BOONE COUNTY WATER DISTRICT

FINANCIAL STATEMENTS

For Years Ending December 31, 2018 and 2017

BOONE COUNTY WATER DISTRICT

FINANCIAL STATEMENTS

December 31, 2018 and 2017

Table of Contents

	Pages
Board of Commissioners	1
Financial Section	
Independent Auditor's Report	2-3
Management's Discussion and Analysis	4-7
Basic Financial Statements:	
Statements of Net Position	8-9
Statements of Revenues, Expenses, and Changes in Net Position	10
Statements of Cash Flows	11
Notes to the Financial Statements	12-28
Required Supplementary Information	
Multiple Employer, Cost Sharing, Defined Benefit Pension Plan	29
Multiple Employer, Cost Sharing, Defined Benefit OPEB Plan	30
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 <i>Government</i>	
Auditing Standards	31-32

BOONE COUNTY WATER DISTRICT

BOARD OF COMMISSIONERS

December 31, 2018 and 2017

Richard Knock, Chairman

Mike Giordano, Vice Chairman

James Daugherty, Treasurer

Tim Alexander, Jr., Secretary

Charlie Cain

Of Counsel

David Koenig, Esq.



Independent Auditor's Report

To the Board of Commissioners Boone County Water District

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of Boone County Water District (District), as of and for the years ended December 31, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the District'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 audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free 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 opinions.



Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities of Boone County Water District as of December 31, 2018 and 2017 and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

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 4–7 and the pension and OPEB disclosures on pages 29-30 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 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 or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated May 24, 2019 on our consideration of Boone County Water District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Boone County Water District's internal control over financial reporting over financial reporting and compliance.

Horder, Walkey + Co. chr.

Van Gorder, Walker & Co., Inc. Erlanger, Kentucky May 24, 2019

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

Our discussion and analysis of the District's financial performance provides an overview of the District's financial activities for the year ended December 31, 2018. The information is presented in conjunction with the audited financial statements that follow this section.

FINANCIAL HIGHLIGHTS

The District saw an increase in net position during 2018. This was primarily due to capital contributions of transmission lines donated to the District by developers.

USING THIS ANNUAL REPORT

The financial statements presented herein include all of the activities of the District accounted for within a single proprietary (enterprise) reporting entity. The financial statements include a statement of net position, statement of revenues, expenses and changes in net position and statement of cash flows, and notes to the financial statements. These statements show the condition of the District's finances and the sources of income and the funds expended.

SUMMARY OF NET POSITION

Table 1 provides a summary of the District's Net Position at December 31, 2018 and 2017.

Table 1 – Net Position

(Dectated)

	<u>2018</u>	(Restated) <u>2017</u>
Current Assets Restricted Assets Noncurrent Assets/Capital Assets Deferred Outflow of Resources	\$18,031,360 99,149 93,106,599 1,007,740	\$17,750,872 443,850 85,388,124 <u>929,347</u>
Total Assets and Deferred Outflow of Resources	<u>112,244,848</u>	<u>104,512,193</u>
Current Liabilities Liabilities from Restricted Assets Long - Term Liabilities Deferred Inflow of Resources	1,812,232 345,323 7,812,532 413,772	1,707,325 469,011 6,950,518 280,097
Total Liabilities and Deferred Inflow of Resources	10,383,859	9,406,951
Net Position: Net investment in Capital Assets Restricted Unrestricted	89,127,982 76,471 12,656,536	80,980,318 427,852 <u>13,697,072</u>
Total Net Position	<u>\$101,860,989</u>	<u>\$95,105,242</u>

Net Position (i.e., total assets net of total liabilities) is divided into three components: 1) net investment in capital assets, 2) restricted and 3) unrestricted.

The majority of the net position of the District is included in the first category which consists of capital assets: land, buildings, transmission lines and equipment net of accumulated depreciation. This classification accounts for 87.5% of the total net position.

The second category, restricted, represents resources that are subject to restrictions on how they are to be expended.

The third category, unrestricted, may be used by the District to meet current obligations to creditors.

SUMMARY OF CHANGES IN NET POSITION

Revenues

Operating revenues increased \$551,389 or 3.9% from 2017 to 2018. This increase is primarily due to the combination of three factors. The District sold more water due to an increase in the number of customers and an increase in customer consumption. In addition, the District passed one of two supplier rate increases on to its customers during 2018.

Water Purchased

The cost of water increased \$883,286 or 10.2% from 2017 to 2018. This increase is due an increase in water sales and two supplier rate increases.

Operating & Maintenance Expenses

Operating and maintenance expenses increased \$49,098 or 1.5% from 2017 to 2018. This increase is primarily due to increases in the cost of workers' comp. insurance, employee wages and employee pensions and benefits.

Depreciation

Depreciation expense for 2018 and 2017 was \$2,607,486 and \$2,474,352, respectively. This increase of \$133,134 or 5.4% correlates to significant additions in fixed assets in 2018 and is consistent with the increase seen in depreciation expense in recent years.

Interest and Investment Income

Interest and Investment income increased \$86,842 from 2017 to 2018. During 2015 the District moved cash reserves from low interest rate certificates of deposit to an investment portfolio with a higher rate of return. This portfolio consists of US Treasuries, US Agency debt, Municipal Bonds, Mutual Funds, and Money Market Funds. These investments, unlike certificates of deposit, carry with them the risk of loss. The amount of this unrealized gain or (loss), \$(80,259) and \$34,349 at December 31, 2018 and 2017, respectively, has been included in investment income. Since the District plans to hold these investments to maturity, the management believes that these losses will never be incurred. See the table below for a breakdown of investment income for 2017 and 2018.

	 2018		2017	Incre	rase/Decrease
Interest and dividends	\$ 216,551	\$	183,608	\$	32,943
Realized gains on the sale of investments	8,343		10,722		(2,379)
Accrued income	(1,727)		(1,529)		(198)
Investment fees	 (38,358)		(35,758)		(2,600)
Investment income	184,809		157,043		27,766
Unrealized gain/loss on investment	 (80,259)	·	34,349		(114,608)
Reported interest and investment income	\$ 104,550	\$	191,392	\$	(86,842)

Capital Contributions

Capital contributions increased \$4,563,102 from 2017 to 2018. This was primarily due to an increase in dedicated lines donated by contractors and replacement lines donated by the Kentucky Department of Transportation as part of road improvement projects.

Table 2 compares the revenues, expenses, and change in net position for 2018 and 2017.

Table 2 – Changes in Net Position

Operating Revenues:	<u>2018</u>	2017
Water Sales Forfeited Discounts Other Water Revenues	\$14,302,007 214,175 137,999	\$13,768,781 190.461 <u>143,550</u>
Total Operating Revenues	14,654,181	14,102,792
Operating Expenses: Water Purchased Operating and Maintenance Depreciation	9,583,211 3,374,374 2,607,486	8,699,925 3,325,276 2,474,352
Total Operating Expenses	15,565,071	14,499,553
Net Operating (Loss)	(910,890)	(396,761)
Non-Operating Income (Expenses): Interest Income Investment (Loss) Income Gain on Sale of Assets Net effect of pension expense Interest on Long-Term Debt Amortization of Debt Expenses	34,122 70,428 9,219 (423,652) (140,148) (9,825)	19,183 172,209 -0- (334,520) (151,966) (9,825)
Net Non-Operating Income (Expenses)	(459,856)	(304,919)
Net Income (Loss) Capital Contributions	(1,370,746) <u>8,918,958</u>	(701,680) <u>4,355,856</u>
Change in Net Position	7,548,212	3,654,176
Net Position – Beginning	94,312,777_	91,451,066
Prior Period Adjustment for OPEB		(792,465)
Net Position – Ending	<u>\$101,860,989</u>	<u>\$ 94,312,777</u>

CAPITAL ASSETS AND DEBT ADMINISTRATION

Capital Assets

At December 31, 2018, the District had \$93,106,599 invested in capital assets including land, buildings, water treatment, transmission and distribution system, equipment, and vehicles, as reflected in the following schedule. This represents a net increase (additions less retirements and depreciation) of \$7,718,475 primarily from the addition of new lines donated by developers within the District and replacement lines donated by the Kentucky Department of Transportation as part of road improvement projects.

