

BARKLEY LAKE WATER DISTRICT

FINANCIAL AUDIT

December 31, 2019

**BARKLEY LAKE WATER DISTRICT
PO BOX 308
CADIZ, KY 42211**

FINANCIAL AUDIT

DECEMBER 31, 2019

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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, 2019, 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 an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

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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, 2019, 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.

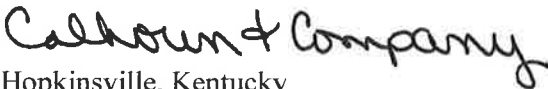
Other Matters

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 35 through 41, 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 25, 2020, 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.



Hopkinsville, Kentucky
June 25, 2020

**BARKLEY LAKE WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE YEAR ENDED DECEMBER 31, 2019**

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, 2019. 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 2019 operating revenues of \$2,503,732 increased 1.53% from 2018, while 2019 operating expenses of \$2,609,442 decreased 3.62% over 2018.
- The District's net position, a measure of current financial resources, decreased by \$385,532, resulting in a December 31, 2019 balance of \$5,973,996.
- The District's unrestricted cash available for operating expenses was \$1,818,492 at December 31, 2019.
- The District's investment in utility plant, net of depreciation, including the construction in progress, was \$14,037,377 at December 31, 2019.

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.

**BARKLEY LAKE WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

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 \$5,973,996 at December 31, 2019.

The largest portion of the District's net position reflects its net investment in capital assets of \$4,010,111 (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 capital assets themselves cannot be liquidated to service these liabilities.

The District's restricted net position totaled \$1,826,795 at December 31, 2019 and consisted of cash restricted for debt service and construction.

Unrestricted net position totaled \$137,090 at December 31, 2019.

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, 2019 as compared to December 31, 2018 are as follows:

**BARKLEY LAKE WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

Net Position

	<u>2019</u>	<u>2018</u>
Assets		
Current Assets	\$ 4,586,133	\$ 4,560,693
Capital Assets	14,037,377	14,639,260
Noncurrent Assets	<u>525</u>	<u>525</u>
Total Assets	<u>18,624,035</u>	<u>19,200,478</u>
Deferred Outflows of Resources		
Deferred Loss on Refunding Bonds	9,029	10,685
Deferred Outflow - Pension	330,834	353,069
Deferred Outflow - Other Post-Employment Benefits	<u>171,755</u>	<u>158,196</u>
Total Deferred Outflows of Resources	<u>511,618</u>	<u>521,950</u>
Liabilities		
Current Liabilities	495,727	517,612
Long-term Liabilities	<u>12,251,155</u>	<u>12,688,767</u>
Total Liabilities	<u>12,746,882</u>	<u>13,206,379</u>
Deferred Inflows of Resources		
Deferred Inflow - Pension	202,851	57,856
Deferred Inflow - Other Post-Employment Benefits	<u>211,924</u>	<u>98,665</u>
Total Deferred Inflows of Resources	<u>414,775</u>	<u>156,521</u>
Net Position		
Net Investment in Capital Assets	4,010,111	4,307,932
Restricted - Expendable	1,826,795	1,831,128
Unrestricted	<u>137,090</u>	<u>220,468</u>
Total Net Position	<u>\$ 5,973,996</u>	<u>\$ 6,359,528</u>

**BARKLEY LAKE WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

Change in Net Position

	<u>2019</u>	<u>2018</u>
Revenues		
Operating Revenues	\$ 2,503,732	\$ 2,466,087
Non-Operating Revenues	45,308	39,766
Capital Contributions	<u>13,180</u>	<u>155,745</u>
Total Revenues	<u>2,562,220</u>	<u>2,661,598</u>
Expenses		
Operating Expenses	2,609,442	2,707,528
Non-Operating Expenses	<u>338,310</u>	<u>404,269</u>
Total Expenses	<u>2,947,752</u>	<u>3,111,797</u>
Change in Net Position	<u>(385,532)</u>	<u>(450,199)</u>
Net Position, Beginning of Year, as Restated	<u>6,359,528</u>	<u>6,809,727</u>
Net Position, Ending of Year	<u><u>\$ 5,973,996</u></u>	<u><u>\$ 6,359,528</u></u>

