
Money markets	38,712,126	38,712,126	-	-
	$ 45,863,626	$ 45,863,626	$ -	$ -

As a means of limiting its exposure to fair value losses arising from rising interest rates, the Authority's investment guidelines limit the maturities of investments not matched to a specific debt or obligation of the Authority to five years or less, unless otherwise approved by the Board.

Note 3. Deposit and Investment Risk Disclosures (Continued)

Interest rate risk (Continued)

Investments matched to obligations of the Authority would include investments of capital and special reserve funds for each of the Authority's outstanding bond issues in Loan Programs I, II and III. The General Revenue Bond Resolutions for Loan Programs I, II, III and IV require that, while the bonds are outstanding, there be on deposit in the capital and special reserve funds an amount equal to the maximum amount of principal installments and interest coming due during the current or any succeeding year. The General Revenue Bond Resolution for Loan Program IV permits this requirement to be met, and it has been met, with the deposit of a Reserve Fund Credit Facility into the reserve fund. There are, therefore, no investments of capital and special reserve funds for Loan Program IV. The Authority has both the intent and the ability to hold long-term securities until final maturity and thus is limited in its exposure to interest rate risk on these long-term obligations.

Concentration of credit risk

As of June 30, 2019, the Authority had investment balances with the following issuers which are greater than or equal to 5 percent of the investment balance:

Type	Issuer	Percentage of Investments
Money Markets	Federated Prime Cash Obligations	84%

The Authority's investment guidelines manage concentration of credit risk by limiting its investment activity so that at any time its total investment portfolio will not exceed the percentage limits as to the permitted investments as follows:

	Permitted Investments	Maximum % of Portfolio
(a)	Direct Federal Obligations	100%
(b)	Federally Guaranteed Obligations	100%
(c)	Federal Agency Obligations	90%
(d)	Money Markets	90%
(e)	Repurchase Agreements/Investment Contracts	90%
(f)	Time Deposits/Certificates of Deposit	90%
(g)	Demand Deposits	30%
(h)	Corporate Obligations	15%
(i)	Other State/Local Obligations	15%
(j)	West Virginia Obligations	15%
(k)	Housing Bonds - Secured by Annual Contributions Contracts	5%

Note 3. Deposit and Investment Risk Disclosures (Continued)

Concentration of credit risk (Continued)

With the exception of money markets, repurchase agreements/investment contracts, time deposits/certificates of deposit and demand deposits, investments that comprise more than 15% of the investment portfolio must be direct federal, federal agency or federally guaranteed obligations.

All other investments listed above that comprise more than 15% of the investment portfolio must be either provided by an institution with a rating of at least A/A by Moody's and/or Standard and Poor's, invested in a money market fund rated AAAm or AAAm-G or better by Standard and Poor's, secured by obligations of the United States, or not exceed the insurance limits established by the FDIC unless adequate collateral is provided.

Credit risk

The following table provides information on the credit ratings of the Authority's short-term investments as of June 30, 2019:

Security Type	Fitch	Moody's	Standard & Poors	Fair Value
Money Markets	AAAmmf	Aaa-mf	AAAm	$38,712,126

Credit risk with investment of bond proceeds is managed by the limitation on investment of those proceeds in the following types of debt securities in accordance with the Authority's investment guidelines and the authorizing General Revenue Bond Resolution: Government obligations, obligations of certain federal agencies, either representing the full faith and credit of the United States of America or which are rated Aaa-mf by Moody's and AAAm by Standard and Poor's, certain types of commercial paper, advance-refunded municipal bonds, certain general obligations of the State of West Virginia or any other state, or other forms of investments approved in writing by the applicable bond insurer, if any.

Accordingly, the credit risk with the investment of cash assets other than bond proceeds, known as "other revenues," is managed by the limitation on investment of other revenues in the following types of debt securities in accordance with the Authority's investment guidelines: direct obligations of or obligations guaranteed by the United States of America, the State of West Virginia or any other state, provided that obligations of other states meet certain requirements, obligations of certain federal agencies, certain types of indebtedness of public agencies or municipalities, corporate indebtedness meeting certain requirements or any other debt security investment permitted with bond proceeds.

Note 3. Deposit and Investment Risk Disclosures (Continued)

Custodial credit risk

For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the Authority will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party.

Cash consisted of the following at June 30, 2019:

Operating cash on hand	$ -
Cash on deposit with State Treasurer	214,946
Total	$ 214,946

The Authority has no securities that are subject to foreign currency risk.

A reconciliation of the amounts disclosed as cash and investments included in this Note to cash and cash equivalents, restricted cash and cash equivalents, and investments in the Statement of Net Assets as of June 30, 2019, is as follows:

Deposits:	
Cash and cash equivalents as reported on the Statement of Net Position	$ 25,217,687
Add: restricted cash and cash equivalents	13,709,385
Less: cash equivalents and restricted cash equivalents disclosed as investments	(38,712,126)
Total cash as disclosed in this Note	$ 214,946
Investments:	
Investments as reported on the Statement of Net Position	$ 6,151,500
Add: restricted investments	1,000,000
Add: cash equivalents and restricted cash equivalents disclosed as investments	38,712,126
Total investments as disclosed in this Note	$ 45,863,626

Note 4. Investments Measured at Fair Value

The Authority measures the investments listed below at fair value for financial reporting purposes. GAAP defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is a market-based measurement, not an entity-specific measurement. The Authority categorizes fair value measurements within the fair value hierarchy established by GAAP.

The fair value hierarchy categorizes the inputs to valuation techniques used to measure fair value into three levels as follows:

Note 4. Investments Measured at Fair Value (Continued)

Level 1 inputs - Quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date.

Level 2 inputs - Other than quoted prices included within Level 1, these are inputs that are observable for an asset or liability, either directly or indirectly.

Level 3 inputs - Unobservable inputs for an asset or liability.

The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs.

U.S. Treasury investments are valued using the last reported sales prices quoted in active markets that can be accessed at the measurement date.

The table below summaries the recurring fair value measurements of the investments in accordance with the fair value hierarchy levels as of June 30, 2018.

Investment Type	Level 1	Level 2	Level 3	Total
U.S. Treasury	$ 7,151,500	$ -	$ -	$ 7,151,500

Note 5. Due From Other Agencies

Certain agencies of the State were indebted to the Authority at June 30, 2019, in connection with services performed by the Authority on behalf of the agencies. Amounts due the Authority at June 30, 2019 are as follows:

West Virginia Infrastructure and Jobs Development Council, net	$ 227,908
Department of Environmental Protection Clean Water State Revolving Fund	44,221
Bureau for Public Health Drinking Water Treatment Revolving Fund	137,646
	$ 409,775

Note 6. Revenue Bonds Receivable

As of June 30, 2019, the face value of revenue bonds of municipalities, public service districts and other political subdivisions purchased with proceeds from Water Development Revenue Bonds was $170,554,987. Management's intentions are to hold such bonds until maturity; therefore, management believes the face amount of the bonds is fully collectible.

