BARKLEY LAKE WATER DISTRICT

FINANCIAL AUDIT

December 31, 2018

BARKLEY LAKE WATER DISTRICT
PO BOX 308
CADIZ, KY 42211

FINANCIAL AUDIT

DECEMBER 31, 2018

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INDEPENDENT AUDITOR'S REPORT

To the Board of Commissioners
Barkley Lake Water District
PO Box 308
Cadiz, Kentucky 42211

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of Barkley Lake Water District, as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise the 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 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 opinions.

Opinion

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

Change in Accounting Principle

As discussed in Note 14 to the financial statements, for calendar year ended December 31, 2018, the District adopted new accounting guidance, GASB Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions." Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis information on pages 3 through 8, as well as the Schedule of Proportionate Share of Net Pension Liability, Schedule of Required Contributions - Pension, Schedule of Proportionate Share of Net Other Post-Employment Benefits, Schedule of Required Contributions - Other Post-Employment Benefits, and Notes to the Required Supplementary Information on pages 28 through 35, 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 June 28, 2019, on our consideration of Barkley Lake 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 Barkley Lake Water District's internal control over financial reporting and compliance.

Calhoun & Company

Hopkinsville, Kentucky
June 28, 2019

BARKLEY LAKE WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE YEAR ENDED DECEMBER 31, 2018

The Management's Discussion and Analysis of the Barkley Lake Water District (District) provides a narrative overview and analysis of the District's financial statements and the activities of the District for the year ended December 31, 2018. Readers are encouraged to consider the information presented here in conjunction with additional information found within the body of the accompanying financial statements.

Financial Highlights

- The District's 2018 operating revenues of $2,466,087 decreased 4.02% from 2017, while 2018 operating expenses of $2,707,528 decreased 1.48% over 2017.

- The District's net position, a measure of current financial resources, decreased by $361,208, resulting in a December 31, 2018 balance of $6,359,528.

- The District's unrestricted cash available for operating expenses was $1,858,159 at December 31, 2018.

- The District's investment in utility plant, net of depreciation, including the construction in progress, was $14,639,260 at December 31, 2018.

Overview of Financial Statements

Barkley Lake Water District is a self-reporting proprietary fund. The District's basic financial statements include a statement of net position, statement of revenues, expenses and changes in fund net position, statement of cash flows and notes to the financial statements. The District does not include financial information of any other entity, nor is it included in the financial information of any other entity.

The District's financial statements are prepared on the accrual basis of accounting in accordance with generally accepted accounting principles promulgated by the Governmental Accounting Standards Board (GASB).

Statement of Net Position
The statement of net position presents the financial position of the District. It represents information on the District's assets, deferred outflows of resources, liabilities, and deferred inflows of resources with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the District is improving or deteriorating.

Statement of Revenues, Expenses and Changes in Fund Net Position
The statement of revenues, expenses and changes in fund net position presents information showing how the District's net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Revenues are recognized when they are earned, not when they are received. Expenses are recognized when incurred, not when they are paid. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods.

Statement of Cash Flows
The statement of cash flows presents information on the effects changes in assets and liabilities have on cash during the course of the fiscal year.

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

Overview of the District's Financial Position and Results of Operations

Net position may serve over time as a useful indicator of the District's financial position. In the case of the District, assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $6,359,528 at December 31, 2018.

The largest portion of the District's net position reflects its net investment in capital assets of $4,307,932 (e.g. water tanks, land and improvements, buildings and improvements, equipment and distribution systems) less any related debt used to acquire those assets that are still outstanding. The District uses these capital assets to provide services to its customers; consequently, these assets are not available for future spending. Although the District's investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the assets themselves cannot be liquidated to service these liabilities.

The District's restricted net position totaled $1,831,128 at December 31, 2018 and consisted of cash restricted for debt service and construction.

Unrestricted net position totaled $220,468 at December 31, 2018.

The District's financial position is the product of several financial transactions including the net results of activities, the acquisition and payment of debt, the acquisition and disposal of capital assets and the depreciation of capital assets. The District's overall financial position and operations for the year ended December 31, 2018 as compared to December 31, 2017 are as follows:

Net Position

	2018	2017
Assets		
Current Assets	$ 4,560,693	$ 3,903,677
Capital Assets	14,639,260	15,166,523
Noncurrent Assets	525	575,036
Total Assets	19,200,478	19,645,236
Deferred Outflows of Resources		
Deferred Loss on Refunding Bonds	10,685	12,476
Deferred Outflow - Pension	353,069	510,337
Deferred Outflow - Other Post-Employment Benefits	158,196	-
Total Deferred Outflows of Resources	521,950	522,813
Liabilities		
Current Liabilities	517,612	474,908
Long-term Liabilities	12,688,767	12,249,081
Total Liabilities	13,206,379	12,723,989
Deferred Inflows of Resources		
Deferred Inflow - Pension	57,856	205,368
Deferred Inflow - Other Post-Employment Benefits	98,665	-
Total Deferred Inflows of Resources	156,521	205,368
Net Position		
Net Investment in Capital Assets	4,307,932	4,546,268
Restricted - Expendable	1,831,128	1,721,343
Unrestricted	220,468	971,081
Total Net Position	$ 6,359,528	$ 7,238,692

Change in Net Position

	2018	2017
Revenues		
Operating Revenues	$ 2,466,087	$ 2,569,292
Non-Operating Revenues	39,766	27,916
Capital Contributions	155,745	92,601
Total Revenues	2,661,598	2,689,809
Expenses		
Operating Expenses	2,707,528	2,657,766
Non-Operating Expenses	404,269	388,643
Total Expenses	3,111,797	3,046,409
Change in Net Position	(450,199)	(356,600)
Net Position, Beginning of Year, as Restated	6,809,727	7,595,289
Adjustments	-	3
Net Position, Ending of Year	$ 6,359,528	$ 7,238,692

Capital Assets

The District's investment in capital assets, net of depreciation as of December 31, 2018 was as follows:

	Balance January 1, 2018	Additions (Eliminations)	Balance December 31, 2018
Nondepreciable Assets			
Land	$ 117,522	$ 10,825	$ 128,347
Construction in Progress	386,920	130,010	516,930
Total Nondepreciable Assets	504,442	140,835	645,277
Depreciable Assets			
Buildings	10,491,477	-	10,491,477
Pumping Equipment	21,434	-	21,434
Transmission Lines	12,559,039	(1)	12,559,038
Meters	1,814,161	55,125	1,869,286
Plant Equipment	581,075	-	581,075
Office Equipment	120,167	-	120,167
Vehicles	317,266	4,950	322,216
Total Depreciable Assets	25,904,619	60,074	25,964,693
Accumulated Depreciation	(11,242,538)	(728,172)	(11,970,710)
Net Depreciable Assets	14,662,081	(668,098)	13,993,983
Net Capital Assets	$ 15,166,523	$ (527,263)	$ 14,639,260

During the year ended December 31, 2018, the District continued work on the Highway 68/80 relocation project and an additional $130,010 was charged to construction in progress. Total construction in progress at year end was $516,930. Depreciation expense for the year was $728,172.

BARKLEY LAKE WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2018

Long-Term Debt

Debt activity for the year ended December 31, 2018 was as follows:

	Balance January 1, 2018	Additions (Payments)	Balance December 31, 2018	Current Maturities
Bond Series 2005	$ 1,011,000	$ (20,500)	$ 990,500	$ 21,000
Bond Series 2008C	2,160,000	(120,000)	2,040,000	130,000
Bond Series 2010A	3,809,500	(53,000)	3,756,500	55,500
Bond Series 2010B	1,683,485	(28,500)	1,654,985	30,000
Bond Series 2012E	1,145,000	(55,000)	1,090,000	55,000
Bond Series 2014	812,500	(13,000)	799,500	13,500
Premium on Bond 2012E	11,246	(718)	10,528	718
	10,632,731	(290,718)	10,342,013	305,718
Compensated Absences	20,828	(1,873)	18,955	-
Customer Deposits	318,139	10,800	328,939	-
Net Pension Liability	1,568,101	216,297	1,784,398	-
Net OPEB Liability	-	520,180	520,180	-
	$ 12,539,799	$ 454,686	$ 12,994,485	$ 305,718

Interest expense of $404,269 was paid during the year ended December 31, 2018.