Table 3 summarizes the District's capital assets at the end of 2018 as compared to 2017.

Table 3 – Capital Assets at Year End (Net of Depreciation)

	<u>2018</u>	<u>2017</u>
Land	\$256,633	\$256,633
Construction in Progress	165,547	1,184,667
Transmission Lines	127,245,199	116,048,247
Automated Meter System	1,663,110	1,663,110
Rate Study	220,578	220,578
Furniture and Fixtures	153,432	127,947
Machinery & Equipment	1,444,866	1,404,005
Buildings	1,966,385	1,964,838
Subtotal	133,115,750	122,870,025
Accumulated Depreciation	<u>(40,009,151)</u>	(37,481,901)
Total Capital Assets	<u>\$ 93,106,599</u>	<u>\$ 85,388,124</u>

Debt Outstanding

Table 4 illustrates the District's outstanding debt at the end of 2018 and 2017.

Table 4 – Outstanding Debt at Year End

		<u>2018</u>	<u>2017</u>
Bonds Payable Capitalized Lease Notes Payable-KIA	\$	370,000 1,835,167 <u>1,773,450</u>	\$ 665,000 1,896,300 <u>1,846,506</u>
Total Debt	<u>\$</u>	<u>3,978,617</u>	\$ 4,407,806

All of the required payments were made on the District's outstanding debt in 2018.

ECONOMIC FACTORS AND NEXT YEAR'S BUDGET

The District's budget for 2019 projects operating revenues to increase 5.9% while operating expenses are expected to increase approximately 5.3%. The amount budgeted for operating revenues is an estimate since consumption is directly related to weather conditions which are unpredictable. Operating expenses are expected to increase during 2019 primarily due to expected increases in water costs as a result of another rate increase from our supplier, an increase in employee wages and benefits and an increase in the cost of material and supplies. The District expects the net loss from operations to decrease approximately \$52,000 and capital contributions are expected to remain approximately the same as in 2018 so that the District's net position should increase as it has in previous years.

FINANCIAL CONTACT

This District's financial statements are designed to present users (citizens, customers, investors and creditors) with a general overview of the District's finances and to demonstrate the District's accountability. If you have questions about the report or need additional information, contact the District Administrative Office at 2475 Burlington Pike, Burlington, KY 41005.

Harry Anness, General Manager Boone County Water District

BOONE COUNTY WATER DISTRICT STATEMENTS OF NET POSITION December 31, 2018 and 2017

ASSETS Current Assets		2018	I	(Restated) 2017
Cash and cash equivalents	\$	646,504	\$	633,281
Investments		8,611,181		8,602,583
Reserve for depreciation, investment cash and equivalents and CDs		5,939,354		5,929,473
Accounts receivable				
Customers, net of allowance		2,219,581		2,033,355
Others		210,543		130,409
Assessments receivable		200,253		202,039
Inventories		179,848		190,831
Prepaids		24,096		28,901
Total Current Assets		18,031,360		17,750,872
Restricted Assets Debt service account Debt service reserve account Total Restricted Assets		66,451 32,698 99,149		84,060 359,790 443,850
Capital Assets				
Land, building, transmission system, equipment, and vehicles		132,950,203		121,685,358
Construction in progress		165,547		1,184,667
Total utility plant in service		133,115,750		122,870,025
Less accumulated depreciation		(40,009,151)		(37,481,901)
Total Capital Assets, Net		93,106,599		85,388,124
TOTAL ASSETS		111,237,108		103,582,846
DEFERRED OUTFLOW OF RESOURCES				
Deferred outflows related to pensions and OPEB		993,739		905,522
Deferred refunding costs on defeased bond debt		14,001		23,825
TOTAL DEFERRED OUTFLOW OF RESOURCES	<u>.</u>	1,007,740		929,347
TOTAL ASSETS AND DEFERRED OUTFLOW OF RESOURCES		112,244,848	<u></u>	104,512,193

Continued on page 9

BOONE COUNTY WATER DISTRICT STATEMENTS OF NET POSITION - Continued December 31, 2018 and 2017

LIABILITIES Current Liabilities	2018	(Restated) 2017
Accounts payable	941,963	881,102
Accrued payroll and taxes	476,146	443,297
Deferred revenue on tap ins	69,445	63,735
Customer deposits	324,678	319,191
Total Current Liabilities	1,812,232	1,707,325
Current Liabilities Payable From Restricted Assets		
Bonds payable	170,000	295,000
KIA note payable	75,041	73,055
Capital lease payable	63,603	61,133
Accrued interest payable	36,679	39,823
Total Current Liabilities Payable From Restricted Assets	345,323	469,011
Long-Term Obligations Bonds Capital lease - KRW KIA loan payable - KRW Net unfunded pension and OPEB liability	200,000 1,771,564 1,698,409 4,142,559	370,000 1,835,167 1,773,451 2,971,900
Total Long-Term Obligations	7,812,532	6,950,518
TOTAL LIABILITIES	9,970,087	9,126,854
DEFERRED INFLOW OF RESOURCES Deferred inflow related to pensions and OPEB	413,772	280,097
TOTAL LIABILITIES AND DEFERRED INFLOW OF RESOURCES	10,383,859	9,406,951
NET POSITION Net investment in capital assets Restricted Unrestricted	89,127,982 76,471 12,656,536	80,980,318 427,852 13,697,072
TOTAL NET POSITION	\$ 101,860,989	\$ 95,105,242

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

BOONE COUNTY WATER DISTRICT STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION For Years Ending December 31, 2018 and 2017

OPERATING REVENUES	2018	2017
Water revenue Forfeited discounts Other water revenues	\$ 14,302,007 214,175 	\$ 13,768,781 190,461 143,550
TOTAL OPERATING REVENUES	14,654,181	14,102,792
OPERATING EXPENSES		
Water purchased Operation and maintenance expense Depreciation	9,583,211 3,374,374 2,607,486	8,699,925 3,325,276 2,474,352
TOTAL OPERATING EXPENSES	15,565,071	14,499,553
OPERATING LOSS	(910,890)	(396,761)
NON-OPERATING INCOME (EXPENSE) Interest income Investment (loss) income Gain on sale of assets Net effect of change in pension and OPEB expense Interest on long-term obligations Amortization of bond discounts	34,122 70,428 9,219 (423,652) (140,148) (9,825)	19,183 172,209 - (334,520) (151,966) (9,825)
NET NON-OPERATING INCOME (EXPENSE)	(459,856)	(304,919)
NET LOSS	(1,370,746)	(701,680)
CAPITAL CONTRIBUTIONS	8,918,958	4,355,856
CHANGE IN NET POSITION	7,548,212	3,654,176
NET POSITION, JANUARY 1	94,312,777	91,451,066
PRIOR PERIOD ADJUSTMENT		(792,465)
NET POSITION, DECEMBER 31	\$ 101,860,989	\$ 94,312,777