Although not required, the Authority purchased supplemental bonds of municipalities and public service districts using other available funds. As of June 30, 2019, the face value of supplemental bonds was $14,786,189.

Note 7. Capital Assets

Capital asset activity for the year ended June 30, 2019, was as follows:

	Beginning Balance	Additions	Disposals	Ending Balance
Capital assets not being depreciated:				
Land	$ 514,684	$ 11,510	$ -	$ 526,194
Construction work in progress	11,510	23,290	-	34,800
Total capital assets not being depreciated	526,194	34,800	-	560,994
Capital assets bing depreciated:				
Furniture and equipment	6,977,934	30,087	-	7,008,021
Land improvements	-	22,650	-	22,650
Building	4,100,298	-	-	4,100,298
Total capital assets, being depreciated	11,078,232	52,737	-	11,130,969
Less accumulated depreciation for:				
Furniture and equipment	6,436,247	480,259	-	6,916,506
Land improvements	-	960	-	960
Building	608,277	102,507	-	710,784
Total accumulated depreciation	7,044,524	583,726	-	7,628,250
Total capital assets, net	$ 4,559,902	$ (496,189)	$ -	$ 4,063,713

Note 8. Revenue Bonds Payable

The following is a summary of the Authority's bond transactions for the year ended June 30, 2019:

	Balance at June 30, 2018	Bonds issued	Bonds retired	Bonds refunded	Balance at June 30, 2019
Revenue bonds	$ 162,150,000	$ -	$ 8,560,000	$ -	$ 153,590,000
Revenue bonds from direct placements	7,961,000	-	409,000	-	7,552,000
	$ 170,111,000	$ -	$ 8,969,000	$ -	$ 161,142,000

Note 8. Revenue Bonds Payable (Continued)

Revenue and refunding bonds outstanding at June 30, 2019, were as follows:

Series	Final Maturity	Interest Rates %	Balance
2012 AI	11/1/25	2.000-3.000	$ 1,130,000
2012 B-I	11/1/26	3.000-4.500	10,125,000
2012 A-II	11/1/23	2.000-3.000	2,840,000
2012 B-II	11/1/33	2.000-4.000	11,295,000
2012 A-III	7/1/39	3.000-4.000	13,835,000
2012 B-III	7/1/40	2.000-3.750	8,410,000
2013 A-II	11/1/29	2.000-5.000	26,985,000
2016 A-II	11/1/39	2.000-5.000	48,575,000
2018 A-IV	11/1/44	2.500-5.000	30,395,000
2018 B-IV*	11/1/35	3.500	7,552,000
			$ 161,142,000

*Direct placement bonds

Loan Program I includes Series 2012 A-I and 2012 B-I Water Development Revenue Refunding Bonds. Loan Program II includes Series 2012 A-II, 2012 B-II, 2013 A-II, and 2016 A-II Water Development Revenue Refunding Bonds. Loan Program III includes Series 2012 A-III and 2012 B-III Water Development Revenue Refunding Bonds. Loan Program IV includes Series 2018 A-IV Water Development Revenue Refunding Bonds and Series 2018 B-IV Direct Placement Bonds.

Total future maturities of bond principal and interest on Authority indebtedness at June 30, 2019, are as follows:

Loan Program I

	Principal	Interest	Total
11/01/19	$ 1,240,000	$ 417,225	$ 1,657,225
11/01/20	1,295,000	362,475	1,657,475
11/01/21	1,345,000	308,375	1,653,375
11/01/22	1,400,000	255,850	1,655,850
11/01/23	1,450,000	202,100	1,652,100
	6,730,000	1,546,025	8,276,025
11/01/24-11/01/26	4,525,000	263,113	4,788,113
	$ 11,255,000	$ 1,809,138	$ 13,064,138

Note 8. Revenue Bonds Payable (Continued)

Loan Program II

	Principal	Interest	Total
11/01/19	$ 5,225,000	$ 3,623,175	$ 8,848,175
11/01/20	5,420,000	3,432,475	8,852,475
11/01/21	5,605,000	3,218,075	8,823,075
11/01/22	5,850,000	2,973,300	8,823,300
11/01/23	6,095,000	2,712,125	8,807,125
	28,195,000	15,959,150	44,154,150
11/01/24-11/01/28	30,410,000	9,770,950	40,180,950
11/01/29-11/01/33	20,920,000	4,100,400	25,020,400
11/01/34-11/01/38	8,690,000	1,188,000	9,878,000
11/01/39	1,480,000	29,600	1,509,600
	61,500,000	15,088,950	76,588,950
	$ 89,695,000	$ 31,048,100	$ 120,743,100

Loan Program III

	Principal	Interest	Total
11/01/19	$ 720,000	$ 773,981	$ 1,493,981
11/01/20	745,000	747,356	1,492,356
11/01/21	775,000	719,731	1,494,731
11/01/22	810,000	690,932	1,500,932
11/01/23	835,000	663,159	1,498,159
	3,885,000	3,595,159	7,480,159
11/01/24-11/01/28	4,575,000	2,900,531	7,475,531
11/01/29-11/01/33	5,380,000	2,059,463	7,439,463
11/01/34-11/01/38	6,440,000	990,000	7,430,000
11/01/39-11/01/40	1,965,000	56,906	2,021,906
	18,360,000	6,006,900	24,366,900
	$ 22,245,000	$ 9,602,059	$ 31,847,059

Note 8. Revenue Bonds Payable (Continued)

Loan Program IV

	Bonds		Bonds from Direct Placement		
	Principal	Interest	Principal	Interest	Total
11/01/19	$ 720,000	$ 1,317,444	$ 333,000	$ 258,492	$ 2,628,936
11/01/20	740,000	1,291,844	344,000	246,645	2,622,489
11/01/21	770,000	1,261,644	356,000	234,395	2,622,039
11/01/22	800,000	1,226,244	369,000	221,707	2,616,951
11/01/23	840,000	1,195,744	382,000	208,565	2,626,309
	3,870,000	6,292,920	1,784,000	1,169,804	13,116,724
11/1/24-11/1/28	4,335,000	5,384,844	2,118,000	829,150	12,666,994
11/1/29-11/1/33	5,215,000	4,215,844	2,516,000	424,620	12,371,464
11/1/34-11/1/38	6,720,000	2,734,219	1,134,000	40,040	10,628,259
11/1/39-11/1/43	8,390,000	1,119,943	-	-	9,509,943
11/01/44	1,865,000	33,803	-	-	1,898,803
	26,525,000	13,488,653	5,768,000	1,293,810	47,075,463
	$ 30,395,000	$ 19,781,573	$ 7,552,000	$ 2,463,614	$ 60,192,187