Request for Information

This financial report is designed to provide a general overview of the Barkley Lake Water District's finances for all those with an interest in the government's finances. Questions or requests for additional information may be addressed to Scott Bridges, Chairman, Barkley Lake Water District, P.O. Box 308, Cadiz, Kentucky 42211.

BARKLEY LAKE WATER DISTRICT
STATEMENT OF NET POSITION - PROPRIETARY FUND
DECEMBER 31, 2018

Assets	
Current Assets	
Cash and Cash Equivalents	$ 1,858,159
Accounts Receivable	346,976
Other Receivables	8,883
Inventory	160,810
Prepaid Expenses	25,798
Restricted Cash	2,160,067
Total Current Assets	4,560,693
Noncurrent Assets	
Capital Assets	
Depreciable Capital Assets, Net of Depreciation	13,993,983
Non-depreciable Capital Assets	645,277
Total Capital Assets	14,639,260
Other Assets	
Utility Deposit	525
Total Other Assets	525
Total Noncurrent Assets	14,639,785
Total Assets	19,200,478
Deferred Outflows of Resources	
Deferred Loss on Refunding Bonds	10,685
Deferred Outflows - Pension	353,069
Deferred Outflows - Other-Post Employment Benefits	158,196
Total Deferred Outflows of Resources	521,950

Liabilities

Current Liabilities

Accounts Payable	40,858
Payroll Liabilities	26,465
Accrued Expenses:	
Taxes	5,620
Interest	138,951
Current Maturities of Long-Term Debt	305,718
Total Current Liabilities	517,612

Noncurrent Liabilities

Compensated Absence	18,955
Customers' Deposits	328,939
Bonds Payable	10,036,295
Net Pension Liability	1,784,398
Net Other Post-Employment Benefits Liability	520,180
Total Noncurrent Liabilities	12,688,767
Total Liabilities	13,206,379

Deferred Inflows of Resources

Deferred Inflows - Pension	57,856
Deferred Inflows - Other Post-Employment Benefits	98,665
Total Deferred Inflows of Resources	156,521

Net Position

Net Investment in Capital Assets	4,307,932
Restricted Net Position	1,831,128
Unrestricted Net Position	220,468
Total Net Position	$ 6,359,528

BARKLEY LAKE WATER DISTRICT
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION - PROPRIETARY FUND
FOR THE YEAR ENDED DECEMBER 31, 2018

Operating Revenues	
Charges for Services	$ 2,437,926
Miscellaneous Revenue	28,161
Total Operating Revenues	2,466,087
Operating Expenses	
Salaries, Wages and Benefits	1,283,012
Purchased Power	186,741
Chemicals	124,176
Materials and Supplies	162,231
Contract Services	65,633
Transportation Expense	40,056
Insurance	41,090
Miscellaneous	18,248
Taxes	58,167
Depreciation and Amortization	728,174
Total Operating Expenses	2,707,528
Operating Income (Loss)	(241,441)
Non-Operating Revenues (Expenses)	
Interest Revenue	13,236
Federal Interest Subsidy	16,530
Donated Property	10,000
Interest Expense	(404,269)
Total Non-Operating Revenues (Expenses)	(364,503)
Capital Contributions	
Contributed Capital	155,745
Total Capital Contributions	155,745
Change in Net Position	(450,199)
Net Position, Beginning of Year, As Restated	6,809,727
Net Position, End of Year	$ 6,359,528

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

BARKLEY LAKE WATER DISTRICT
STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2018

Cash Flows from Operating Activities	
Received from Customers	$ 2,512,822
Paid to Suppliers for Goods and Services	(621,078)
Paid to Employees	(1,025,362)
Net Cash Provided (Used) by Operating Activities	866,382
Cash Flows from Capital and Related Financing Activities	
Acquisition and Construction of Property, Plant and Equipment	(190,910)
Proceeds from Capital Grants	152,210
Proceeds from Federal Interest Subsidy	16,530
Principal Paid on Long-Term Debt	(290,718)
Interest Paid on Debt	(369,617)
Net Cash Provided (Used) by Capital and Related Financing Activities	(682,505)
Cash Flows from Investing Activities	
Interest Income	13,236
Net Cash Provided (Used) by Investing Activities	13,236
Net Increase (Decrease) in Cash	197,113
Cash and Cash Equivalents, Beginning of Year	3,821,113
Cash and Cash Equivalents, End of Year	$ 4,018,226

BARKLEY LAKE WATER DISTRICT
STATEMENT OF CASH FLOWS , CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2018

Reconciliation of Operating Activities to Net Cash Flows from Operating Activities

Cash Flows from Operating Activities

Operating Income (Loss)	$ (241,441)
Adjustments - Operating Activities	
Depreciation and Amortization	728,174
Bad Debt	2,484
Pension Contributions	257,717
(Increase) Decrease in	
Accounts Receivable	33,865
Other Receivable	63,271
Inventory	22,716
Prepaid Insurance	(1,709)
Increase (Decrease) in	
Accounts Payable	(5,829)
Accrued Taxes	(414)
Payroll Liabilities	1,806
Compensated Absence	(1,873)
Tenant Deposits Payable	10,800
Net Cash Provided (Used) by Operating Activities	$ 866,382

Non-Cash Activities

Capital and Related Financing Activities	
Land Donated to Barkley Lake Water District	$ 10,000
Total Capital and Related Financing Activities	$ 10,000
Investing Activities	$ -

BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2018

1. Summary of Significant Accounting Policies

a. Activity

The Barkley Lake Water District is a county water district supported by funds derived from the sale of water and is operated by a District Board. The District is authorized under Kentucky Revised Statutes and constitutes a governmental subdivision of the Commonwealth of Kentucky. The District is located in Cadiz, Kentucky and primarily serves the Trigg County, Kentucky area.

b. Principles Determining Scope of Reporting Entity

The District's financial report includes only the funds of the District. The District has no oversight responsibility for any other governmental entity and is not included in any other governmental "reporting entity" as defined by the Governmental Accounting Standards Board pronouncement. The District's Board members are appointed by the County Judge Executive, a publicly elected official, and they have decision making authority, the authority to set rates, the power to designate management, the ability to significantly influence operations, and primary accountability for fiscal matters.

c. Basis of Accounting

The District is presented as an enterprise fund. The financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recognized when the liability is incurred, or economic asset used. Revenues, expenses, gains, losses, assets, deferred outflows of resources, liabilities, and deferred inflows of resources resulting from exchange and exchange-like transactions are recognized when the exchange takes place. Grants and similar items are recognized as soon as all eligibility requirements imposed by the provider have been met.

The District follows all pronouncements of the Government Accounting Standards Board and has elected to follow Financial Accounting Standards Board pronouncements issued after November 30, 1989 which do not conflict with GASB pronouncements.

Enterprise funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with an enterprise fund's principal ongoing operations. The principal operating revenues of the District are charges to customers for water services. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

d. Revenue Recognition

Operating revenues are recognized in the period that water is supplied to participants and others. All other revenues are reflected in non-operating income when earned.

BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2018

1. Summary of Significant Accounting Policies, Continued

e. Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The estimated revenues from unbilled receivables at year-end are reflected in these financial statements

f. Taxes on Income

The Barkley Lake Water District is exempt from paying income taxes under Section 115 of the Internal Revenue Code.

g. Cash and Cash Equivalents

For purposes of the statement of cash flows, the District considers all highly liquid investments with an original maturity of twelve months or less when purchased to be cash equivalents. Unrestricted and restricted cash are reflected in total cash and cash equivalents.

h. Accounts Receivable

The direct write-off method was used for recording uncollectible accounts. No allowance for uncollectible accounts was deemed necessary. The District grants credit to customers, substantially all of who are residents of Trigg County. The balance of accounts receivable at December 31, 2018 was $346,976.

i. Inventory

Inventories consist of materials and supplies and are stated at cost which is determined by the first-in, first-out method. Inventory at December 31, 2018 totaled $160,810.

j. Capital Assets

The utility plant is carried at cost. The District maintains a capitalization threshold of $7,500. Depreciation is computed using the straight-line method. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts, and any resulting gain or loss is recognized in net operating income during that period. The cost of maintenance and repairs is charged to expense as incurred; significant betterments are capitalized. Contributions from customers for the purpose of purchasing service connections to the utility plant are recorded as contributions when they are received. Depreciation on contributed assets is recorded as an expense in the statement of revenues, expenses and changes in fund net position – proprietary fund.

BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2018

1. Summary of Significant Accounting Policies, Continued

j. Capital Assets, Continued

Capital assets are depreciated over the following useful lives:

Buildings	10 - 50 Years	Pumping Equipment	5 - 10 Years
Transmission Lines	5 - 50 Years	Meters	5 - 10 Years
Plant Equipment	5 - 10 Years	Office Equipment	5 - 10 Years
Vehicles	5 Years		

k. Use of Restricted / Unrestricted Resources

When an expense is incurred for purposes for which both restricted and unrestricted resources are available, the District's policy is to apply restricted resources first.

l. Deferred Outflows / Inflows of Resources

In addition to assets, the statement of financial position includes a separate section for deferred outflows of resources. This separate financial statement element, *deferred outflows of resources*, represents a consumption of net position that applies to a future period(s), and therefore will not be recognized as an outflow of resources (expense/expenditure) until then. The District has two items that qualify for reporting in this category. The deferred loss on refunding bonds of $10,685 represents the difference between the reacquisition price and the net carrying amount of the old debt on the 2008 and 2012E refunding. It will be recognized as a component of interest expense over the remaining life of the new debt. Additionally, the District has deferred outflows of resources of $353,069 for the year ended December 31, 2018 that relate to pensions as required by GASB Statement No. 68. As of December 31, 2018, the District has $158,196 in deferred outflows of resources that relate to other post-employment benefits as required by GASB Statement No. 75.

In addition to liabilities, the statement of financial position includes a separate section for *deferred inflows of resources*. This separate financial element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s), and therefore will not be recognized as an inflow of resources (revenue) until that time. The District has deferred inflows of resources of $57,856 for the year ended December 31, 2018 that relate to pensions as required by GASB Statement No. 68. As of December 31, 2018, the District has $98,665 in deferred inflows of resources that relate to other post-employment benefits as required by GASB Statement No. 75.

m. Compensated Absences

Sick leave is accumulated and will be paid to employees retiring on good terms from the District. Sick leave is forfeitable for employees terminating other than by retirement. Due to the uncertainty involved, no provision for unpaid sick leave has been reflected in the financial statements.

In accordance with the District's policy on vacation pay, the District has accrued a liability for pay, which has been earned but not taken by employees. The District is currently liable for compensated absences of $18,955 at December 31, 2018.

1. Summary of Significant Accounting Policies, Continued

n. Pension and Other Post-Employment Benefits (OPEB)

For purposes of measuring the net liability related to pension and other post-employment benefits, deferred outflows of resources and deferred inflows of resources related to pension and other post-employment benefits, and pension and other post-employment benefits expenses, information about the fiduciary net position of the County Employees Retirement System (CERS) Non-Hazardous and additions to / deductions from CERS's fiduciary net position have been determined on the same basis as they are reported by CERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

o. Proprietary Fund Net Position

Proprietary fund net position represents the difference between assets and deferred outflows of resources, and liabilities and deferred inflows of resources. Net position is displayed in three components:

Net Investment in Capital Assets – consists of capital assets net of accumulated depreciation and is reduced by any outstanding debt that was used to finance those assets plus deferred outflows of resources less deferred inflows of resources related to those assets.

Restricted Net Position – consists of net assets with constraints placed on the use by either external groups such as creditors, grantors, contributors, or laws or regulations of other governments; or by state enabling legislation.

Unrestricted Net Position – consists of all other net assets that do not meet the definition of "restricted" or "net investment in capital assets".

p. Non-Exchange Transactions

Non-exchange transactions, in which the District receives value without directly giving equal value in return, include grants and donations. Revenue from grants and donations are recognized in the fiscal year in which all eligibility requirements have been satisfied. Eligibility requirements include timing requirements, which specify the year when the resources are required to be used or the year when use is first permitted, and, matching requirements, in which the District must provide local resources to be used for a specific purpose, and expenditure requirements, in which the resources are provided to the District on a reimbursement basis. On a modified accrual basis, revenue from non-exchange transactions must be available before it can be recognized.

q. Fair Value of Financial Instruments

FASB ASC 820, *Fair Value Measurement and Disclosures* defines fair value as the price that would be received upon sale of an asset or paid upon transfer of a liability in an orderly transaction between market participants at the measurement date and the principal or most advantageous market for that asset or liability. The fair value should be calculated based on assumptions that market participants would use on pricing the asset or liability, not on assumptions specific to the entity.

1. Summary of Significant Accounting Policies, Continued

q. Fair Value of Financial Instruments, Continued

Cash and cash equivalents, accounts receivable, prepaid expenses, accounts payable, payroll liabilities, and accrued expenses - The carrying amounts reported in the balance sheets for these items are a reasonable estimate of the fair value.

Bonds Payable and Customers' Deposits – The carrying amount approximates fair value.

r. Date of Management's Review

In preparing the financial statements, management has evaluated events and transactions for potential recognition or disclosure through June 28, 2019, the date the financial statements were available to be issued.

2. Bank Accounts

a. Unrestricted Cash

Current revenues are deposited daily in the Revenue Fund, which earns interest at the passbook rate. Disbursements from this fund are made into the following funds as required by the bond covenants and are more fully described in subsequent paragraphs and notes:

(1) Operation and Maintenance Fund
(2) Bond Sinking Fund and Reserve – Restricted Cash
(3) Depreciation Fund – Restricted Cash

On or before the twentieth day of each month, there is to be withdrawn from the Revenue Fund and deposited to the Operation and Maintenance Fund, an amount sufficient to pay the current expenses of operating and maintaining the plant pursuant to the annual budget. This fund is reported on the balance sheet as cash for general use.

b. Restricted Cash

Customers deposits are maintained in a separate account as described in Note 3.

The requirement to maintain separate and special bank accounts was established by the historical bond issues as well as the Bond Series of 2005, 2008, 2010A, 2010B, 2012E and 2014. The bond covenants require additional sums to be deposited in the Bond Sinking Fund and Depreciation Fund as described in Notes 4 and 5.

Construction accounts related to current expansion have been established to account for project funding as described in Note 6.

3. Customers' Deposits Fund

A separate fund has been established by the District and is to be maintained as long as a liability exists to customers for meter deposits held by the District.

3. Customers' Deposits Fund, Continued

As of December 31, 2018, the composition of the customer deposit fund is as follows:

Cash in Bank - Checking	$	336,105
Certificates of Deposit		56,055
Total Customers' Deposit	$	392,160

As of December 31, 2018, the District's liability for customers' deposit was:

Meter Deposits	$	329,597
Interest Payable		2,837
Final Bill Payables		(3,495)
Total Customers' Deposit Liability	$	328,939

4. Bond Sinking Fund and Sinking Fund Reserve

The bond ordinance of 1969 established this fund solely for the purpose of paying the principal and interest on all bonds. The ordinance requires that the monthly amount deposited equals one-sixth of the next succeeding interest installment, one-twelfth of the principal of all bonds maturing on the next November 1st to a maximum of $477,803.