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

BOONE COUNTY WATER DISTRICT STATEMENTS OF CASH FLOWS For Years Ending December 31, 2018 and 2017

CASH FLOWS FROM OPERATING ACTIVITIES	2018	2017
Received from customers	\$ 14,427,498	\$ 14,002,725
Paid to suppliers for goods and services Paid to or on behalf of employees for services	(11,555,801)	(10,675,143)
	(1,282,754) 1,588,943	(1,220,815) 2,106,767
	1,000,940	2,100,707
CASH FLOWS FROM INVESTING ACTIVITIES Purchases and sales of investments	_	_
Interest on investments	35,849	21,672
NET CHANGE IN CASH FROM INVESTING ACTIVITIES	35,849	21,672
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Principal paid on long-term debt	(429,188)	(424,882)
Transfers of reserve for depreciation, cash and certificates of deposit	43,635	(115,504)
Interest paid on long-term debt	(143,292)	(161,839)
Acquisition and construction of fixed assets	(2,006,519)	(1,453,230)
Proceeds on sale of assets	12,563	- · · · · ·
Contributed capital received	566,531	395,327
(Increase) decrease in restricted funds	,	,
Debt service account	17,609	(981)
Debt service reserve account	327,092	(11,538)
Renewal and replacement account		
NET CHANGE IN CASH FROM CAPITAL AND		
RELATED FINANCING ACTIVITIES	(1,611,569)	(1,772,647)
CHANGE IN CASH AND CASH EQUIVALENTS	13,223	355,792
CASH AND CASH EQUIVALENTS-BEGINNING OF YEAR	633,281	277,489
CASH AND CASH EQUIVALENTS-END OF YEAR	\$ 646,504	\$ 633,281
RECONCILIATION OF OPERATING INCOME TO NET CHANGE IN CASH		
FROM OPERATING ACTIVITIES		
Operating loss	\$ (910,890)	\$ (396,761)
Adjustments to reconcile net income to net cash		
provided by operating activities:		
Depreciation	2,607,486	2,474,352
Change in operating assets and liabilities		
(Increase) decrease in receivables	(228,348)	(103,387)
(Increase) decrease in inventories	10,983	(20,919)
(Increase) decrease in prepaid assets	4,805	358
Increase (decrease) in accounts payable	60,861	75,726
Increase (decrease) in accrued payroll and taxes	32,849	54,173
Increase (decrease) in deferred revenue on tap ins	5,710	12,735
Increase (decrease) in customer deposits	5,487	10,490
NET CASH PROVIDED BY OPERATING ACTIVITIES	\$ 1,588,943	\$ 2,106,767
Non-Cash Capital and Related Financing Activities:	_	
Capital assets (transmission mains, hydrants, etc.) contributed to the District	\$ 8,404,595	\$ 3,960,530
Supplemental Information		
Interest paid	\$ (143,292)	\$ (161,839)
The accompanying potes are an integral part of the financial statements		

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

NOTE 1 – GENERAL INFORMATION AND SIGNIFICANT ACCOUNTING POLICIES

The Boone County Water District (District) is a water utility, which provides service to residential and commercial customers in Boone County, Kentucky. The District was created by the Boone County Court under the provisions of chapter 74 of the Kentucky Revised Statutes ("KRS").

Regulatory Requirements

The District is subject to the regulatory authority of the Kentucky Public Service Commission ("PSC") pursuant to KRS 278.040.

Basis of Accounting

The District's financial statements are presented on the full accrual basis in accordance with accounting principles generally accepted in the United States of America. The District applies all relevant Governmental Accounting Standards Board (GASB) pronouncements and applicable Financial Accounting Standards Board (FASB) pronouncements, and Accounting Principles Board (APB) Opinions issued on or before November 30, 1989, unless they conflict with GASB pronouncements.

All activities of the District are accounted for within a single proprietary (enterprise) reporting entity. Proprietary entities are used to account for operations that are (a) financed and operated in a manner similar to private business enterprises where the intent of the governing body is that the cost (expense, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes.

The accounting and financial reporting treatment applied to the District is determined by its measurement focus. The transactions of the District are accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operations are included on the Statement of Net Position. Net position (i.e., total assets net of total liabilities) are segregated into "invested in capital assets, net of related liabilities"; "restricted"; and "unrestricted"

Assessments Receivable

Assessments that the District has levied on property owners for the extension of water service to their property are recorded as a receivable at the time of the final public hearing.

Allowance for Bad Debts

The District maintained an allowance for bad debts of \$27,000 and \$37,000 at 2018 and 2017, respectively.

Cash Equivalents

For purposes of the statement of cash flows, the District considers all unrestricted highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents.

Budgets

In accordance with Kentucky Revised Statute 65A, the District is required to upload a balanced budget on the Kentucky Department of Local Government's website prior to January 15. The budget includes proposed expenditures and the means of financing them for the upcoming year. Annual budgets are adopted on a basis consistent with generally accepted accounting principles for all governmental funds.

Expenditures may not legally exceed budgeted appropriations at the fund level. All appropriations lapse at fiscal year-end.

Inventories

Inventories are stated at the lower of cost or market value. Cost is determined under the First-In, First-Out (FIFO) method. Market is determined on the basis of estimated realizable market values.

Distribution System, Building, and Equipment

Property, plant, transmission lines and equipment are recorded at cost and depreciated over their estimated useful lives using the straight line method. Upon sale or retirement, the cost and related accumulated depreciation are removed from the respective accounts and the resulting gain or loss is included in the "Non-Operating Income (Expense)" portion of results of operations.

Construction in Progress

Capitalizable costs incurred on projects which are not in use or ready for use at year end are held as "Construction in Progress." When the related asset is ready for use, related costs are transferred to the related asset account.

Capital Contributions

In conformity with the provisions of Governmental Accounting Standards Board Statement No. 33 – *Accounting and Financial Reporting for Non-Exchange Transactions*, amounts related to customer contributions in aid of construction have been reported as other income in the District's income statement. These contributions represent customer tap-in fees and assessments charged to recover the costs of extensions of the distribution system. The District also includes estimated cost figures for those lines contributed by outside contractors. These amounts have been reduced by rebates paid to the contractor for 50 feet of line each time that a new customer taps into the contributed line.

Income Tax Status

The District is exempt from federal and state income taxes since it is a governmental entity. Accordingly, the financial statements include no provision for income taxes.

Use of Estimates

The process of preparing financial statements in conformity with generally accepted accounting principles requires the use of estimates and assumptions regarding certain types of assets, liabilities, revenues and expenses. Such estimates primarily relate to unsettled transactions and events as of the date of the financial statements. Accordingly, upon settlement, actual results may differ from estimated amounts.

Operating Revenues and Non-Operating Revenues

Revenues have been classified as operating and non-operating. Operating revenues are those revenues that are directly generated from the sale of water to customers. Non-operating revenues are those revenues that arise from the overall function of the entity. Examples of non-operating revenues are grant revenues, sale of fixed assets and interest income.

NOTE 2 – DEPOSITS

Deposits consist of checking and savings accounts. They are carried at cost, which approximates market value. The carrying amount of deposits is separately displayed on the Statement of Net Position as "Cash and Cash Equivalents" and "Restricted Assets". The balances for Cash and Cash Equivalents were \$6,585,858 and \$6,562,754 at December 31, 2018 and 2017, respectively. The balances for Restricted Assets were \$99,149 and \$443,850 at December 31, 2018 and 2017, respectively.