	Revenue bonds	Direct Placement Bonds	Total
Total all loan programs	$ 153,590,000	$ 7,552,000	$ 161,142,000
Add: unamortized net premium	9,892,948	-	9,892,948
Total all loan programs, net	163,482,948	7,552,000	171,034,948
Less: Current portion of revenue bonds payable	8,617,091	333,000	8,950,091
Noncurrent portion of revenue bonds payable	$ 154,865,857	$ 7,219,000	$ 162,084,857

Note 8. Revenue Bonds Payable (Continued)

The Authority has defeased certain revenue bonds by placing the proceeds of new bonds in irrevocable trusts to provide for all future debt service payments on the refunded bonds. Accordingly, the trust accounts' assets and the liabilities for the defeased bonds are not included in the Authority's financial statements. At June 30, 2019, there are $580,000 in defeased bonds outstanding.

The proceeds from the Authority's Revenue Bond Program provide financial assistance to municipalities, public service districts and other public subdivisions to meet the requirements of state and federal water pollution control and safe drinking water laws. All bonds are considered a moral obligation of the state of West Virginia. All assets of the Authority except capital assets have been pledged to fulfill the commitments of the bonds over the life of the debt. The Direct Placement Bonds are secured by revenues from Loan Program IV Local Bonds of the governmental agency. Principal and interest paid on bonds payable for the year ended June 30, 2019, was $8,969,000 and $6,676,866, respectively, and principal payments and interest received on pledged notes receivable were $8,716,581 and $11,263,300, respectively, at June 30, 2019.

Note 9. Pension Plan

Plan description

The Authority contributes to the PERS, a cost-sharing multiple-employer defined benefit pension plan administered by the West Virginia Consolidated Public Retirement Board (CPRB). PERS covers substantially all employees of the State and its component units, as well as employees of participating non-state governmental entities who are not participants of another state or municipal retirement system. Benefits under PERS include retirement, death and disability benefits, and have been established and may be amended by action of the State Legislature. The CPRB issues a publicly available financial report that includes financial statements for PERS that may be obtained at www.wvretirement.com.

Benefits provided

PERS provides retirement benefits as well as death and disability benefits. For employees hired prior to July 1, 2015, qualification for normal retirement is age 60 with five years of service or at least age 55 with age and service equal to 80 or greater. For all employees hired July 1, 2015 and later, qualification for normal retirement is age 62 with 10 years of service. The straight-life annuity retirement benefit is equivalent to 2% of average salary multiplied by years of service. For employees hired prior to July 1, 2015, average salary is the average of the highest annual compensation during any period of three consecutive years within the last fifteen years of earnings. For all employees hired July 1, 2015 and later, average salary is the average of the five consecutive highest annual earnings out of the last fifteen years of earnings. For employees hired prior to July 1, 2015, terminated members with at least five years of contributory service who do not withdraw their accumulated contributions may elect to receive their retirement annuity beginning at age 62. For all employees hired July 1, 2015 and later, this age increases to 64.

(Continued)

Note 9. Pension Plan (Continued)

Contributions

Contributions as a percentage of payroll for members are established by statutes, subject to legislative limitations and are not actuarially determined. Contributions as a percentage of payroll for employers are established by the CPRB. Members hired prior to July 1 2015 contribute 4.5% of annual earnings. All members hired July 1, 2015 and later contribute 6% of annual earnings. Current funding policy requires employer contributions of 10.0%, 11.0%, and 12.0% for the years ended June 30, 2019, 2018, and 2017, respectively.

During the years ended June 30, 2019, 2018, and 2017, the Authority's contributions to PERS required and made were approximately $56,511, $57,366, and $63,388, respectively.

Pension liabilities, pension expense, and deferred outflows of resources and deferred inflows of resources related to pensions

At June 30, 2019, the Authority reported a liability of $89,328 for its proportionate share of the net pension liability. The net pension liability reported at June 30, 2019 was measured as of June 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of July 1, 2017, rolled forward to the measurement date of June 30, 2018. The Authority's proportion of the net pension liability was based on the Authority's share of contributions to the pension plan relative to the contributions of all employers participating in PERS for the year ended June 30, 2018. At June 30, 2018, the Authority's proportion was 0.034590 percent, which was a decrease of 0.003467 percent from its proportion measured as of June 30, 2017.

For the year ended June 30, 2019, the Authority recognized pension expense of ($14,647). At June 30, 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Net difference between projected and actual earnings on pension plan investments	$ -	$ 52,566
Changes in proportion and differences between the Authority's contributions and proportionate share of contributions	-	26,252
Differences between expected and actual experience	4,431	222
The Authority's contributions made subsequent to the measurement date of June 30, 2018	56,511	-
Total	$ 60,942	$ 79,040

The amount of $56,511 reported as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Note 9. Pension Plan (Continued)

Year ending June 30,		
2020	$	(8,674)
2021		(17,554)
2022		(39,483)
2023		(8,898)

Actuarial assumptions

The total pension liability in the June 30, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods in the measurement:

Inflation	3.0 percent
Salary increases	3.0 – 6.0 percent, average, including inflation
Investment rate of return	7.5 percent, net of pension plan investment expense

Mortality rates were based on 100% of RP-2000 Non-Annuitant, Scale AA fully generational for active employees, 110% of the RP-2000 Non-Annuitant, Scale AA fully generational for retired healthy males, 101% of RP-2000 Non-Annuitant Scale AA fully generational for retired healthy females, 96% of RP-2000 Disabled Annuitant, Scale AA fully generational for disabled males, and 107% of RP-2000 Disabled Annuitant, Scale AA fully generational for disabled females.

An experience study, which was based on the years 2009 through 2014, was completed prior to the 2015 actuarial valuation.

The long-term expected rate of return on pension plan investments was determined using the building block method in which estimates 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. Best estimates of long-term geometric rates of return are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Rate of Return	Weighted Average Expected Real Rate of Return
Domestic equity	27.5%	4.5%	1.24%
International equity	27.5%	8.6%	2.37%
Fixed income	15.0%	3.3%	0.50%
Real estate	10.0%	6.0%	0.60%
Private equity	10.0%	6.4%	0.64%
Hedge funds	10.0%	4.0%	0.40%
Total	100.00%		5.75%
Inflation (CPI)			2.10%
			7.85%

Note 9. Pension Plan (Continued)

Discount rate

The discount rate used to measure the total pension liability was 7.5 percent. The projection of cash flows used to determine the discount rate assumed that employer contributions will continue to follow the current funding policies. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. Although discount rates are subject to change between measurement dates, there were no changes in the discount rate in the current period.