The composition of the Bond Sinking and Reserve Funds is as follows:

Cash in Bank - Sinking Fund	$	17,447
Cash in Bank - System Refunding		177,260
Cash in Bank - Sinking Fund		117,654
Cash in Bank - Regions Refunding		65,269
Cash in Bank - Regions Refunding		51,408
Certificate of Deposit - Sinking Fund		99,646
Total Bond Sinking and Reserve Funds	$	528,684

5. Depreciation Fund

This fund was established by the bond ordinance of 1969. The ordinance requires Barkley Lake Water District to make monthly contributions to this fund after observing the priority of deposits into the Water System Bond and Interest Sinking Fund (Bond Sinking Fund and Reserve). The following bond ordinances require monthly deposits until a maximum amount is accumulated:

Issue	Monthly Deposit	Maximum Requirement
2005	$ 540	$ 64,800
2008C	-	-
2010A	1,755	210,600
2010B	755	90,600
2012E	-	-
2014	295	35,400

The maximum required level of funding all bond resolutions is $401,400. The Water System Revenue Bonds, Series 2008C and 2012E require the maintaining of a Depreciation Fund but do not modify the method or level of funding. As of December 31, 2018, the depreciation cash and certificates of deposit totaled $1,097,545.

As further security for the bond owners and for the benefit of the District, in addition to the monthly transfers required to be made there shall be deposited all proceeds of connection fees collected from potential customers to aid in the financing of the cost of future extensions, additions and improvements to the District, plus the proceeds of any property damage insurance (not otherwise used to replace damaged or destroyed property); and any such amounts or proceeds so deposited shall be used solely and only for the purposes intended. The funds in the Depreciation fund can be expended for the purpose of paying the cost of unusual or extraordinary maintenance, repairs, renewals or replacements, and the cost of construction additions and improvements to the system.

6. Construction Funds

Expansion projects currently in construction are funded through the construction account with a December 31, 2018 year-end balance of $141,678. Initial funding was obtained through the 2008 bond issue.

7. Deposits and Investments

State statutes require that all deposits in financial institutions be fully collateralized by U.S. Government obligations or its agencies and instrumentalities or direct obligations of Kentucky or its agencies and instrumentalities that have a market value of not less than the principal amount of deposits. The District's deposits, including certificates of deposit, were insured or collateralized as required by State statutes at their highest daily balance during the year.

Custodial credit risk is defined as the risk that a government will not be able to recover its deposits, investments, or collateral from the bank in the event of bank failure. The District does not have a policy addressing custodial credit risk.

7. Deposits and Investments, Continued

The District is exposed to custodial credit risk at various points throughout the year. The District's deposits not covered by depository insurance are collateralized by pledged securities held by the financial institution.

During the year ended December 31, 2018, the District held balances at two financial institutions. The highest cash day for one institution consisted of a bank balance totaling $4,001,180. That balance was covered by $500,000 Federal Deposit Insurance and the remainder by pledged securities of $4,717,287. The deposits were fully collateralized during the fiscal year ended December 31, 2018.

The second institution had a highest cash day balance of $234,331. That balance was covered by $250,000 Federal Deposit Insurance. Additionally, the funds in excess of $250,000 are secured by perfected liens on the Bank's securities in an amount not less than 105% of the total excess deposits. During the fiscal year ended December 31, 2018, the deposits were fully collateralized.

8. Capital Assets

Capital asset activity for the year ended December 31, 2018:

	Balance January 1, 2018	Additions	Eliminations	Balance December 31, 2018
Depreciable Assets				
Buildings - Water Plant	$ 10,474,079	$ -	$ -	$ 10,474,079
Buildings - General Plant	17,398	-	-	17,398
Pumping Equipment	21,434	-	-	21,434
Transmission Lines	12,559,039	-	1	12,559,038
Meters	1,814,161	55,125	-	1,869,286
Plant Equipment	581,075	-	-	581,075
Office Equipment	120,167	-	-	120,167
Vehicles	317,266	4,950	-	322,216
Total Depreciable Assets	25,904,619	60,075	1	25,964,693
Accumulated Depreciation				
Buildings - Water Plant	3,776,830	250,442	-	4,027,272
Buildings - General Plant	3,304	1,456	-	4,760
Pumping Equipment	21,434	-	-	21,434
Transmission Lines	5,121,086	363,596	-	5,484,682
Meters	1,564,073	54,288	-	1,618,361
Plant Equipment	407,887	28,540	-	436,427
Office Equipment	114,206	3,786	-	117,992
Vehicles	233,718	26,064	-	259,782
Total Accumulated Depreciation	11,242,538	728,172	-	11,970,710
Net Depreciable Assets	14,662,081	(668,097)	1	13,993,983
Non-Depreciable Assets				
Land	117,522	10,825	-	128,347
Construction in Progress	386,920	130,010	-	516,930
Total Non-Depreciable Assets	504,442	140,835	-	645,277
Net Capital Assets	$ 15,166,523	$ (527,262)	$ 1	$ 14,639,260

Depreciation charged to expense was $728,172 at December 31, 2018.

9. Interest Expense

The District incurred interest costs in 2018 of $404,269. The entire amount has been recognized as a current non-operating expense.

10. Long-Term Debt

The original amount of each bond issue, the bond issue dates, interest rates, and maturity dates are summarized below:

Issue	Original Amount	Interest Rates	Maturity Date
2005	$ 1,185,000	4.000% - 6.000%	2044
2008C	3,060,000	2.350% - 4.550%	2037
2010A	4,002,000	3.375%	2051
2010B	1,837,000	3.000%	2049
2012E	1,465,000	2.200% - 3.550%	2033
2014	825,000	2.750%	2055

Changes in the long-term liability accounts during the year are summarized below:

	Balance January 1, 2018	Proceeds	Repayments	Balance December 31, 2018	Current Amount Due
Revenue Bonds 2005	$ 1,011,000	$ -	$ 20,500	$ 990,500	$ 21,000
Revenue Bonds 2008C	2,160,000	-	120,000	2,040,000	130,000
Revenue Bonds 2010A	3,809,500	-	53,000	3,756,500	55,500
Revenue Bonds 2010B	1,683,485	-	28,500	1,654,985	30,000
Revenue Bonds 2012E	1,145,000	-	55,000	1,090,000	55,000
Revenue Bonds 2014	812,500	-	13,000	799,500	13,500
Premium on Bond 2012E	11,246	-	718	10,528	718
Total Bond Obligation	10,632,731	-	290,718	10,342,013	305,718
Compensated Absences	20,828	-	1,873	18,955	-
Customer Deposits	318,139	69,485	58,685	328,939	-
Net Pension Liability	1,568,101	216,297	-	1,784,398	-
Net OPEB	-	520,180	-	520,180	-
	$ 12,539,799	$ 805,962	$ 351,276	$ 12,994,485	$ 305,718

10. Long-Term Debt, Continued

The bonds may be called prior to maturity and redemption premiums are specified in each issue. Assuming no bonds are called prior to scheduled maturity, the minimum obligations of the District at December 31, 2018 for debt service (principal and interest) are as follows:

Maturity	Principal	Interest	Total
2019	$ 305,000	$ 365,271	$ 670,271
2020	318,500	354,055	672,555
2021	324,000	342,447	666,447
2022	339,000	330,359	669,359
2023	354,500	317,700	672,200
2024-2028	1,862,000	1,378,974	3,240,974
2029-2033	1,698,500	1,065,441	2,763,941
2034-2038	1,454,000	764,558	2,218,558
2039-2043	1,395,000	521,611	1,916,611
2044-2048	1,419,000	272,310	1,691,310
2049-2053	827,985	54,933	882,918
2054-2058	34,000	-	34,000
	$ 10,331,485	$ 5,767,659	$ 16,099,144

By a resolution of the Commission on August 26, 2014, the District authorized an $825,000 Bond Anticipation note through Kentucky Rural Water Finance Corporation, Interim Finance Program. The Interim financing was for the Cerulean Area Water System Improvements and was secured through a bond issuance in 2015. The District issued $825,000 of revenue bonds (Series 2014). These bonds carry an interest rate of 2.75% and mature between January 1, 2015 and January 1, 2035.