The District's General Bond Resolution dated October 13, 1992 permits investment of monies in each fund, consistent with the contemplated use of such monies, in investment obligations defined as follows:

- a) Direct obligations of or obligations guaranteed by the United States of America;
- b) Obligations issued by any of the following agencies: Federal Home Loan Bank System; Export-Import Banks; Government National Mortgage Association; Farmers Home Administration; Federal National Mortgage Association to the extent that such obligations are guaranteed by the Government National Mortgage Association; and any other Federal Agency to the extent that such obligations are backed by the full faith and credit of the United States (other than provided in (a) hereof);
- c) Public housing bonds issued by public housing authorities and fully secured as to the payment of both principal and interest by a pledge of annual contributions under an annual contributions contract or contracts with the United States of America; or project notes issued by public housing authorities, fully secured as to the payment of both principal and interest by a requisition or payment agreement with the United States of America;
- d) U.S. Dollar denominated deposit accounts fully insured to the holder (up to the \$250,000 maximum coverage) by the Federal Deposit Insurance Corporation in commercial banks, and to the extent not so insured (amounts in excess of \$250,000 maximum coverage), collateralized by obligations described in (a) or (b) above, having at all times a quoted market value at least equal to such uninsured amount plus accrued and undisbursed interest;
- e) General obligations to the Commonwealth of Kentucky;
- f) A pool or fund made up entirely of U.S. Government obligations or obligations guaranteed both as to principal and interest by the U.S. Government ; or
- g) Repurchase agreements for U.S. Government Obligations, secured in the same manner as is provided in (d) above for other deposits.

NOTE 3 – INVESTMENTS

Investment obligations are deemed to be part of the fund or account for which they were purchased. Income, interest, gains and losses on an investment obligation are credited or charged to the fund or account for which such an investment obligation was purchased. In the case of the Debt Service Reserve, as long as the aggregate debt service reserve requirement is being maintained, excess income from that fund is to be transferred to the Water Reserve Fund.

Investments are measured at fair value on a recurring basis. *Recurring* fair value measurements are those that Governmental Accounting Standards Board (GASB) Statements require or permit in the statement of net position at the end of each reporting period. Fair value measurements are categorized based on the valuation inputs used to measure an asset's fair value: Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

		Fair Value Measurements Using						
Investments	Fai	Fair Value		el 1 Inputs	Lev	el 2 Inputs	Level 3 Inputs	
Debt securities:								
U.S. treasuries	\$ 3	3,095,823	\$	3,095,823	\$	-	\$	-
U.S. agencies (FNMA, etc.)	3	3,343,192		3,343,192		-		-
Municipal bonds		300,082		<u> </u>		300,082		-
Total debt securities	6	6,739,097	·	6,439,015		300,082		-
Equity securities:								
Mutual funds	1	,872,084		1,872,084		-		-
Total equity securities	1	,872,084		1,872,084		-		-
Subtotal investments	8	3,611,181		8,311,099		300,082		-
Cash and Cash Equivalents								
Money market funds		456,273		456,273		-		-
Total investments	\$ 9	,067,454	\$	8,767,372	\$	300,082	\$	_

Investments' fair value measurements are as follows at December 31, 2018:

Investments' fair value measurements are as follows at December 31, 2017:

			Fair Value Measurements Using					
Investments	{	Fair Value		Level 1 Inputs		el 2 Inputs	Level 3 Inputs	
Debt securities:								
U.S. treasuries	\$	3,074,101	\$	3,074,101	\$	-	\$	-
U.S. agencies (FNMA, etc.)		3,367,563		3,367,563		-		-
Municipal bonds		302,016		-		302,016		-
Total debt securities		6,743,680		6,441,664		302,016		
Equity securities:								
Mutual funds		1,858,903		1,858,903		-		-
Total equity securities		1,858,903		1,858,903		-		-
Subtotal investments		8,602,583		8,300,567		302,016		-
Cash and Cash Equivalents								
Money market funds		401,030		401,030				-
Total investments	\$	9,003,613	\$	8,701,597	\$	302,016	\$	-

Debt and equity securities categorized as Level 1 are valued based on prices quoted in active markets for those securities. Debt securities categorized as Level 2 are valued using a matrix pricing technique that values securities based on their relationship to benchmark quoted prices.

In accordance with GASB 40, the District has \$32,698 and \$359,790 in bond sinking funds held in investments in federally backed US Treasury Obligations rated AAA/Aaa at December 31, 2018 and 2017, respectively. The market risk on these investments is negligible.

NOTE 4 – RESTRICTED PORTION OF NET POSITION

Net position comprises the various net earnings from operating and non-operating revenues, expenses and contributions of capital. Net position is classified in the following three components: invested in capital assets, net of related debt; restricted; and unrestricted portion of net position. Invested in capital assets, net of related debt consists of all capital assets net of accumulated depreciation and reduced by outstanding debts, that is attributable to the acquisition, construction and improvement of those assets. The restricted portion of net position consists of assets for which constraints are placed thereon by external parties, such as lenders, grantors, contributors, laws, regulations and enabling legislation, including self-imposed legal mandates. The unrestricted portion of net position consists of all other assets not included in the above categories.

Included in restricted portion of net position at December 31,

	 2018	 2017
Debt Service Account	\$ 66,451	\$ 84,060
Debt Service Reserve Account	 32,698	 359,790
Subtotal - Restricted Assets	99,149	443,850
Deferred refunding costs on defeased bond debt Less: non-capital payables to be paid from	14,001	23,825
restricted assets: accrued interest payable	(36,679)	(39,823)
Total Restricted Portion of Net Position	\$ 76,471	\$ 427,852

NOTE 5 - UTILITY PLANT IN SERVICE

All property, plant and equipment including infrastructure assets are recorded at cost and depreciated over their estimated useful lives, using the straight-line method as detailed in Note 1. Repair and maintenance charges, which do not increase the useful lives of the assets, are charged to income as incurred. Interest incurred on construction funding during the period of construction is capitalized and is added to the item under construction rather than charged to expense as incurred.

Estimated useful lives, in years, for depreciable assets are as follows:

Buildings and improvements	10-40 years
Furniture and fixtures	5-15 years
Machinery and equipment	5-10 years
Automated meter system	50 years
Transmission lines	50 years
Rate Study	4 years

Asset Type	Decem	nce at iber 31,)17	Additions	F	etirements	D	Balance at ecember 31, 2018
Land	\$	256,633	\$ -	\$	_	\$	256,633
Transmission lines	116,	048,247	11,196,952		-		127,245,199
Automated meter system	1,	663,110	-		-		1,663,110
Buildings	1,	964,838	9,553		(8,006)		1,966,385
Machinery and equipment	1,	404,005	113,870		(73,009)		1,444,866
Furniture and fixtures		127,947	34,894		(9,409)		153,432
Rate study		220,578	-		-		220,578
Construction in progress	1,	184,667	 1,366,624		(2,385,744)		165,547
Subtotal	122,	870,025	12,721,893		(2,476,168)		133,115,750
Accumulated depreciation	(37,	481,901)	 (2,607,486)		80,236	<u></u>	(40,009,151)
Fixed Assets, net	\$ 85,	388,124	\$ 10,114,407	\$	(2,395,932)	\$	93,106,599

NOTE 6 – LONG TERM DEBT

The following is a summary of the District's debt:

Debt type	Balance at ecember 31 2017	A	dditions	Principal Payments	Balance at ecember 31 2018	Current Portion
2004 Refunding Bond	\$ 130,000	\$	-	\$ (130,000)	\$ -	\$ -
2011 Refunding Bond	535,000		-	(165,000)	370,000	170,000
KIA Loan	1,846,506		-	(73,055)	1,773,451	75,041
BCFC Capital Lease	 1,896,300		-	 (61,133)	 1,835,167	 63,603
Totals	\$ 4,407,806	\$	-	\$ (429,188)	\$ 3,978,618	\$ 308,644

Revenue Refunding Bonds, Series 2011

In October 2011, the District sold \$1,480,000 of revenue refunding bonds in order to redeem the Water Revenue Bonds, 2001 Series A. The bonds mature on or after October 1, 2020 at a redemption price of 100%. Interest is payable April 1st and October 1st of each year. Maturing bond principal is due October 1st of each year. District infrastructure assets serve as collateral for this debt.