Sensitivity of the Authority's proportionate share of the net pension liability to changes in the discount rate

The following presents the Authority's proportionate share of the net pension liability calculated using the discount rate of 7.5 percent, as well as what the Authority's proportionate share of the net pension liability would be if it were calculated using a discount rate that is one-percentage-point lower or one-percentage-point higher than the current rate:

	1% Decrease (6.5%)	Current Discount Rate (7.5%)	1% Increase (8.5%)
Authority's proportionate share of the net pension liability	$ 359,746	$ 89,328	$ 139,440

Note 10. Other Postemployment Benefits

Plan description

The West Virginia Other Postemployment Benefit Plan (the OPEB Plan) is a cost-sharing, multiple-employer, defined benefit other post-employment benefit plan and covers the retirees of State agencies, colleges and universities, county boards of education, and other government entities as set forth in the West Virginia Code Section 5-16D-2 (the Code). The financial activities of the OPEB Plan are accounted for in the West Virginia Retiree Health Benefit Trust Fund (RHBT), a fiduciary fund of the State of West Virginia. The OPEB Plan is administered by a combination of the West Virginia Public Employees Insurance Agency (PEIA) and the RHBT staff. OPEB Plan benefits are established and revised by PEIA and the RHBT management with approval of their Finance Board. The PEIA issues a publically available financial report of the RHBT that can be obtained at www.peia.wv.gov or by writing to the West Virginia Public Employees Insurance Agency, 601 57th Street, SE Suite 2, Charleston, WV 25304.

Note 10. Other Postemployment Benefits (Continued)

Benefits provided

Authority employees who retire are eligible for PEIA health and life benefits, provided they meet the minimum eligibility requirements of the PERS or meet certain other eligibility requirements of other West Virginia Consolidated Public Retirement Board (CPRB) sponsored retirement plans. RHBT provides medical and prescription drug insurance and life insurance benefits to those qualified participants. Life insurance is provided through a vendor and is fully funded by member contributions. The medical and prescription drug insurance is provided through two options; Self-Insured Preferred Provider Benefit Plan - primarily for non-Medicare-eligible retirees and spouses or External Managed Care Organizations - primarily for Medicare-eligible retirees and spouses.

The RHBT Medicare-eligible retired employees and their Medicare-eligible dependents receive medical and drug coverage from a Medicare Advantage Plan administered by a vendor. Under this arrangement, the vendor assumes the financial risk of providing comprehensive medical and drug coverage with limited copayments. Non-Medicare retirees continue enrollment in PEIA's Preferred Provider Benefit or the Managed Care Option. The RHBT collects employer contributions for Managed Care Organization (MCO) participants and remits capitation payments to the MCO. Survivors of retirees have the option of purchasing the medical and prescription drug coverage.

Eligible participants hired after June 30, 2010, will be required to fully fund premium contributions upon retirement. The Plan is a closed plan to new entrants.

Contributions

West Virginia Code section 5-16D-6 assigns to the PEIA Finance Board the authority to establish and amend contribution requirements of the plan members and the participating employers. Participating employers are required by statute to contribute at a rate assessed each year by the RHBT. The annual contractually required rate is the same for all participating employers. Employer contributions represent what the employer was billed during the respective year for their portion of the pay as you go premiums, commonly referred to as paygo, retiree leave conversion billings, and other matters, including billing adjustments. The annual contractually required per active policyholder per month rates for State non-general funded agencies and other participating employers effective June 30, 2019, 2018, and 2017, respectively, were:

	2019	2018	2017 1/1/17-6/30/17	2017 7/1/17-12/31/17
Paygo Premium	$ 183	$ 177	$ 135	$ 196

Contributions to the OPEB plan from the Authority were $17,733, $17,523 and $8,604 for the years ended June 30, 2019, 2018, and 2017, respectively.

Note 10. Other Postemployment Benefits (Continued)

Members retired before July 1, 1997, pay retiree healthcare contributions at the highest sponsor subsidized rate, regardless of their actual years of service. Members retired between July 1, 1997 and June 30, 2010, pay a subsidized rate depending on the member's years of service. Members hired on or after July 1, 2010, pay retiree healthcare contributions with no sponsor provided implicit or explicit subsidy.

Retiree leave conversion contributions from the employer depend on the retiree's date of hire and years of service at retirement as described below:

- Members hired before July 1, 1988, may convert accrued sick or leave days into 100% of the required retiree healthcare contribution.

- Members hired from July 1, 1988, to June 30, 2001, may convert accrued sick or leave days into 50% of the required retiree healthcare contribution.

The conversion rate is two days of unused sick and annual leave days per month for single healthcare coverage and three days of unused sick and annual leave days per month for family healthcare coverage.

Contributions by non-employer contributing entities in special funding situations

The State of West Virginia is a nonemployer contributing entity that provides funding through SB 419, effective July 1, 2012, amended by West Virginia Code §11-21-96. The State provides a supplemental pre-funding source dedicating $30 million annually to the RHBT Fund from annual collections of the Personal Income Tax Fund and dedicated for payment of the unfunded liability of the RHBT. The $30 million transferred pursuant to this Code shall be transferred until the Governor certifies to the Legislature that an independent actuarial study has determined that the unfunded liability of RHBT has been provided for in its entirety or July 1, 2037, whichever date is later. This funding is to the advantage of all RHBT contributing employers.

The State is a nonemployer contributing entity that provides funding through West Virginia State Code §11B-2-32. The Financial Stability Fund is a plan to transfer an annual amount of $5 million to the RHBT from special revenue funds to be used to lower retiree premiums, to help reduce benefit cuts, to help reduce premium increases or any combination thereof. The $5 million transferred pursuant to this Code shall be transferred annually into the RHBT through June 30, 2020. This funding is to the advantage of all RHBT contributing employers.

The State is a nonemployer contributing entity that provides funding through SB 469 which was passed February 10, 2012, granting OPEB liability relief to the 55 County Boards of Education effective July 1, 2012. The public school support plan (PSSP) is a basic foundation allowance program that provides funding to the local school boards for "any amount of the employer's annual required contribution allocated and billed to the county boards for employees who are employed as professional employees, employees who are employed as service personnel and employees who are employed as professional student support personnel", within the limits authorized by the State Code. This special funding under the school aid formula subsidizes employer contributions of the county boards of education.