The District issued $4,002,000 of revenue bonds (Series 2010A) for the purpose of financing construction projects. The bonds carry an interest rate of 3.375% and mature between November 1, 2014 and November 1, 2051.

The District completed a current refunding of the 1976 and 1993 bond issues, dated August 29, 2012. The par amount of the 2012E refunding issue is $1,465,000 and it has a total debt service requirement of $2,031,446. The combined remaining total debt service requirement of the 1976 and 1993 bond issues at the date of refunding was $2,271,305, which produces a cash flow savings of $197,120. The net present value of the economic gain on the combined refunding of 1976 and 1993 bond issues is $185,180.

The District issued the Series 2010B bonds through the Build America Bond Program that provides 35% in federal subsidies on the total interest requirements. The interest is paid directly to the District's bond escrow account on a semi-annual basis corresponding with the interest payment dates to the bond holders. Total subsidy payments received at December 31, 2018 were $16,530.

All the Revenue Bonds are payable solely from, and secured by, a first pledge of the water revenues. So long as any of the bonds are outstanding and unpaid, the District shall continuously be maintained and operated in good condition. Rates and charges for services rendered will be imposed and collected so that gross revenues will be sufficient at all times, to provide for the payment of the

10. Long-Term Debt, Continued

operation and maintenance of the water plant, and to maintain the Depreciation and Sinking Funds described in Notes 4 and 5.

If there is any default in the payment of the principal or interest on any of the outstanding bonds, and suit is filed by a holder of said bond, any court having jurisdiction may appoint a receiver to administer the District with the power to charge and collect rates. These collected rates shall be sufficient to provide for the payment of the outstanding bonds, and the operating and maintenance expenses. The income and revenues shall be in conformity with the bond resolution, and the provisions of the applicable laws of Kentucky.

The plant may be sold, or otherwise disposed of only as a whole or substantially as a whole and then only if the proceeds to be realized therefore, together with any monies in the Sinking Fund are sufficient fully to redeem at the then current redemption prices all outstanding bonds and other obligations payable from the net revenues of the District. The bond covenants require that the rates for all utility services rendered by the District must be reasonable.

The District must maintain adequate public liability insurance including fire, windstorm, and hazards covered by a standard extended coverage policy. The net revenues of the District will be equal to 120% of the maximum annual principal, interest and Sinking Fund requirements of all outstanding bonds. Net revenues are defined to be gross revenues less current expenses of the system. Current expenses include all reasonable and necessary costs of operating, repairing, maintaining, and insuring the System, but shall exclude any allowance for depreciation, payments into the Depreciation Fund for extensions, improvements and extraordinary repairs and maintenance, and payments into the Bond Fund and the Debt Service Reserve. The bond covenant also requires the District be audited within 150 days of year-end. The requirements that the District maintain a 1.20 times debt coverage ratio was met for the year ended December 31, 2018. The requirement that the District be audited within 150 days of year-end was not met, however an extension was approved for the additional time needed.

11. Employee Benefits

General Information about the Pension Plan

Plan Description: Employees whose positions do not require a degree beyond a high school diploma are covered by the CERS, a cost-sharing multiple-employer defined benefit plan established by the provisions of Kentucky Revised Statute Section 78.520 and administered by the Kentucky Retirement System (KRS). Section 61.645 of the Kentucky Revised Statutes grants the authority to establish and amend the benefit terms to the Board of Trustees of KRS. KRS issues a publicly available financial report that can be obtained from http://kyret.ky.gov.

Employee membership data related to the Plan as of June 30, 2018 was as follows:

Retirees and beneficiaries currently receiving benefits	59,013
Terminated employees entitled to but not yet receiving benefits	85,031
Active plan members	82,198
	226,242

11. Employee Benefits, Continued

Benefits provided: The CERS plan supports three benefit tiers: Tier 1, Tier 2 and Tier 3. Employees under Tier 1 started participation before September 1, 2008. Employees beginning participation between September 1, 2008 and December 31, 2013 are Tier 2 plan members. Tier 3 members began participating on or after January 1, 2014. All Tiers provide for retirement, disability, health insurance, and death benefits to plan members.

Tier 1: A member may retire and receive normal retirement benefits if any of the following have been met:

- Any age with 27 years of service
- Age 65 with 48 months of service
- Money purchase for age 65 with less than 48 months, based on contributions and interest.

Additionally, there are some provisions allowing for early retirement after 25 years of service or after 60 months of service and being 55 years of age. Retirement benefits paid to members are based on the average of the highest 5 fiscal years (must contain at least 48 months of service), multiplied by the applicable benefit factor based on participation entry date, multiplied by the years of service.

Tier 2: A member may retire and receive normal retirement benefits if any of the following have been met:

- Age 57 and age plus earned service years must equal 87
- Age 65 with 5 years of earned service

Additionally, there are some provisions allowing for early retirement after 25 years of service or after 60 years of age with 5 years of service. Retirement benefits paid to members are based on the 5 complete fiscal years immediately preceding retirement (each year must contain 12 months), multiplied by the applicable benefit factor based on service credit, multiplied by the years of service.

Tier 3: A member may retire and receive normal retirement benefits if any of the following have been met:

- Age 57 and age plus earned service years must equal 87
- Age 65 with 5 years of earned service

Tier 3 is a Cash Balance Plan, which is a new benefit tier within the Defined Benefit plan. In the Cash Balance Plan, the employee and employer will make set contributions. The retirement benefit will be based upon the accumulated account balance at the time of retirement.

Cost of living adjustments are provided at the discretion of the General Assembly. Retirement is based on a factor of the number of years' service and hire date multiplied by the average of the highest five years' earnings. Reduced benefits are based on factors of both components.

11. Employee Benefits, Continued

Participating employees become eligible to receive the health insurance benefit after at least 180 months of 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 spouse will receive a $10,000 lump sum payment plus a monthly payment of 75% of the decedent's final average pay. Any dependent child will receive 10% of the decedent's final average rate of pay not to exceed a total child benefit of 25% while the spouse is alive. Five years' service is required for nonservice related disability benefits.

Contributions: Under Tier 1, members contribute 5% of annual compensation and the employer pays the contractually required contribution rate for each year. Under Tier 2, members contribute 6% of annual compensation, 5% to the defined benefit pension and 1% as a health insurance contribution, and the employer pays the contractually required contribution rate for each year. Under Tier 3, members contribute 6% of annual compensation, 5% to the defined benefit pension and 1% as a health insurance contribution, and the employer pays the contractually required contribution rate for each year. The contractually required contribution rate for the year ended December 31, 2018 was 19.18% from January to June and 21.48% from July to December. This percentage includes a 4.70% contribution for insurance provided by the Program and a 14.48% contribution for pensions from January to June and a 5.26% contribution for insurance provided by the Program and a 16.22% contribution for pensions from July to December. Contributions related to the pension plan only, excluding insurance, from the District were $103,018 for the year ended December 31, 2018.

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

Pension Liability: At December 31, 2018, the District reported a liability of $1,784,398 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018. The total pension liability used to calculate the net pension liability was based on an actuarial valuation as of that date. The District's proportion of the net pension liability was based on the District's contributions to the pension plan during the fiscal year ended June 30, 2018. At the June 30, 2018 measurement date, the District's proportion was 0.029299%, an increase of 0.002509% from the prior year.