The Refunding Revenue Bonds, Series 2011, are scheduled to mature as follows:

	Interest	Principal		Interest		Total			
Year	Rates	Amount		Amount		A	mount	De	bt Service
2019	1.000%	\$	170,000	\$	7,230	\$	177,230		
2020	1.05 - 2.00%		200,000		4,000		204,000		
Totals		\$	370,000	\$	11,230	\$	381,230		

Revenue Refunding Bonds, Series 2004

In November 2004, the District sold \$1,975,000 of revenue bonds in order to redeem the Water System Refunding and Revenue Bonds, 1993 Series A. The bonds matured on October 1, 2018 at a redemption price of 100%. Interest is payable April 1st and October 1st of each year. Maturing bond principal is due October 1st of each year. District infrastructure assets serve as collateral for this debt. There are no outstanding bonds at December 31, 2018.

Capital Lease - Boone County Fiscal Court

The District established a capital lease related to its acquisition of Rural Water lines from the Boone County Fiscal Court, effective during the year ended 2009. This capital lease carries an interest rate of 2.00%, and expires on August 1, 2037. District infrastructure assets serve as collateral for this debt.

Year	Interest Rates	Principal Amount		Interest Amount	D	Total ebt Service
2019	2.00%	\$ 63,603	\$	72,777	\$	136,380
2020	2.00%	66,173		70,207		136,380
2021	2.00%	68,846		67,534		136,380
2022	2.00%	71,627		64,753		136,380
2023	2.00%	74,521		61,859		136,380
2024-2028	2.00%	420,273		261,627		681,900
2029-2033	2.00%	512,308		169,592		681,900
2034-2037	2.00%	 557,816		55,324		613,140
Totals		\$ 1,835,167	\$	823,673	\$	2,658,840

Remaining debt service requirements on this capital lease are as follows:

Note Payable - Kentucky Infrastructure Authority

The District established a note payable related to its acquisition of Rural Water lines from the Boone County Fiscal Court, effective during the year ended 2009. This note payable carries an interest rate of 2.70% and matures on June 1, 2037. District infrastructure assets serve as collateral for this debt.

Remaining debt service requirements on this note payable are as follows:

	Interest	Principal		Interest		Total	
Year	Rates		Amount	1	Amount	D	ebt Service
2019	2.70%	\$	75,041	\$	50,890	\$	125,931
2020	2.70%		77,081		48,699		125,780
2021	2.70%		79,176		46,448		125,624
2022	2.70%		81,328		44,137		125,465
2023	2.70%		83,539		41,762		125,301
2023-2027	2.70%		453,016		170,874		623,890
2028-2032	2.70%		518,026		101,049		619,075
2033-2037	2.70%		406,244		23,877		430,121
Totals		\$	1,773,451	\$	527,736	\$	2,301,187

Defeased District Revenue Bonds

In October 2011, the District placed \$1,741,250 from the 2011 Series Bond proceeds in trust to be used solely for satisfying scheduled payments of both principal and interest of the 2001 Series Bonds. In November 2004, the District irrevocably placed \$1,924,562 from the 2004 Series Bond proceeds in trust to be used solely for satisfying scheduled payments of both principal and interest of the 1993 Series A Bonds.

These defeased revenue bonds outstanding at December 31, 2018 are as follows:

		2001		1993
Year	Se	eries Bond	S	eries A
2019		185,000		-
2020		190,000		-
2021		200,000		-
	\$	575,000	\$	-

Miscellaneous Deferred Charges

The discount on the 2001 Series Bonds is recorded as a deferred charge and is being amortized over the life of the bond issues and the defeased bond loss associated with the 1993 Series A Bonds is being amortized over fifteen years. These revenue bonds are considered extinguished and do not appear as liabilities on the accompanying Statements of Net position as of December 31, 2018 and 2017. The balance of losses incurred on the 2001 Series Bonds defeasement was \$10,483 in 2018 and \$16,200 in 2017. The balance of losses incurred on the 1993 Series A Bonds defeasement was \$3,518 in 2018 and \$7,625 in 2017.

NOTE 7 – COUNTY EMPLOYEES' RETIREMENT SYSTEM

Plan description - Employees are covered by CERS (County Employees Retirement System), a costsharing multiple-employer defined benefit pension and health insurance (Other Post-Employment Benefits; OPEB) plan administered by the Kentucky Retirement System, an agency of the Commonwealth of Kentucky. Under the provisions of the Kentucky Revised Statue ("KRS") Section 61.645, the Board of Trustees of the Kentucky Retirement administers CERS and has the authority to establish and amend benefit provisions. The Kentucky Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for CERS. That report may be obtained from <u>http://kyret.ky.gov/</u>.

The Plan is divided into both a **Pension Plan** and **Health Insurance Fund Plan** (Other Post-Employment Benefits; OPEB) and each plan is further sub-divided based on *Non-Hazardous* duty and *Hazardous* duty covered-employee classifications. The Boone County Water District has only Non-Hazardous employees.

PENSION PLAN

Non-Hazardous Pension Plan Description

Benefits Provided – CERS provides retirement, health insurance, death and disability benefits to Non-Hazardous duty Plan employees and beneficiaries. Employees are vested in the plan after five years of service. For retirement purposes, employees are grouped into three tiers, based on hire date:

Tier 1	Participation date Unreduced retirement Reduced retirement	Before September 1, 2008 27 years service or 65 years old At least 5 years service and 55 years old At least 25 years service and any age
Tier 2	Participation rate Unreduced retirement	September 1, 2008 - December 31,2013 At least 5 years service and 65 years old or age 57+ and sum of service years plus age equal 87
	Reduced retirement	At least 10 years service and 60 years old
Tier 3	Participation date	After December 31, 2013
	Unreduced retirement	At least 5 years service and 65 years old or age 57+ and sum of service years plus age equal 87
	Reduced retirement	Not available

Cost of living adjustments are provided at the discretion of the General Assembly. Retirement is based on a factor of the number of years of service and hire date multiplied by the average of the highest five years' earnings. Reduced benefits are based on factors of both of these components. Participating employees become eligible to receive the health insurance benefit after at least 180 months or service. Death benefits are provided for both death after retirement and death prior to retirement. Death benefits after retirement are \$5,000 in lump sum. Five years' service is required for death benefits prior to retirement and the employee must have suffered a duty-related death. The decedent's beneficiary will receive the higher of the normal death benefit and \$10,000 plus 25% of the decedent's monthly final rate or pay and any dependent child will receive 10% of the decedent's monthly final rate of pay up to 40% for all dependent children. Five years' service is required for nonservice-related disability benefits.