(Continued)

Note 10. Other Postemployment Benefits (Continued)

OPEB liabilities, OPEB expense, and deferred outflows of resources and deferred inflows of resources related to OPEB

At June 30, 2019, the Authority reported a liability for its proportionate share of the RHBT net OPEB liability that reflected a reduction for State OPEB support provided to the Authority. The amount recognized by the Authority as its proportionate share of the net OPEB liability, the related State support, and the total portion of the net OPEB liability that was associated with the Authority was as follows:

	2019
Authority's proportionate share of the net OPEB liability	$ 174,309
State's special funding proportionate share of the net OPEB liability associated with the Authority	36,025
Total portion of net OPEB liability associated with the Authority	$ 210,334

The net OPEB liability was measured as of June 30, 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of June 30, 2017. The Authority's proportion of the net OPEB liability was based on its proportionate share of employer and non-employer contributions to the OPEB Plan for the fiscal year ended on the measurement date. At June 30, 2018, the Authority's proportion was .008124614 percent, which is an increase of .001678066 percent from its proportion measured as of June 30, 2017.

For the years ended June 30, 2019, the Authority recognized OPEB expense of $32,273 and for support provided by the State under special funding situations revenue of $11,012. At June 30, 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ -	$ 2,578
Changes in assumptions	-	17,404
Net difference between projected and actual earnings on OPEB plan investments	-	3,227
Changes in proportion and differences between Authority's contributions and proportionate share of contributions	20,638	46,147
Authority's contributions subsequent to the measurement date of June 30, 2018	17,733	-
Total	$ 38,371	$ 69,356

Note 10. Other Postemployment Benefits (Continued)

The amount of $17,733 reported as deferred outflows of resources related to OPEB resulting from Authority's contributions subsequent to the measurement date will be recognized as a reduction of the net OPEB liability in the year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year ending June 30:	
2020	($17,875)
2021	(17,875)
2022	(12,963)
2023	(5)

Actuarial assumptions

The total OPEB liability was determined by an actuarial valuation as of June 30, 2017, rolled forward to June 30, 2018 using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.75%
Salary increases	Dependent upon pension system ranging from 3.00% to 6.50%, including inflation
Investment rate of return	7.15%, net of OPEB plan investment expense, including inflation
Healthcare cost trend rates	Actual trend used for fiscal year 2018. For fiscal years on and after 2019, trend starts at 8.00% and 10.00% for pre and post-Medicare, respectively, and gradually decreases to an ultimate trend of 4.50%. Excess trend rate of 0.13% and 0.00% for pre and post-Medicare, respectively, is added to healthcare trend rates pertaining to per capita claims costs beginning in 2022 to account for the Excise Tax.
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percentage of payroll over a 20 year closed period
Remaining amortization period	20 years closed as of June 30, 2017

Post-retirement mortality rates were based on the RP-2000 Healthy Annuitant Mortality Table projected with Scale AA on a fully generational basis for PERS and Teachers' Retirement System (TRS) and RP-2014 Healthy Annuitant Mortality Table projected with scale MP-2016 on a fully generational basis for West Virginia Death, Disability, and Retirement Fund (Troopers A) and West Virginia State Police Retirement System (Troopers B). Pre-retirement mortality rates were based on RP-2000 Non-Annuitant Mortality Table projected with Scale AA on a fully generational basis for PERS and TRS and RP-2014 Employee Mortality Table projected to 2020 with Scale MP-2016 on a fully generational basis for Troopers A and B.

Note 10. Other Postemployment Benefits (Continued)

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period July 1, 2010- June 30, 2015.

Certain assumptions have been changed since the prior measurement date. The assumption changes that most significantly impacted the Net OPEB Liability are as follows: the inclusion of waived annuitants increased the liability by approximately $17 million; a 15% reduction in the retirement rate assumption decreased the liability by approximately $68 million; a change in certain healthcare-related assumptions decreased the liability by approximately $232 million; and an update to the mortality tables increased the liability by approximately $25 million. Certain other assumption changes were noted but did not materially impact the Net OPEB Liability.

The long-term expected rate of return of 7.15% on OPEB plan investments was determined by a combination of an expected long-term rate of return of 7.50% for long-term assets invested with the West Virginia Investment Management Board (WVIMB) and an expected short-term rate of return of 3.0% for assets invested with the WVBTI. Long-term pre-funding assets are invested with the WVIMB. The strategic asset allocation consists of 55% equity, 15% fixed income, 10% private equity, 10% hedge fund and 10% real estate invested. Short-term assets used to pay current year benefits and expenses are invested with the WVBTI.

The long-term rate of return on OPEB plan investments were determined using a building block method in which estimates of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) was developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentages and by adding expected inflation. Best estimates of long-term geometric rates are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return
Large Cap Domestic	17.0%
Non-Large Cap Domestic	22.0%
International Qualified	24.6%
International Non-Qualified	24.3%
International Equity	26.2%
Short-Term Fixed	0.5%
Total Return Fixed Income	6.7%
Core Fixed Income	0.1%
Hedge Fund	5.7%
Private Equity	19.6%
Real Estate	8.3%
Opportunistic Income	4.8%
Cash	0.0%

Note 10. Other Postemployment Benefits (Continued)

Discount rate

The discount rate used to measure the total OPEB liability was 7.15%. The projection of cash flows used to determine the discount rate assumed that RHBT contributions would be made at rates equal to the actuarially determined contribution rates, in accordance with prefunding and investment policies. Future pre-funding assumptions include a $30 million annual contribution from the State through 2037. Based on those assumptions, and that the Plan is expected to be fully funded by fiscal year ended June 30, 2036, the OPEB plan's fiduciary net position was projected to be available to make 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. Discount rates are subject to change between measurement dates.

Other key assumptions

The projection assumes that the capped subsidy aggregate contribution limit of $160 million for 2018 would increase by $10 million per year on and after 2019. Additionally, the per member subsidy is projected to increase by at least 3.0% per year but no more than the healthcare trend inflation assumption such that the product of the projected subsidy and projected members is less than the projected aggregated capped costs; and the member's share of plan costs is expected remain stable as a percentage of total costs following the year that the program is fully funded. After 2037, the program is projected to be fully funded and the sponsor is assumed to contribute the residual portion of normal cost and operational expenses needed to maintain a funded ratio of 100% in future years. In addition, after 2035, the member's share of total plan costs is assumed to remain stable at approximately 61% of total plan costs. These assumptions produced per member annual capped subsidy increases of 3.0% per year from 2018 to 2023 and 4.5% per year after 2023.

Members hired on or after July 1, 2010, are required to pay 100% of expected cost of coverage, resulting in no implicit or explicit employer cost. Consequently, these members are excluded from the actuarial valuation.

Subsequent event

Subsequent to the June 30, 2018, measurement date, on August 21, 2018 RHBT executed a contract renewal with Humana’s Medicare Advantage Plan (Humana MAPD) for Plan years 2019 and 2020. This renewal included reduced per member per month capitation costs which decreased from $224 to $175 per member per month, due to favorable experience and the removal of the health insurance fee.