11. Employee Benefits, Continued

For the year ended December 31, 2018, the District's total payroll for all employees was $688,895. Total covered payroll was $673,054. For the year ended December 31, 2018, the District recognized pension expense of $329,076. At December 31, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to pension from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Net difference between projected and actual investment earnings on pension plan investments	$ -	$ 21,396
Net difference between expected and actual experience	32,082	-
Changes in actuarial assumptions	174,388	-
Changes in proportion and difference between employer contributions and proportionate share of contributions	94,775	36,460
District's contributions subsequent to the measurement date	51,824	-
Total	$ 353,069	$ 57,856

The total Deferred Outflows and Deferred Inflows recognized in relation to the pension at December 31, 2018 are $353,069 and $57,856, respectively. Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions less the District's contributions subsequent to the measurement date will be recognized in pension expense as follows:

Year Ended December 31,	
2019	$ 162,850
2020	94,645
2021	(4,530)
2022	(9,577)
2023	-
Total	$ 243,388

Actuarial Assumptions: For financial reporting, the actuarial valuation as of June 30, 2018 was performed by GRS Retirement Consulting. The total pension liability, net pension liability, and sensitivity information as of June 30, 2018 were based on an actuarial valuation date as of June 30, 2017. The total pension liability was rolled-forward from the valuation date (June 30, 2017) to the plan's fiscal year ending June 30, 2018, using generally accepted actuarial principles. GRS did not perform the actuarial valuation as of June 30, 2017 but did replicate the prior actuary's valuation results on the same assumption, methods, and data, as of that date. The roll forward is based on the

11. Employee Benefits, Continued

results of GRS' replication. Subsequent to the actuarial valuation date (June 30, 2017), but prior to the measurement date, the KRS Board of Trustees reviewed investment trends, inflation, and payroll growth historical trends. Based on this review the Board adopted the following updated actuarial assumptions that were used in performing the actuarial valuation as of June 30, 2018, which were also used to determine the Total Pension Liability and Net Pension Liability as of June 30, 2018:

Inflation	2.30%
Salary Increases	3.30% - 11.55%, varies by service
Investment Rate of Return	6.25%, net of pension plan investment 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 (setback 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. These assumptions contain a margin for mortality improvement.

The long-term expected return on plan assets is reviewed as part of the regular experience studies prepared every five years. 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 investment consultant are intended for use over a 10-year horizon and may not be useful in setting 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 the future years.

11. Employee Benefits, Continued

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
US Equity	17.50%	14.50%
International Equity	17.50%	13.75%
Global Bonds	4.00%	3.00%
Global Credit	2.00%	3.75%
High Yield	7.00%	5.50%
Emerging Market Debt	5.00%	6.00%
Illiquid Private	10.00%	8.50%
Private Equity	10.00%	6.50%
Real Estate	5.00%	9.00%
Absolute Return	10.00%	5.00%
Real Return	10.00%	7.00%
Cash	2.00%	1.50%
Total	100.00%	6.09%

Discount Rate: The projection of cash flows used to determine the discount rate of 6.25% for CERS Non-Hazardous assumed that local employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 25 years (closed) amortization period of the unfunded actuarial accrued liability. The discount rate determination does not use a municipal bond rate.

Sensitivity of CERS Proportionate Share of Net Pension Liability to Changes in the Discount Rate: The following table presents the net pension liability of the District, calculated using the discount rate selected, as well as what the District's 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 rates.

	1% Decrease (5.25%)	Current Discount Rate (6.25%)	1% Increase (7.25%)
District's Proportionate Share of Net Pension Liability	$ 2,246,373	$ 1,784,398	$ 1,397,345

Pension Plan Fiduciary Net Position: Detailed information about the pension plan's fiduciary net position is available in the separately issued KRS financial report.

General Information about Other Post-Employment Benefits

Plan Description: Employees whose positions do not require a degree beyond a high school diploma are covered by the CERS, a cost-sharing multiple-employer defined benefit plan established by the provisions of Kentucky Revised Statute Section 78.520 and administered by the Kentucky Retirement

11. Employee Benefits, Continued

System (KRS). Section 61.645 of the Kentucky Revised Statutes grants the authority to establish and amend the benefit terms to the Board of Trustees of KRS. KRS issues a publicly available financial report that can be obtained from http://kyret.ky.gov.

Employee membership data related to the Plan as of June 30, 2017 was as follows:

Retirees and beneficiaries currently receiving benefits	33,481
Terminated employees entitled to but not yet receiving benefits	8,230
Active plan members	81,891
	123,602

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

Tier 1 participation began before July 1, 2003. Members are eligible for benefits if they are the recipient of a retirement allowance. The percentage of the member premium paid by the retirement system is based on the number of years of service as indicated below:

Less than 4 years	0%
4-9 years	25%
10-14 years	50%
15-19 years	75%
20 or more years	100%

Tier 2 participation began on or after July 1, 2003, but before September 1, 2008. Members are eligible for benefits if they are the recipient of a retirement allowance with at least 120 months of service at retirement. The retirement system provides a monthly contribution of $10 for each year of earned service. The monthly contribution is increased by 1.5% each July. As of July 1, 2017, the monthly contribution was $13.18/year of service.

Tier 3 participation began on or after September 1, 2008. Benefits are identical to Tier 2, except Tier 3 members are required to have at least 180 months of service in order to be eligible.

Contributions: Required contributions by the employee are based on the tier. Tier 1 members contribute 0% of gross salary. Tier 2 and 3 members both contribute 1% of gross salary.

Employer contribution rates for the fiscal year were adopted by the Board of KRS based on actuarially recommended rates. The District's contributions for the year ended December 31, 2018, were $33,424.

11. Employee Benefits, Continued

Pension Liabilities (Assets), Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Other Post-Employment Benefits

Other Post-Employment Benefits Liability: At June 30, 2018, the District reported a liability of $520,180 for its proportionate share of net liability associated with the other post-employment benefits. The net other post-employment benefits liability was measured as of June 30, 2018, and the total other post-employment benefits liability used to calculate the net other post-employment benefits asset was determined by an actuarial valuation as of that date. The District's portion of the net other post-employment benefits liability was based on the District's contributions to the other post-employment benefits plan during the year ending June 30, 2018, relative to the contributions of all members for the year ended June 30, 2018. At the June 30, 2018 measurement date, the District's proportion was 0.029298%.

For the year ended December 31, 2018, the District's total payroll for all employees was $688,895. The total covered payroll was $673,054. Covered payroll refers to all compensation paid by the District to active employees covered by the Plan. Employees contribute 1% from covered payroll for the insurance fund.

For the year ended December 31, 2018, the District recognized expense related to other post-employment benefits of $50,508. At December 31, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to other post-employment benefits from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Net difference between projected and actual earnings on plan investments	$ -	$ 35,830
Net difference between expected and actual experience	-	60,620
Change of assumptions	103,888	1,202
Changes in proportion and differences between employer contributions and proprtionate share of contributions	33,306	1,013
Employer contributions subsequent to the measurement date	21,002	-
	$ 158,196	$ 98,665

11. Employee Benefits, Continued

Deferred outflows of resources resulting from the District's contributions subsequent to the measurement date 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 OPEB expense as follows:

Year Ended December 31,	
2019	$ 7,898
2020	7,898
2021	7,898
2022	14,857
2023	1,513
Thereafter	(1,539)
Total	$ 38,525

Actuarial methods and 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:

Actuarial Cost Method	Entry Age
Amortization Method	Level Percent of Pay
Asset Valuation Method	20% of the difference between market value of assets and the expected actuarial value of assets is recognized
Amortization Period	27 Years, Closed
Payroll Growth Rate	4.00%
Investment Rate of Return	7.50%
Inflation	3.25%
Salary Increases	4.00%, average with inflation
Healthcare Trend Rates (Pre-65)	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.
Healthcare Trend Rates (Post-65)	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.