Contributions - Required pension plan contributions by the employee are based on the tier:

	Required Contribution	
Tier 1	5%	
Tier 2	5%	
Tier 3	5%	

Contributions

For non-hazardous duty employees, the District contributed 19.18% (from January – June 2018) of which 14.48% was for the pension fund and 4.70% was for the health insurance fund, and 21.48% (from July – December 2018) of which 16.22% was for the pension fund and 5.26% was for the health insurance fund, of the non-hazardous duty covered-employee's compensation during the fiscal year ended December 31, 2018.

The District made all required contributions for the non-hazardous Plan obligation for the fiscal year in the amount of \$272,048, of which \$205,408 was for the pension fund and \$66,640 was for the health insurance fund.

Pension Liabilities, Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions

At December 31, 2018, the District reported a liability of \$3,207,520 as its proportionate share of the net pension liability. The net pension liability 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 that date. The District's proportion of the net pension liability was based on a projection of the District's long-term share of contributions to the pension plan relative to the projected contributions of all participating entities, actuarially determined. At June 30, 2018, the District's non-hazardous employer allocation proportion was 0.05267% of the total CERS non-hazardous duty employees. For the year ended June 30, 2018, the District recognized pension expense of \$346,703 in addition to its \$205,426 pension contribution.

At December 31, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Non-Hazardous			
	 rred Outflow Resources		erred Inflow Resources	
Differences between expected and actual experience	\$ 104,620	\$	(46,951)	
Net difference between projected actual earnings on plan investments	149,152		(187,612)	
Changes of assumptions	313,468		-	
Changes in proportion and differences between contributions and proportionate share of contributions	80,698		(1,758)	
Contributions subsequent to the measurement date	107,689			
	\$ 755,627	\$	(236,321)	

The District's contributions subsequent to the measurement date of \$107,689 will be recognized as a reduction of the net pension liability in the year ending December 31, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Fiscal Year Ending	Net
December 31,	Deferral
2019	\$ 293,404
2020	160,418
2021	(24,989)
2022	(17,215)
	\$ 411,618

Actuarial Assumptions

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

Valuation date	June 30, 2016
Experience study	July 1, 2008 – June 30, 2013
Actuarial cost method	Entry Age Normal
Amortization method	Level percentage of payroll, closed
Remaining amortization period	27 years
Asset valuation method	5-year smoothed market

Payroll growth	2.00%
Inflation	2.30%
Salary increase	3.05%, average, including inflation
Investment rate of return	6.25%, net of pension plan expense, including inflation

The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females). For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (1 year set-back for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

The long-term expected return on plan assets is reviewed as part of the regular experience studies prepared every five years for CERS. The most recent analysis, performed for the period covering fiscal years 2008 through 2013, is outlined in a report dated April 30, 2014. Several factors are considered in evaluating the long-term rate of return assumption including long term historical data, estimates inherent in current market data, and a log- normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense, and inflation) were developed by the investment consultant 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 percentage and then adding expected inflation. The capital market assumptions developed by the long-term rate of return for funding pension plans which covers a longer timeframe. The assumption is intended to be a long term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

Changes of Assumptions

There have been no changes in actuarial assumptions since June 2017. In 2017, the demographic and economic assumptions that affect the measurement of the total pension liability were updated as follows:

- The assumed investment rate was decreased from 7.5% to 6.25%.
- The assumed rate of inflation was reduced from 3.25% to 2.30%.
- The assumed rate of wage inflation was reduced from 4.00% to 3.05%.
- Payroll growth assumption was reduced from 4.00% to 2.00%.
- The mortality table used for active members is RP-2000 Combined mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).
- For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set-back 1 year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.
- The assumed rates of retirement, withdrawal and disability were updated to more accurately reflect experience.

The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

	CERS Pensions	
	(Haz & Non-Haz)	Long Term
	Target	Expected
Asset Class	Allocation	Nominal Return
Combined equity	35%	5.79%
Combined fixed income	24%	6.71%
Real return (diversified		
inflation strategies)	10%	7.00%
Absolute return (diversified		
hedge funds)	10%	5.00%
Private equity	10%	6.50%
Real estate	5%	9.00%
Global bonds	4%	3.00%
Cash	2%	1.50%

Discount Rate

The discount rate used to measure the total pension liability was 6.25%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and employers will be made at statutory contribution rates. Projected inflows from investment earnings were calculated using the long-term assumed investment return of 6.25%. The long-term assumed investment rate of return was applied to all periods of projected of benefit payments to determine the total pension liability.

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

The following presents the District's proportionate share of the net pension liability calculated using the discount rate of 6.25 percent, as well as what the Distirct's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.25 percent) or 1-percentage-point higher (7.25 percent) than the current rate:

	Proportionate Share of Net Pension Liability					
	1% Decrease	Current Rate	1% Increase			
	5.25%	6.25%	7.25%			
Non-hazardous	\$ 4,037,935	\$ 3,207,520	\$ 2,511,777			

HEALTH INSURANCE - OTHER POST-EMPLOYMENT BENEFITS

Non-Hazardous OPEB Plan Description

Benefits Provided – CERS provides retirement, health insurance, death and disability benefits to non-hazardous duty plan employees and beneficiaries. Health insurance coverage is provided through payment/partial payment of insurance premiums for both non-Medicare-eligible and Medicare-eligible retirees.

Tier 1	Participation date Benefit eligibility Percentage of member premium paid by the plan	Before July 1, 2003 Recipient of a retirement allowance < 4 years service - 0% 4-9 years service - 25% 10-14 years service - 50% 15-19 years service - 75% 20 or more years service - 100%
Tier 2	Participation date Benefit eligibility	July 1, 2003 - August 31, 2008 Recipient of a retirement allowance with at least 120 months of service at retirement
	Member premium paid by the plan	\$10/month for each year of earned service with a 1.5% increase each July 1. As of July 1, 2016, the contribution was \$12.99 per month.
Tier 3	Participation date	On or after September 1, 2008
	Benefit eligibility	Recipient of a retirement allowance with at least 180 months of service at retirement
	Member premium paid by the plan	\$10/month for each year of earned service with a 1.5% increase each July 1. As of July 1, 2016, the contribution was \$12.99 per month.

Contributions - Required health insurance plan contributions by the employee are based on the tier:

	Required Contribution
Tier 1	None
Tier 2	1%
Tier 3	1%

Contributions

Contribution requirements for covered employees and participating governmental entities are established and may be amended by the KRS Trustees. The contractually required contribution rate for governmental entities for January - June 2018, was 4.70% and for July – December 2018 was 5.26% of coveredemployee payroll for non-hazardous duty employees, actuarially determined as an amount that is expected to finance the cost of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the OPEB plan from the District were \$66,648 for non-hazardous duty employees for the year ended December 31, 2018.

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

At December 31, 2018, the District reported a liability of \$935,039 for its proportionate share of the net OPEB liability. 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 that date. The District's proportion of the net OPEB liability was based on a projection of the District's long-term share of contributions to the OPEB plan relative to the projected contributions of all governmental entities, actuarially determined. At June 30, 2018, the District's proportion of the non-hazardous plan was .05266%, which was 0.001887% higher than the District's proportion at the previous measurement date.