**BARKLEY LAKE WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

Capital Assets

The District's investment in capital assets, net of depreciation as of December 31, 2019 was as follows:

	Balance January 1, 2019	Additions (Eliminations)	Balance December 31, 2019
Nondepreciable Assets			
Land	\$ 128,347	\$ -	\$ 128,347
Construction in Progress	516,930	21,215	538,145
Total Nondepreciable Assets	645,277	21,215	666,492
Depreciable Assets			
Buildings	10,491,477	17,657	10,509,134
Pumping Equipment	21,434	-	21,434
Transmission Lines	12,559,038	-	12,559,038
Meters	1,869,286	(798,089)	1,071,197
Plant Equipment	581,075	(107,670)	473,405
Office Equipment	120,167	(43,818)	76,349
Vehicles	322,216	(31,563)	290,653
Total Depreciable Assets	25,964,693	(963,483)	25,001,210
Accumulated Depreciation	(11,970,710)	340,385	(11,630,325)
Net Depreciable Assets	13,993,983	(623,098)	13,370,885
Net Capital Assets	<u>\$ 14,639,260</u>	<u>\$ (601,883)</u>	<u>\$ 14,037,377</u>

During the year ended December 31, 2019, the District continued work on the Highway 68/80 relocation project and an additional \$21,215 was charged to construction in progress. Total construction in progress at year end was \$538,145. Depreciation expense for the year was \$720,338.

**BARKLEY LAKE WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

Long-Term Debt

Debt activity for the year ended December 31, 2019 was as follows:

	Balance January 1, 2019	Additions (Payments)	Balance December 31, 2019	Current Maturities
Bond Series 2005	\$ 990,500	\$ (21,000)	\$ 969,500	\$ 22,000
Bond Series 2008C	2,040,000	(130,000)	1,910,000	135,000
Bond Series 2010A	3,756,500	(55,500)	3,701,000	57,500
Bond Series 2010B	1,654,985	(30,000)	1,624,985	30,500
Bond Series 2012E	1,090,000	(55,000)	1,035,000	60,000
Bond Series 2014	799,500	(13,500)	786,000	13,500
Premium on Bond 2012E	10,528	(718)	9,810	718
	<u>10,342,013</u>	<u>(305,718)</u>	<u>10,036,295</u>	<u>319,218</u>
Compensated Absences	18,955	(404)	18,551	-
Customer Deposits	328,939	6,736	335,675	-
Net Pension Liability	1,784,398	(25,152)	1,759,246	-
Net OPEB Liability	520,180	(99,574)	420,606	-
	<u>\$ 12,994,485</u>	<u>\$ (424,112)</u>	<u>\$ 12,570,373</u>	<u>\$ 319,218</u>

Interest expense of \$338,310 was paid during the year ended December 31, 2019.

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, 2019

Assets

Current Assets

Cash and Cash Equivalents	\$ 1,818,492
Accounts Receivable	371,246
Other Receivables	5,698
Inventory	202,044
Prepaid Expenses	26,183
Restricted Cash	<u>2,162,470</u>
 Total Current Assets	 <u>4,586,133</u>

Noncurrent Assets

Capital Assets

Depreciable Capital Assets, Net of Depreciation	13,370,885
Non-depreciable Capital Assets	<u>666,492</u>
 Total Capital Assets	 <u>14,037,377</u>

Other Assets

Utility Deposit	<u>525</u>
 Total Other Assets	 <u>525</u>
 Total Noncurrent Assets	 <u>14,037,902</u>

Total Assets	<u>18,624,035</u>
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Deferred Outflows of Resources

Deferred Loss on Refunding Bonds	9,029
Deferred Outflows - Pension	330,834
Deferred Outflows - Other-Post Employment Benefits	<u>171,755</u>
 Total Deferred Outflows of Resources	 <u>511,618</u>

Liabilities**Current Liabilities**

Accounts Payable	31,985
Payroll Liabilities	28,691
Accrued Expenses:	
Taxes	307
Interest	115,526
Current Maturities of Long-Term Debt	<u>319,218</u>
 Total Current Liabilities	 <u>495,727</u>

Noncurrent Liabilities

Compensated Absence	18,551
Customers' Deposits	335,675
Bonds Payable	9,717,077
Net Pension Liability	1,759,246
Net Other Post-Employment Benefits Liability	<u>420,606</u>
 Total Noncurrent Liabilities	 <u>12,251,155</u>
 Total Liabilities	 <u><u>12,746,882</u></u>