The mortality table used for active members is RP-2000 Combined Mortality Table projected to 2013 with Scale BB (set back 1 year for females).

11. Employee Benefits, Continued

The long-term expected rate of return was determined by using a building-block method in which best-estimate ranges of expected future real rate of returns are developed for each asset class. The ranges are combined by weighting the expected future real rate of return by the target asset allocation percentage. The target allocation and best estimates of arithmetic real rate of return for each major asset class are summarized below:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
US Equity	17.50%	14.50%
International Equity	17.50%	13.75%
Global Bonds	4.00%	3.00%
Global Credit	2.00%	3.75%
High Yield	7.00%	5.50%
Emerging Market Debt	5.00%	6.00%
Illiquid Private	10.00%	8.50%
Private Equity	10.00%	6.50%
Real Estate	5.00%	9.00%
Absolute Return	10.00%	5.00%
Real Return	10.00%	7.00%
Cash	2.00%	1.50%
Total	100.00%	6.09%

Discount Rate: The projection of cash flows used to determine the discount rate of 5.85% assumed that local employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 27-year (closed) amortization period of the unfunded actuarial accrued liability. The discount rate determination used an expected rate of return of 6.25%, and a municipal bond rate of 3.62%, as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2018.

Sensitivity of CERS Proportionate Share of Net OPEB Liability to Changes in the Discount Rate: The following table presents the District's proportionate share of the collective net OPEB liability, calculated using the discount rate of 5.85%, as well as what the District's proportionate share of the collective 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 rates.

	1% Decrease (4.85%)	Current Discount Rate (5.85%)	1% Increase (6.85%)
District's Proportionate Share of Net OPEB Liability	$ 675,631	$ 520,180	$ 387,765

11. Employee Benefits, Continued

Sensitivity of CERS Proportionate Share of Collective Net OPEB Liability to Changes in the Healthcare Cost Trend Rates: The following table presents the District's proportionate share of collective net OPEB liability, calculated using the discount rate selected, as well as what the District's proportionate share of collective net OPEB liability would be if it were calculated using healthcare cost trend rates that were 1 percentage point lower or 1 percentage point higher than the current healthcare cost trend rates.

	1% Decrease	Current Healthcare Cost Trend	1% Increase
District's Proportionate Share of Collective Net OPEB Liability	$ 387,279	$ 520,180	$ 676,832

12. Commitments and Contingencies

The District participates in federal and state assisted grant programs for construction of water lines. These programs are subject to review by grantors or their representatives. As of December 31, 2018 there were no material questioned or disallowed costs as a result of grant audits. As construction is completed, amounts due from state grant funds are recognized and are recorded as contributed capital.

13. Commercial Insurance

It is the policy of the District to purchase commercial insurance for the risks of losses to which it is exposed. These risks include general liability, property and casualty, employee health and accident coverage. Settled claims have not exceeded this commercial coverage in any of the past three fiscal years.

14. New GASB Standards

In fiscal year ended December 31, 2018, the District implemented GASB Statement No. 75, "Accounting and Financial Reporting for Post-employment Benefits Other Than Pensions". This statement, in conjunction with GASB Statement No. 74, "Financial Reporting for Post- Employment Benefit Plans Other Than Pension Plans" reflects substantial improvements to the accounting and financial reporting of other post-employment benefit plans by state and local governments and other post-employment benefit plans. Statement No. 74 addresses financial reporting for state and local government other post-employment benefit plans, while Statement No. 75 addresses the measurement and recording of other post-employment benefit costs, including those for participants in the multi-employer plans.

The guidance contained in these Statements will change how governments calculate and report the costs and obligations associated with other post-employment benefit plans in important ways. It is designed to improve the decision / usefulness of reported other post-employment benefits information and to increase the transparency, consistency, and comparability of other post-employment benefits plan information across governments.

14. New GASB Standards, Continued

Under the standards previously in effect, cost-sharing employers had not been required to present actuarial information about other post-employment benefit plans. Instead, information has been required to be presented in the other post-employment benefit plan's own financial statements for all the participating governments combined. Through its research, the GASB concluded that the needs of users of information regarding cost-sharing employers do not differ significantly from those interested in single and agent employers. Therefore, the GASB believes it is important to give users of the financial statements of cost-sharing employer's access to better, more transparent financial information. Consequently, under the new standards the GASB is requiring that cost-sharing governments report a net other post-employment benefits plan liability, other post-employment benefits expense, and other post-employment benefits related deferred inflows and outflows of resources based on their proportionate share of the collective amounts for all the governments in the plan.

The implementation of GASB Statement No. 75 required the District to record its proportionate share of the net other post-employment benefits liabilities, deferred inflows, and deferred outflows of the cost-sharing defined benefit plan in which it participates. This amount, $428,965 for business-type activities, was material to the financial statements of the District. It was also required to record current activity related to the plan that included deferred inflows of resources and deferred outflows of resources. See Note 11 for further detail related to the plan.

In fiscal year ended December 31, 2018, the District considered implementation of GASB Statement No. 81, "Irrevocable Split-Interest Agreements". This statement's intent is to improve accounting and financial reporting for irrevocable split-interest agreements by providing guidance on recognition and measurement for governments that are beneficiaries to this type of agreement. The District does not currently have any irrevocable split-interest agreements. Therefore, implementation of the statement has no impact on the financial statements.

In fiscal year ended December 31, 2018, the District implemented Statement No. 82, "Pension Issues", which is an amendment of GASB Statements No. 67, No. 68, and No. 73. This statement's purpose is to address issues raised regarding the presentation of payroll-related measures in the required supplementary information, the selection of assumptions and the treatment of deviations from the guidance in the Actuarial Standard of Practice for financial reporting purposes, and the classification of payments made by employers to satisfy employee (plan member) contribution requirements. The District implemented the standard in the current year. However, upon review of the requirements, the changes have no material impact on the financial statements or required supplementary information.

In fiscal year ended December 31, 2018, the District implemented Statement No. 85, "Omnibus 2017". This statement's purpose is to address practice issues identified during implementation and application of certain GASB Statements. It addresses a variety of topics to include issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other post-employment benefits. The District implemented the standard in the current year. However, upon review of the requirements, the changes have no material impact on the financial statements or required supplementary information.

In fiscal year ended December 31, 2018, the District considered implementation of GASB Statement No. 86, "Certain Debt Extinguishment Issues". This statement's purpose is to improve consistency in

14. New GASB Standards, Continued

accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources are placed in an irrevocable trust for the sole purpose of extinguishing debt. The District does not currently have any of this type of debt extinguishment. Therefore, implementation of the statement has no impact on the financial statements.

15. Prior Period Adjustment

For fiscal year ended December 31, 2018, the District made prior period adjustments due to the adoption of GASB Statement No. 75, as described in Note 14, New GASB Standards above, which require the restatement of the December 31, 2017 net position in business-type activities. The result is a decrease in Net Position at January 1, 2018 of $428,965 for business-type activities. This change is in accordance with generally accepted accounting principles.