For the year ended December 31, 2018, the Distirct recognized an OPEB expense of \$76,949. In addition, the District reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Non-Hazardous			
	Deferred Outflow		Deferred Inflow	
	of F	Resources	of	Resources
Differences between expected and actual experience	\$	\$ -		(108,966)
Net difference between projected actual earnings on plan investments		_		(64,406)
Changes of assumptions		186,741		(2,160)
Changes in proportion and differences between contributions and proportionate share of contributions		23,022		(1,919)
Contributions subsequent to the measurement date		34,923		
	\$	244,686	\$	(177,451)

The District's contributions subsequent to the measurement date, \$34,923 for non-hazardous duty employees will be recognized as a reduction of the net OPEB liability in the year ending December 31, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources will be recognized in pension expense as follows:

Fiscal Year Ending		Net
December 31,	Deferral	
2019	\$	7,223
2020		7,223
2021		7,223
2022		19,732
2023		(4,239)
Thereafter		(4,852)
	\$	32,310

Actuarial Assumptions

The total OPEB liability in the June 30, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Actuarial cost method: Asset valuation method:	Entry Age Normal 20% of the difference between the market value of assets and the expected actuarial value of assets is recognized
Amortization method:	Level, percent of pay
Amortization period:	25 years, closed
Payroll growth rate:	2.00%
Investment return:	6.25%
Inflation	2.30%
Salary increases:	3.05%, average
Mortality:	RP-2000 Combined Mortality Table, projected to 2013 with Scale BB
-	(set back 1 year for females)

Healthcare trend rates	
(Pre-65):	Initial trend starting at 7.00% and gradually decreasing to an ultimate trend rate of 4.05% over a period of 12 years.
Healthcare trend rates	
(Post-65):	Initial trend starting at 5.00% and gradually decreasing to an ultimate trend rate of 4.05% over a period of 10 years.

The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study calculated as of June 30, 2015.

The long-term expected rate of return on Plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are as follows:

The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

	CERS Health Insurance Target	Long Term Expected
Asset Class	Allocation	Nominal Return
Combined equity	35%	5.79%
Combined fixed income	24%	6.71%
Real return (diversified		
inflation strategies)	10%	7.00%
Absolute return (diversified		
hedge funds)	10%	5.00%
Private equity	10%	6.50%
Real estate	5%	9.00%
Global bonds	4%	3.00%
Cash	2%	1.50%

Changes of Assumptions

In 2017, the demographic and economic assumptions that affect the measurement of the total pension liability were updated as follows:

- The assumed investment return was decreased from 7.50% to 6.25%.
- The assumed rate of inflation was reduced from 3.25% to 2.30%.
- The assumed rate of salary increase was reduced from 4.00% to 3.05%.
- Payroll growth assumption was reduced from 4.00% to 2.00%.
- The mortality table used for active members is RP-2000 Combined mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).

In 2018, the following changes were made to the discount rates:

• For the non-hazardous plan, the single discount rate changed from 5.84% to 5.85%

Discount Rate

The discount rate used to measure the total OPEB liability was 5.85% for the non-hazardous plan and 5.96% for the hazardous plan. The projection of cash flows used to determine the discount rate assumed that contributions from governmental entities will be made at contractually required rates, actuarially determined. Based on this assumption, the Plan's fiduciary net position was projected to be available to make all projected OPEB payments for current active and inactive employees. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

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

The following presents the proportionate share of the net OPEB liability calculated using the discount rates of 5.85% for the non-hazardous plan, as well as what the proportionate share of the net pension 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:

	Proportionate Share of Net OPEB Liability					
	1.00% Decrease Current Rate			1.00% Increase		
Discount rate, non-hazardous		4.85%		5.85%		6.85%
Net OPEB liability, non-hazardous	\$	1,214,466	\$	935,039	\$	697,018

Sensitivity of the District's Proportionate Share of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the proportionate share of the net OPEB liability, as well as what the 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 healthcare cost trend rates:

	Proportionate Share of Net OPEE					B Liability	
Healthcare cost trend rate	1.009	% Decrease	Cu	rrent Rate	1.00% Increase		
Net OPEB liability, non-hazardous	\$	696,146	\$	935,039	\$	1,216,625	

Plan Fiduciary Net Position

Both the Pension Plan and the Health Insurance Plan issue publicly available financial report that include financial statements and required supplementary information, and detailed information about each Plan's fiduciary net position. These reports may be obtained, in writing, from the County Employee Retirement System, 1260 Louisville Road, Perimeter Park West, Frankfort, Kentucky, 40601.

NOTE 8 - RELATED PARTY TRANSACTIONS

The District purchases water from the joint Boone-Florence Water Commission (Commission). Two of the District's board members also serve as commissioners on the Boone-Florence Water Commission. The Commission is the District's sole source of wholesale water. The Commission was created in a joint venture with the City of Florence, Kentucky to purchase water from the City of Cincinnati, Ohio. During 2018 and 2017, the District purchased \$9,583,211 and \$8,699,925, respectively. During 2018 and 2017, the District also provided

maintenance services to the Water Commission lines and towers, and was reimbursed \$71,906 and \$50,639 for those services during 2018 and 2017, respectively.

NOTE 9 – ECONOMIC DEPENDENCY/CREDIT RISK

Boone County Water District is a government agency operating with one office in Burlington, Kentucky. It grants credit to customers who are primarily local residents and businesses. The District receives all of its operating revenues from customers in Boone County, Kentucky.

NOTE 10 – PRIOR PERIOD ADJUSTMENT

The District has recorded an adjustment to the Beginning Net Position of (\$792,465) at December 31, 2018. This adjustment accounts for the estimated net OPEB liability at December 31, 2017 and is being recorded in accordance with Government Accounting Standards Board Statement No. 75.

NOTE 11 – SUBSEQUENT EVENTS

Management has considered subsequent events through May 24, 2019, which represents the date the financial statements were available to be issued. The District did not have any events subsequent to December 31, 2018 through May 24, 2019 to disclose.