Deferred Inflows of Resources

Deferred Inflows - Pension	202,851
Deferred Inflows - Other Post-Employment Benefits	<u>211,924</u>
 Total Deferred Inflows of Resources	 <u>414,775</u>

Net Position

Net Investment in Capital Assets	4,010,111
Restricted Net Position	1,826,795
Unrestricted Net Position	<u>137,090</u>
 Total Net Position	 <u><u>\$ 5,973,996</u></u>

BARKLEY LAKE WATER DISTRICT
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND
NET POSITION - PROPRIETARY FUND
FOR THE YEAR ENDED DECEMBER 31, 2019

Operating Revenues

Charges for Services	\$ 2,487,974
Miscellaneous Revenue	<u>15,758</u>
Total Operating Revenues	<u>2,503,732</u>

Operating Expenses

Salaries, Wages and Benefits	1,164,631
Purchased Power	166,404
Chemicals	121,326
Materials and Supplies	213,323
Contract Services	54,553
Transportation Expense	48,272
Insurance	49,274
Miscellaneous	16,471
Taxes	54,850
Depreciation and Amortization	<u>720,338</u>
Total Operating Expenses	<u>2,609,442</u>
Operating Income (Loss)	<u>(105,710)</u>

Non-Operating Revenues (Expenses)

Interest Revenue	24,157
Federal Interest Subsidy	16,346
Gain on Disposal of Asset	4,805
Interest Expense	<u>(338,310)</u>
Total Non-Operating Revenues (Expenses)	<u>(293,002)</u>

Capital Contributions

Contributed Capital	<u>13,180</u>
Total Capital Contributions	<u>13,180</u>

Change in Net Position	(385,532)
Net Position, Beginning of Year	<u>6,359,528</u>
Net Position, End of Year	<u><u>\$ 5,973,996</u></u>

**BARKLEY LAKE WATER DISTRICT
STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2019**

Cash Flows from Operating Activities

Received from Customers	\$ 2,487,053
Paid to Suppliers for Goods and Services	(775,315)
Paid to Employees	<u>(1,027,489)</u>
Net Cash Provided (Used) by Operating Activities	<u>684,249</u>

Cash Flows from Capital and Related Financing Activities

Acquisition and Construction of Property, Plant and Equipment	(118,457)
Proceeds from Sale of Property, Plant and Equipment	4,805
Proceeds from Capital Grants	16,715
Proceeds from Federal Interest Subsidy	16,346
Principal Paid on Long-Term Debt	(305,718)
Interest Paid on Debt	<u>(359,361)</u>
Net Cash Provided (Used) by Capital and Related Financing Activities	<u>(745,670)</u>

Cash Flows from Investing Activities

Interest Income	<u>24,157</u>
Net Cash Provided (Used) by Investing Activities	<u>24,157</u>

Net Increase (Decrease) in Cash	(37,264)
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Cash and Cash Equivalents, Beginning of Year	<u>4,018,226</u>
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Cash and Cash Equivalents, End of Year	<u><u>\$ 3,980,962</u></u>
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**BARKLEY LAKE WATER DISTRICT
STATEMENT OF CASH FLOWS , CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

Reconciliation of Operating Activities to Net Cash Flows from Operating Activities

Cash Flows from Operating Activities

Operating Income (Loss)	\$ (105,710)
Adjustments - Operating Activities	
Depreciation and Amortization	720,338
Bad Debt	6,168
Pension Contributions	135,320
(Increase) Decrease in	
Accounts Receivable	(24,270)
Other Receivable	(350)
Inventory	(41,234)
Prepaid Insurance	(385)
Increase (Decrease) in	
Accounts Payable	(8,873)
Accrued Taxes	(5,313)
Payroll Liabilities	2,226
Compensated Absence	(404)
Tenant Deposits Payable	6,736
	<hr/>
Net Cash Provided (Used) by Operating Activities	\$ 684,249 <hr/> <hr/>

Non-Cash Activities

Capital and Related Financing Activities	<hr/> \$ -
Total Capital and Related Financing Activities	<hr/> <hr/> \$ -
Investing Activities	<hr/> \$ -

**BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2019**

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, 2019**

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, 2019 was \$371,246.