Note 10. Other Postemployment Benefits (Continued)

The estimated impact of these reduced rates is not recognized in the estimated net OPEB liability measured at June 30, 2018, since the contract was executed subsequent to the measurement date. Per GASB Statement 75, if a change occurs in a factor relevant to measurement of the net OPEB liability between the measurement date of the net OPEB liability and the employer's current fiscal year-end, the employer should report the effect on the net OPEB liability of that change as of the next measurement date. The estimated impact of the reduced capitation rates on the net OPEB liability is a decrease of approximately 9.0%, or $280 million, which will be considered in the next actuarial valuation estimating the net OPEB liability measured as of June 30, 2019. The future actuarial measurement may differ significantly from this estimate due to various other factors such as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

Sensitivity of the Authority's proportionate share of the net OPEB liability to changes in the discount rate.

The following presents the Authority's proportionate share of the net OPEB liability calculated using the current discount rate, as well as what the Authority's proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage-point higher than the current rate:

	1% Decrease (6.15%)	Current Discount Rate (7.15%)	1% Increase (8.15%)
Authority's proportionate share of the net OPEB liability	$ 204,865	$ 174,309	$ 148,836

Sensitivity of the Authority's proportionate share of net OPEB liability to changes in the healthcare cost trend rates.

The following presents the Authority's proportionate share of the net OPEB liability, as well as what the Authority's proportionate share of the net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage point higher than the current rates:

	1% Decrease	Current Healthcare Cost Trend Rates	1% Increase
Authority's proportionate share of the net OPEB liability	$ 144,231	$ 174,309	$ 210,957

Note 11. General and Administrative Expenses

General and administrative expenses for the year ended June 30, 2019, are as follows:

Personal services	$ 595,266
Legal	53,755
Professional	59,064
Trustee	38,835
Employee benefits	18,093
Public employees insurance	64,827
Office supplies/printing	29,432
Advertising	5,378
Repairs and maintenance	63,531
Travel	6,813
Utilities	29,191
Telecommunications	21,460
Payroll taxes	18,718
Computer supplies/services	157,952
Janitorial	10,769
Miscellaneous	3,665
Rental	9,630
Administrative	2,871
Insurance	14,560
Training and development	3,009
	$ 1,206,819

Note 12. Risk Management

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to and illnesses of employees; and natural disasters.

The Authority has obtained coverage for job-related injuries of employees and health coverage for its employees from a commercial insurance provider and the WVPEIA, respectively. In exchange for the payment of premiums to the commercial insurance provider and WVPEIA, the Authority has transferred its risk related to job-related injuries and health coverage for employees.

The Authority participates in the West Virginia Board of Risk and Insurance Management to obtain coverage for general liability, property damage, business interruption, errors and omissions, and natural disasters. Coverage is offered in exchange for an annual premium. There were no changes in coverage or claims in excess of coverage for the year ended June 30, 2019.

Note 13. New Accounting Pronouncements

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

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

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

The GASB issued Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period in June 2018. This Statement enhances the relevance and comparability of information about capital assets and the cost of borrowing for a period and simplifies accounting for interest cost incurred before the end of a construction period. The requirements of this Statement are effective for periods beginning after December 15, 2019. The requirements of this Statement should be applied prospectively.

The GASB issued Statement No. 90, Majority Equity Interests, an amendment of GASB Statements No. 14 and No. 61 in August 2018. This Statement improves the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and improves the relevance of financial statement information for certain component units. The requirements of this Statement are effective for periods beginning after December 15, 2018. The requirements should be applied retroactively, except for the provisions related to (1) reporting a majority equity interest in a component unit and (2) reporting a component unit if the government acquires a 100 percent equity interest. Those provisions should be applied on a prospective basis.

The GASB issued Statement No. 91, Conduit Debt Obligations in May 2019. This Statement provides a single method of reporting conduit debt obligations by issuers and eliminates diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. The requirements of this Statement are effective for reporting periods beginning after December 15, 2020.

Management has not determined the effects these new accounting pronouncements may have on its financial statements.

Note 14. Subsequent Events

On August 13, 2019, the Water Development Authority issued Series 2019 A Notes, as a private placement offering in the amount of $13,150,000 less $160,000 for the cost of issuance. The remaining proceeds will be used to provide interim design loans to governmental agencies for water and wastewater projects around the state. Remaining funds will be disbursed as requisitioned by the governmental agencies, subject to approval.

Note 15. Segment Information

The presentation of segment information for the Authority, which follows, and conforms with GAAP is comprised of the following segments:

Loan Program I includes Series 2012 A-I and 2012 B-I Water Development Revenue Refunding Bonds. Loan Program II includes Series 2016 A-II Water Development Revenue Refunding Bonds, 2012 A-II, 2012 B-II, and 2013 A-II Water Development Revenue Refunding Bonds. Loan Program III includes Series 2012 A-III and 2012 B-III Water Development Revenue Refunding Bonds. Loan Program IV includes Series 2018 A-IV and 2018 B-IV Water Development Revenue Bonds.

Note 15. Segement Information (Continued)

	Loan Program I	Loan Program II	Loan Program III
ASSETS			
Current - unrestricted	$ 2,999,324	$ 8,147,940	$ 720,051
Noncurrent - unrestricted	-	-	-
Restricted - current and noncurrent	13,771,383	99,572,307	24,429,922
Capital assets, net	-	-	-
Total assets	$ 16,770,707	$ 107,720,247	$ 25,149,973
DEFERRED OUTFLOWS OF RESOURCES			
Deferred outflows of resources related to pension and OPEB	$ -	$ -	$ -
Deferred loss on bond refundings	1,847,951	5,169,547	312,829
Total deferred outflows	$ 1,847,951	$ 5,169,547	$ 312,829
LIABILITIES			
Current	$ 1,498,091	$ 6,266,020	$ 1,124,513
Long-term	11,161,379	89,952,020	21,734,374
Total liabilities	$ 12,659,470	$ 96,218,040	$ 22,858,887
DEFERRED INFLOWS			
Deferred inflows of resources related to pension and OPEB	$ -	$ -	$ -
Deferred gain on refunding	-	-	-
	$ -	$ -	$ -
NET POSITION			
Restricted	$ 4,457,955	$ 14,789,834	$ 3,008,377
Unrestricted	1,501,233	1,881,920	(404,462)
Investment in capital assets	-	-	-
Total net position	$ 5,959,188	$ 16,671,754	$ 2,603,915
OPERATING REVENUE			
Charges for services and miscellaneous revenue	$ 1,126,735	$ 6,500,099	$ 1,447,611
OPERATING EXPENSES			
Depreciation and amortization	$ -	$ -	$ -
General and administrative	-	-	-
Allocation of general and administrative	80,461	597,609	141,412
OPERATING INCOME	$ 1,046,274	$ 5,902,490	$ 1,306,199
NONOPERATING REVENUES (EXPENSES):			
Interest and investment revenue	$ 54,434	$ 218,530	$ 44,498
Interest expense	(534,736)	(3,717,779)	(791,364)
Transfers (net)	(605,252)	(1,483,764)	141,415
Change in net position	(39,280)	919,477	700,748
Beginning net position	5,998,468	15,752,277	1,903,167
Ending net position	$ 5,959,188	$ 16,671,754	$ 2,603,915
Net cash provided by (used in):			
Operating activities	$ 2,110,161	$ 8,878,395	$ 1,968,221
Capital and related financing activities	-	-	-
Noncapital financing activities	(2,111,364)	(8,884,149)	(1,499,757)
Investing activities	46,525	2,691,894	42,444
Beginning cash and cash equivalents	1,157,892	6,520,897	2,836,038
Ending cash and cash equivalents	$ 1,203,214	$ 9,207,037	$ 3,346,946