BOONE COUNTY WATER DISTRICT MULTIPLE EMPLOYER, COST SHARING, DEFINED BENEFIT Last Ten Fiscal Years	R DISTRIC ST SHARING	T , DEFINED B		ISION PLAN-	PENSION PLAN-NON-HAZARDOUS	DOUS					
	2018	Schedule of 1	the District's County Empl 2016	Proportionate loyees' Retirer 2015	Schedule of the District's Proportionate Share of the Net Pension Liability County Employees' Retirement System (CERS) 2017 2016 2015 2014 2013 2012	Vet Pensior CERS) 2013	ו Liability 2012	2011	2010	2009	2008
Proportion of net pension liability	0.052670%	3%	0.049998%	0.051020%				1			
Proportionate share of the net pension liability (asset)	\$ 3,207,520	\$ 2,971,900	\$ 2,461,715	\$ 2,193,686							
Covered employee payroll in year of measurement	\$ 1,305,317	\$ 1,143,696	\$ 1,179,827	\$ 1,151,543							
Share of the net pension liability (asset) as a percentage of its covered employee payroll	245.73%	259.85%	208.65%	190.50%							
Plan fiduciary net position as a percentage of total pension liability	53.54%	53.30%	55.50%	59.97%							
$ \begin{array}{c} \mbox{Schedule of the District's Pension Fund Contributions} \\ \mbox{Contractually required contribution} & \begin{tabular}{c} 2018 & 2013 & 2013 & 2013 & 2013 & 2010 & 2009 & 2008 \\ \mbox{Contractually required contribution} & \begin{tabular}{c} 2018 & 2017 & 2016 & 2016 & 2013 & 2013 & 2011 & 2010 & 2009 & 2008 \\ \mbox{Contractually required contribution} & \begin{tabular}{c} 2018 & 2017 & 2014 & 2013 & 2011 & 2010 & 2009 & 2008 \\ \mbox{Contractually required contribution} & \begin{tabular}{c} 2018 & 2017 & 2014 & 2013 & 2012 & 2011 & 2010 & 2009 & 2008 \\ \mbox{Contractually required contribution} & \begin{tabular}{c} 2018 & 2014 & 2013 & 2012 & 2011 & 2010 & 2009 & 2008 \\ \mbox{Contractually required contribution} & \begin{tabular}{c} 2018 & 2014 & 2013 & 1013 & 2012 & 2011 & 2010 & 2009 & 2008 \\ \mbox{Contractually required contribution} & \begin{tabular}{c} 2018 & 2014 & 2013 & 2013 & 2013 & 2012 & 2011 & 2010 & 2009 & 2008 \\ \mbox{Contributions as a percentage of} & \begin{tabular}{c} 1,179,827 & $$1,151,543 & $$1,151,543 & $$1,151,543 & $$1,151,543 & $$1,154,543 & $$0xeed employee payrol & $$1,538 & $$1,143,666 & $$1,179,827 & $$1,151,543 & $$1,316 & $$1,316 & $$1,328 & $$1,316 & $$1,238,229 & $$1,143,666 & $$1,179,827 & $$1,316 & $	2018 \$ 205,408 (205,408) \$ (205,408) \$ 1,335,691 15.38% 15.38% cember 31, 201 het difference t	Sc 2017 \$ 179,614 (179,614) \$ 1,238,229 14.51% 14.51% s, is based on the set ween project interest on the set of contributed interest of contribute	thedule of the County Emp 2016 \$ 142,047 (142,047) \$ 1,143,696 \$ 1,143,696 \$ 1,143,696 \$ 1,143,696 \$ 2,1143,696 \$ 1,143,696 \$ 1,146,146 \$ 1,146,146 \$ 1,146,146\\\$ 1,146,146\\\$ 1,146,146\\\$ 1,166,146\\\$ 1,166,166\\\$	District's Pen loyees' Retire 2015 \$ 150,428 (150,428) \$ 1,179,827 \$ 1,179,827 \$ 1,179,827 \$ 1,179,827 \$ 1,179,827 \$ a tuarial valua arnings on plan i istrict's contribut	Schedule of the District's Pension Fund Contributions County Employees' Retirement System (CERS) County Employees' Retirement System (CERS) $\frac{1}{5}$ $\frac{3}{142,047}$ $\frac{2015}{5}$ $\frac{2014}{5}$ $\frac{2013}{2013}$ $\frac{2012}{2011}$ $\frac{2010}{2000}$ $\frac{200}{20}$ $\frac{20}{20}$ $\frac{1}{5}$ $\frac{3}{1,143,696}$ $\frac{3}{5}$ $\frac{1,151,543}{1,151,543}$ $\frac{1}{6}$ $\frac{1,2,42\%}{1,24\%}$ $\frac{1,2,75\%}{1,151,543}$ $\frac{1,3,74\%}{13,74\%}$ Notes to Required Supplementary Information for the Year Ended December 31, 2018 $\frac{1}{16}$ of the pension expense, i.e. the differences betwee cetted and actual earnings on plan investments, changes in assumptions, the changes in proportion and differences betwee butions, and the District's contributions subsequent to the measurement date are detailed in NOTE 7 in the Notes to the	(CERS) 2013 2013 2013 2013 2013 2013 2014 eler mges in assur t to the meas	2012 ments of the p mptions, the date	2011 Dension expe changes in pl	2010 anse, i.e. the c roportion and d in NOTE 7 ir	2009 differences be	2008 stween between

BOONE COUNTY WATER DISTRICT MULTIPLE EMPLOYER, COST SHARING, DEFINED BENEFIT OPEB PLAN-NON-HAZARDOUS Last Ten Fiscal Years	ER DISTRIC	, DEFINED	BENEFIT OPEB	PLAN-NO	N-HAZARDO	SU					
	2018	Schedule 2017	Schedule of the District's Proportionate Share of the Net OPEB Liability County Employees' Retirement System (CERS) 2017 2016 2015 2014 2013 2012	roportionati /ees' Retirer 2015	e Share of the ment System 2014	e Net OPEB I (CERS) 2013	_iability 2012	2011	2010	2009	2008
Proportion of net pension liability Proportionate share of the net pension liability (asset)	0.052660% \$ 935,039										
Covered employee payroll in year of measurement Share of the part pension liability	\$1,305,317										
covered employee payroll	71.63%										
Plan fiduciary net position as a percentage of total pension liability	57.62%										
	2018	2017	Schedule of the District's OPEB Fund Contributions County Employees' Retirement System (CERS) 2016 2015 2014 2013	District's OP /ees' Retirer 2015	EB Fund Con ment System 2014	tributions (CERS) 2013	2012	2011	2010	2009	2008
Contractually required contribution Actual contribution	\$ 66,640 (66,640)	\$ 61,453 (61,453)	5								
Contribution deficiency (excess) Covered employee payroll	\$ \$ 1,335,691	\$ \$1,238,229	11								
Contributions as a percentage of covered employee payroll	4.99%	4.96%	0,								
			Notes to Required Supplementary Information for the Year Ended December 31, 2018	iired Supple ar Ended De	es to Required Supplementary Information the Year Ended December 31, 2018	mation 018			1		
The net OPEB liability as of December 31, 2018, is based on the June 30, 2018, actuarial valuation. The changes to the elements of the pension expense, i.e. the differences between expected and actual experience, net difference between projected and actual earnings on plan investments, changes in assumptions, the changes in proportion and differences between the District's contributions and proportionate share of contributions, and the District's contributions subsequent to the measurement date are detailed in NOTE 7 in the Notes to the Financial Statements.	mber 31, 2018, i net difference t roportionate shi	s based on th etween proj are of contrik	ne June 30, 2018, actu ected and actual earr putions, and the Distr	uarial valuatio Nings on plan i Ict's contribut	n. The changes nvestments, ch cions subsequer	to the elemer anges in assun It to the meas	its of the per iptions, the irement date	ision expensi changes in pr e are detailec	e, i.e. the dif oportion and d in NOTE 7 i	ferences betw J differences l n the Notes to	een letween the
	a ha a tanan a manana matana kata matana kata a tanan kata kata matana kata kata matana kata a tanang	Exercise of the second s	and the second provide state of the second se	And and a second se	And and the first of the second s	g ann a star agus a angu ang					······································



Charles A. Van Gorder, CPA Lori A. Owen, CPA John R. Chamberlin, CPA, MBA Members of AICPA & KyCPA Licensed in Kentucky & Ohio

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 Commissioners Boone County Water District

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 business-type activities of Boone County Water District as of and for the years ended December 31, 2018 and 2017, and the related notes to the financial statements which collectively comprise Boone County Water District's basic financial statements and have issued our report thereon dated May 24, 2019.

Internal Control over Financial Reporting

In planning and performing our audits of the financial statements, we considered Boone County Water District'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 opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Boone County Water District's internal control. Accordingly, we do not express an opinion on the effectiveness of Boone County Water District'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 combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. 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. We did not identify deficiencies in internal control that we consider to be significant deficiencies.



Compliance and Other Matters

As part of obtaining reasonable assurance about whether Boone County Water District's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audits, 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.

an Horder, Walker + Co. Inc.

Van Gorder, Walker & Co., Inc. Erlanger, Kentucky May 24, 2019