The total adjustments to beginning net position for business-type activities are as follows:

	Business-Type Activities
Beginning Net Position as Previously Reported at December 31, 2017	$ 7,238,692
Prior Period Adjustment - Implementation of GASB 75	
Net Other Post-Employment Benefits Liability (As of 12/31/17)	(538,571)
Deferred Outflows	
Contributions made after June 30, 2017 measurement date	20,615
Assumption Changes	117,190
Total Deferred Outflows (As of 12/31/17)	137,805
Deferred Inflows	
Liability Experience	(1,496)
Investment Experience	(25,453)
Pension Proportionate Share	(1,250)
Total Deferred Inflows (As of 12/31/17)	(28,199)
Total Prior Period Adjustment	(428,965)
Net Position as Restated, January 1, 2018	$ 6,809,727

REQUIRED SUPPLEMENTARY INFORMATION

BARKLEY LAKE WATER DISTRICT
SCHEDULE OF PROPORTIONATE SHARE
NET PENSION LIABILITY
FOR THE YEARS ENDED DECEMBER 31

Non-Hazardous	**2018**	**2017**	**2016**	**2015**	**2014**
City's Proportion of the Net Pension Liability (Asset)	0.029299%	0.02679%	0.02887%	0.02688%	0.02465%
City's Proportionate Share of the Net Pension Liability (Asset)	$ 1,784,398	$ 1,568,101	$ 1,421,206	$ 1,155,890	$ 799,806
City's Covered-Employee Payroll	$ 673,054	$ 697,564	$ 650,755	$ 649,895	$ 619,402
City's Proportionate Share of the Net Pension Liability (Asset) as a Percentage of Its Covered-Employee Payroll	265.12%	224.80%	218.39%	177.86%	129.13%
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	53.54%	53.30%	55.50%	59.97%	66.80%

Note: Schedule is intended to show information for the last 10 fiscal years. Additional years will be displayed as they become available.

BARKLEY LAKE WATER DISTRICT
SCHEDULE OF REQUIRED CONTRIBUTIONS
NET PENSION LIABILITY
FOR THE YEARS ENDED DECEMBER 31

Non-Hazardous	2018	2017	2016	2015	2014
Contractually Required Contribution	$ 103,018	$ 99,289	$ 86,839	$ 81,301	$ 82,112
Contributions in Relation to the Contractually Required Contribution	(103,018)	(99,289)	(86,839)	(81,301)	(82,112)
Contribution Deficiency (Excess)	$ -	$ -	$ -	$ -	$ -
City's Covered-Employee Payroll	$ 673,054	$ 697,564	$ 650,755	$ 649,895	$ 619,402
Contributions as a Percentage of Covered-Employee Payroll	15.31%	14.23%	13.34%	12.51%	13.26%

Note: Schedule is intended to show information for the last 10 fiscal years. Additional years will be displayed as they become available.

BARKLEY LAKE WATER DISTRICT
SCHEDULE OF PROPORTIONATE SHARE
NET OTHER POST-EMPLOYMENT BENEFITS LIABILITY
COUNTY EMPLOYEE RETIREMENT SYSTEM
FOR THE YEAR ENDED DECEMBER 31,

Non-Hazardous	**2018**
Total Net Other Post-Employment Benefits Liability (Asset) for County Employee Retirement System	$ 1,775,480,122
Barkley Lake Water District's Proportion of the Net Other Post-Employment Benefits Liability (Asset)	0.029298%
Barkley Lake Water District's Proportionate Share of the Net Other Post-Employment Benefits Liability (Asset)	$ 520,180
Barkley Lake Water District's Covered Payroll	$ 673,054
Barkley Lake Water District's Proportionate Share of the Net Other Post-Employment Benefits Liability as a Percentage of Its Covered Payroll	77.29%
Plan Fiduciary Net Position as a Percentage of the Total Net Position	57.62%

*The amounts presented were determined as of June 30 of the prior fiscal year.

Note: This is a 10-year schedule. However, the information in this schedule is not required to be presented retroactively. Additional years will be presented as they become available.

BARKLEY LAKE WATER DISTRICT
SCHEDULE OF REQUIRED CONTRIBUTIONS
NET OTHER POST-EMPLOYMENT BENEFITS LIABILITY
COUNTY EMPLOYEE RETIREMENT SYSTEM
FOR THE YEARS ENDED DECEMBER 31,

Non-Hazardous	**2018**
Contractually Required Other Post-Employment Benefits Contribution (Implicit Subsidy Omitted)	$ 33,424
Contribution in Relation to the Contractually Required Other Post-Employment Benefits Contribution	(33,424)
Contribution Deficiency (Excess)	$ -
Barkley Lake Water District's Covered Payroll	$ 673,054
Contributions as a Percentage of Barkley Lake Water District's Covered Payroll	4.97%

Note: This is a 10-year schedule. However, the information in this schedule in not required to be presented retroactively. Additional years will be presented as they become available.

BARKLEY LAKE WATER DISTRICT
NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION
FOR THE YEAR ENDED DECEMBER 31, 2018

County Employee Retirement System – Net Pension Liability

Changes of benefits terms – The following changes were made by the Kentucky Legislature and reflected in the valuation performed as of June 30 listed below:

2009: A new benefit tier for members who first participate on or after September 1, 2008 was introduced which included the following changes:

1. Tiered Structure for benefit accrual rates
2. New retirement eligibility requirements
3. Different rules for the computation of final average compensation

2014: A cash balance plan was introduced for members whose participation date is on or after January 1, 2014.

Changes of assumptions – The following changes were made by the Kentucky Legislature and reflected in the valuation performed as of June 30 listed below:

2017:

- The assumed investment rate of return was decreased from 7.50% to 6.25%.
- The assumed rate of inflation was reduced from 3.25% to 2.30%.
- The Payroll growth assumption was reduced from 4.00% to 2.00%.
- The mortality table used for active members is RP-2000 Combine 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 one year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back four 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.
- Assumed rates of retirement, withdrawal, and disability were updated to more accurately reflect experience

County Employee Retirement System – Net Pension Liability Contributions

Method and assumptions used in calculations of actuarially determined contributions – The actuarially determined contribution rates effective for fiscal year ending 2018 are calculated as of June 30, 2016. Based on the June 30, 2016 actuarial evaluation report (produced by the prior actuary), the actuarial methods and assumptions used to calculate these contribution rates are below:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent of Pay
Remaining Amortization Period	27 Years, Closed
Asset Valuation Method	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized
Investment Rate of Return	7.50%
Inflation	3.25%
Salary Increase	4.00%, average

County Employee Retirement System – Net OPEB Liability

Changes in Benefits Terms – None

Changes of Assumptions – The following changes were made by the Kentucky Legislature and reflected in the valuation performed as of June 30 listed below:

2017:

- The assumed investment rate of return was decreased from 7.50% to 6.25%
- The assumed rate of inflation was reduced from 3.25% to 2.30%
- Payroll growth assumption was reduced from 4.00% to 2.00%
- The single discount rate changed from 6.89% to 5.84%
- The mortality table used for active members is RP-2000 Combined Mortality Table, projected to 2013 with Scale BB (set back 1 year for females).

County Employee Retirement System – Net OPEB Liability Contributions

Method and assumptions used in calculations of actuarially determined contributions – The actuarially determined contribution rates effective for fiscal year ending 2018 are calculated as of June 30, 2016. Based on the June 30, 2016 actuarial valuation report (produced by the prior actuary), the actuarial methods and assumptions used to calculate these contribution rates are below:

Actuarial Cost Method	Entry Age
Amortization Method	Level Percent of Pay
Asset Valuation Method	20% of the difference between market value of assets and the expected actuarial value of assets is recognized
Amortization Period	27 Years, Closed
Payroll Growth Rate	4.00%
Investment Rate of Return	7.50%
Inflation	3.25%
Salary Increases	4.00%, average with inflation
Healthcare Trend Rates (Pre-65)	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.
Healthcare Trend Rates (Post-65)	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.

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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
Barkley Lake Water District
PO Box 308
Cadiz, Kentucky 42211

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 Barkley Lake Water District, as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise Barkley Lake Water District's basic financial statements, and have issued our report thereon dated June 28, 2019.

Internal Control Over Financial Reporting

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

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control over financial reporting 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 Barkley Lake Water District'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.

Calhoun & Company

Hopkinsville, Kentucky
June 28, 2019