Note 15. Segement Information (Continued)

	Loan Program IV	Supplemental	Total
ASSETS			
Current - unrestricted	$ 64,205	$ 32,410,195	$ 44,341,715
Noncurrent - unrestricted	-	8,443,488	8,443,488
Restricted - current and noncurrent	39,581,860	3,683,687	181,039,159
Capital assets - net	-	4,063,713	4,063,713
Total assets	$ 39,646,065	$ 48,601,083	$ 237,888,075
DEFERRED OUTFLOWS OF RESOURCES			
Deferred outflows of resources related to pension and OPEB	$ -	$ 99,313	$ 99,313
Deferred loss on bond refundings	-	-	7,330,327
Total deferred outflows	$ -	$ 99,313	$ 7,429,640
LIABILITIES			
Current	$ 1,414,707	$ 26,158	$ 10,329,489
Long-term	39,237,083	329,658	162,414,514
Total liabilities	$ 40,651,790	$ 355,816	$ 172,744,003
DEFERRED INFLOWS			
Deferred inflows of resources related to pension and OPEB	$ -	$ 148,396	$ 148,396
Deferred gain on refunding	572,322	-	572,322
	$ 572,322	$ 148,396	$ 720,718
NET POSITION			
Restricted	$ (227,545)	$ 3,304,946	$ 25,333,567
Unrestricted	(1,350,502)	40,827,525	42,455,714
Investment in capital assets	-	4,063,713	4,063,713
Total net position	$ (1,578,047)	$ 48,196,184	$ 71,852,994
OPERATING REVENUE			
Charges for services and miscellaneous revenue	$ 2,081,929	$ 292,999	$ 11,449,373
OPERATING EXPENSES			
Depreciation and amortization	$ 3,659	$ 583,727	$ 587,386
General and administrative	-	1,206,819	1,206,819
Allocation of general and administrative	255,321	(1,074,803)	-
OPERATING INCOME	$ 1,822,949	$ (422,744)	$ 9,655,168
NONOPERATING REVENUES (EXPENSES):			
Interest and investment revenue	$ 6,759	$ 744,510	$ 1,068,731
Interest expense	(1,488,483)	-	(6,532,362)
Transfers (net)	339,392	1,608,209	-
Change in net position	680,617	1,929,975	4,191,537
Beginning net position	(2,258,664)	46,266,209	67,661,457
Ending net position	$ (1,578,047)	$ 48,196,184	$ 71,852,994
Net cash provided by (used in):			
Operating activities	$ 3,146,736	$ 1,242,810	$ 17,346,323
Capital and related financing activities	-	(87,538)	(87,538)
Noncapital financing activities	(3,150,596)	-	(15,645,866)
Investing activities	6,755	(4,213,403)	(1,425,785)
Beginning cash and cash equivalents	57,018	28,168,093	38,739,938
Ending cash and cash equivalents	$ 59,913	$ 25,109,962	$ 38,927,072

REQUIRED SUPPLEMENTARY INFORMATION

WEST VIRGINIA WATER DEVELOPMENT AUTHORITY

SCHEDULE OF THE PROPORTIONATE SHARE OF THE NET PENSION LIABILITY

Public Employees Retirement System Plan

	Year Ended June 30,				
	2019	2018	2017	2016	2015
Authority's proportion (percentage) of the net pension liability	0.034590%	0.038057%	0.039702%	0.043182%	0.040945%
Authority's proportionate share of the net pension liability	$ 89,328	$ 164,270	$ 364,905	$ 241,080	$ 151,290
Authority's covered payroll	$ 530,152	$ 530,764	$ 553,481	$ 587,420	$ 507,753
Authority's proportionate share of the net pension liability as a percentage of its covered payroll	16.850%	30.950%	65.929%	41.040%	29.796%
Plan fiduciary net position as a percentage of the total pension liability	96.33%	93.67%	86.11%	91.29%	93.98%

Note: All amounts presented are as of the measurement date, which is one year prior to the fiscal year end date.

WEST VIRGINIA WATER DEVELOPMENT AUTHORITY

SCHEDULE OF CONTRIBUTIONS TO THE PERS

	Year Ended June 30,						
	2019	2018	2017	2016	2015	2014	2013
Statutorily required contribution	$ 56,511	$ 57,366	$ 63,388	$ 74,720	$ 81,986	$ 72,599	$ 62,525
Contributions in relation to the statutorily required contribution	$ (56,511)	$ (57,366)	$ (63,388)	$ (74,720)	$ (81,986)	$ (72,599)	$ (62,525)
Contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Authority's covered payroll	$ 567,261	$ 530,152	$ 530,764	$ 553,481	$ 587,420	$ 507,753	$ 463,946
Contributions as a percentage of covered payroll	9.96%	11.00%	12.00%	13.50%	14.00%	14.30%	13.48%

See Independent Auditor's Report and accompanying Notes to Required Supplementary Information.

WEST VIRGINIA WATER DEVELOPMENT AUTHORITY

SCHEDULE OF THE PROPORTIONATE SHARE OF THE NET OPEB LIABILITY

Retiree Health Benefit Trust

	Year Ended June 30,	
	2019	2018
Authority's proportion (percentage) of the net OPEB liability	0.0081246%	0.0064466%
Authority's proportionate share of the net OPEB liability	$ 174,309	$ 158,520
State's proportionate share of the net OPEB liability associated with the Authority	36,025	32,560
Total proportionate share of the net OPEB liability associated with the Authority	$ 210,334	$ 191,080
Authority's covered employee payroll	$ 111,957	$ 214,103
Authority's proportionate share of the net OPEB liability as a percentage of its covered employee payroll	155.690%	74.040%
Plan fiduciary net position as a percentage of the total OPEB liability	30.98%	25.10%

Note: All amounts presented are as of the measurement date, which is one year prior to the fiscal year end date.

WEST VIRGINIA WATER DEVELOPMENT AUTHORITY

SCHEDULE OF CONTRIBUTIONS TO THE RHBT

	Year Ended June 30,			
	2019	2018	2017	2016
Statutorily required contribution	$ 17,733	$ 17,523	$ 8,604	$ 19,152
Contributions in relation to the statutorily required contribution	$ (17,733)	$ (17,523)	$ (8,604)	$ (19,152)
Contribution deficiency (excess)	$ -	$ -	$ -	$ -
Authority's covered employee payroll	$ 131,838	$ 111,957	$ 214,103	$ 247,855
Contributions as a percentage of covered employee payroll	13.45%	15.65%	4.02%	7.73%

See Independent Auditor's Report and accompanying Notes to Required Supplementary Information.

Note 1. Trend Information Presented

The accompanying schedules of the Authority's proportionate share of the net pension liability and contributions to PERS are required supplementary information to be presented for 10 years. However, until a full 10 year trend is compiled, information is presented in the schedules for those years for which information is available.

Note 2. OPEB Changes in Assumptions

Below are changes in assumptions between the 2017 and 2016 valuations:

The assumption changes that most significantly impacted the Net OPEB Liability are as follows: the inclusion of waived annuitants increased the liability by approximately $17 million; a 15% reduction in the retirement rate assumption decreased the liability by approximately $68 million; a change in certain healthcare-related assumptions decreased the liability by approximately $232 million; and an update to the mortality tables increased the liability by approximately $25 million. Certain other assumption changes were noted but did not materially impact the Net OPEB Liability.

Below are changes in the assumptions between the 2016 and 2015 valuations:

Certain economic and behavioral assumptions are unique to healthcare benefits. These assumptions include the healthcare trend, per capita claims costs, the likelihood that a member selects healthcare coverage and the likelihood that a retiree selects one-person, two person or family coverage. These assumptions were updated based on a recent experience study performed by the RHBT actuaries using five-year experience data through June 30, 2015. The updated per capita claims costs were also based on recent claims, enrollment and premium information as of the valuation date.

For the June 30, 2016 valuation, the retiree healthcare participation assumption for each retirement plan is slightly higher than the previous assumption used in the June 30, 2015 OPEB valuation. More members who were covered as actives will be assumed to participate as retirees.

The 2016 and 2015 valuations include consideration of the $30 million annual appropriations under Senate Bill 419, through July 1, 2037, or if earlier, the year the benefit obligation is fully funded. Additionally, the presentation of covered payroll was changed for the June 30, 2015, actuarial valuation. Participating employees hired before July 1, 2010, pay retiree premiums that are subsidized based on years of service at retirement. Participating employees hired on or after July 1, 2010, are required to fully fund premium contributions upon retirement. Consequently, beginning June 30, 2015, actuarial valuation covered payroll represents only the payroll for those OPEB eligible participating employees that were hired before July 1, 2010, allowing a better representation of the UAAL as a percentage of covered payroll, whereas, for the prior years, covered payroll is in total for all participating employees.

(Continued)

Note 3. Pension Plan Amendments

The PERS was amended to make changes which apply to new employees hired July 1, 2015 and later as follows:

- For employees hired prior to July 1, 2015, qualification for normal retirement is age 60 with five years of service or at least age 55 with age and service equal to 80 or greater. A member may retire with the pension reduced actuarially if the member is at least age 55 and has at least 10 years of contributory service, or at any age with 30 years of contributory service. For employees hired July 1, 2015 and later, qualification for normal retirement is 62 with 10 years of service. A member hired after July 1, 2015 may retire with the pension reduced actuarially if the member is between ages 60 and 62 with at least ten years of contributory service, between ages 57 and 62 with at least twenty years of contributory service, or between ages 55 and 62 with at least thirty years of contributory service.

- The straight life annuity retirement benefit is equivalent to 2% of average salary multiplied by years of service. For employees hired prior to July 1, 2015, average salary is the average of the three consecutive highest annual earnings out of the last fifteen years of earnings. For all employees hired July 1, 2015 and later average salary is the average of the five consecutive highest annual earnings out of the last fifteen years of earnings.

- For employees hired prior to July 1, 2015, terminated members with at least five years of contributory service who do not withdraw their accumulated contributions may elect to receive their retirement annuity beginning at age 62. For all employees hired July 1, 2015 and later, this age increases to 64 with at least ten years of contributory service, or age 63 with at least twenty years of contributory service.

- For all employees hired prior to July 1, 2015, employees are required to contribute 4.5% of annual earnings. All employees hired July 1, 2015 and later, are required to contribute 6% of annual earnings.

(Continued)

Note 4. Pension Plan Assumptions

An experience study, which was based on the years 2009 through 2014, was completed prior to the 2015 actuarial valuation. As a result, several assumptions were changed for the actuarial valuations as follows:

	2015-2018	2014
Projected salary increases:		
State	3.0-4.6%	4.25-6.0%
Nonstate	3.35-6.0%	4.25-6.0%
Inflation rate	3.0% (2016-2018); 1.9% (2015)	2.2%
Mortality rates	Active-RP- 2000 Non-Annuitant tables, Scale AA fully generational Retired healthy males - 110% of RP-2000 Non-Annuitant, Scale AA fully generational 2000 Non-Annuitant, Scale AA Retired healthy females - 101% of RP-2000 Non-Annuitant, Scale AA fully generational Disabled males – 96% of RP-2000 Disabled Annuitant, Scale AA fully generational Disabled females -107% of RP-2000 Disabled Annuitant, Scale AA fully generational	Healthy males – 1983 GAM Healthy females – 1971 GAM Disabled males – 1971 GAM Disabled females - Revenue ruling 96-7
Withdrawal rates		
State	1.75-35.1%	1 - 26%
Nonstate	2-35.8%	2 - 31.2%
Disability rates	0 - .675%	0 - .8%

BROWN EDWARDS
certified public accountants

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

To the Board of Directors
West Virginia Water Development Authority
Charleston, West Virginia

We have audited in accordance with the 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, the financial statements of the West Virginia Water Development Authority (the Authority), as of and for the year ended June 30, 2019, and the related notes to the financial statements which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated October 7, 2019.

Internal Control over Financial Reporting

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

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

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

Compliance and Other Matters

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

Purpose of this Report

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

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

CERTIFIED PUBLIC ACCOUNTANTS

Charleston, West Virginia
October 7, 2019