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, 2019 totaled \$202,044.

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, 2019

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 \$9,029 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 \$330,834 for the year ended December 31, 2019 that relate to pensions as required by GASB Statement No. 68. As of December 31, 2019, the District has \$171,755 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 \$202,851 for the year ended December 31, 2019 that relate to pensions as required by GASB Statement No. 68. As of December 31, 2019, the District has \$211,924 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 \$18,551 at December 31, 2019.

BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019

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.

**BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

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. Subsequent Events

Subsequent events have been evaluated by management through the date of the independent auditor's report, the date the financial statements were available to be issued. Material subsequent events, if any, are disclosed in a separate footnote to these financial statements.

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.

**BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

3. Customers' Deposits Fund, Continued

As of December 31, 2019, the composition of the customer deposit fund is as follows:

Cash in Bank - Checking	\$ 362,407
Certificates of Deposit	<u>56,055</u>
Total Customers' Deposit	<u><u>\$ 418,462</u></u>

As of December 31, 2019, the District's liability for customers' deposit was:

Meter Deposits	\$ 335,937
Interest Payable	2,837
Final Bill Payables	<u>(3,099)</u>
Total Customers' Deposit Liability	<u><u>\$ 335,675</u></u>

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 \$495,528.

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

Cash in Bank - Sinking Fund	\$ 17,456
Cash in Bank - System Refunding	160,994
Cash in Bank - Sinking Fund	122,338
Cash in Bank - Regions Refunding	65,272
Cash in Bank - Regions Refunding	54,085
Certificate of Deposit - Sinking Fund	<u>99,646</u>
Total Bond Sinking and Reserve Funds	<u><u>\$ 519,791</u></u>

BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019

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:

<u>Issue</u>	<u>Monthly Deposit</u>	<u>Maximum Requirement</u>
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, 2019, the depreciation cash and certificates of deposit totaled \$1,098,592.

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, 2019 year-end balance of \$125,625. 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.

**BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

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, 2019, the District held balances at two financial institutions. The highest cash day for one institution consisted of a bank balance totaling \$4,049,698. That balance was covered by \$500,000 Federal Deposit Insurance and the remainder by pledged securities of \$4,219,874. The deposits were fully collateralized during the fiscal year ended December 31, 2019.

The second institution had a highest cash day balance of \$260,462. 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, 2019, the deposits were fully collateralized.

BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019

8. Capital Assets

Capital asset activity for the year ended December 31, 2019:

	Balance January 1, 2019	Additions	Eliminations	Balance December 31, 2019
Depreciable Assets				
Buildings - Water Plant	\$ 10,474,079	\$ -	\$ -	\$ 10,474,079
Buildings - General Plant	17,398	17,657	-	35,055
Pumping Equipment	21,434	-	-	21,434
Transmission Lines	12,559,038	-	-	12,559,038
Meters	1,869,286	52,409	850,498	1,071,197
Plant Equipment	581,075	-	107,670	473,405
Office Equipment	120,167	-	43,818	76,349
Vehicles	322,216	27,176	58,739	290,653
Total Depreciable Assets	<u>25,964,693</u>	<u>97,242</u>	<u>1,060,725</u>	<u>25,001,210</u>
Accumulated Depreciation				
Buildings - Water Plant	4,027,272	250,125	-	4,277,397
Buildings - General Plant	4,760	1,532	-	6,292
Pumping Equipment	21,434	-	-	21,434
Transmission Lines	5,484,682	363,596	-	5,848,278
Meters	1,618,361	52,576	850,496	820,441
Plant Equipment	436,427	26,205	107,670	354,962
Office Equipment	117,992	1,004	43,818	75,178
Vehicles	259,782	25,300	58,739	226,343
Total Accumulated Depreciation	11,970,710	720,338	1,060,723	11,630,325
Net Depreciable Assets	<u>13,993,983</u>	<u>(623,096)</u>	<u>2</u>	<u>13,370,885</u>
Non-Depreciable Assets				
Land	128,347	-	-	128,347
Construction in Progress	516,930	21,215	-	538,145
Total Non-Depreciable Assets	<u>645,277</u>	<u>21,215</u>	<u>-</u>	<u>666,492</u>
Net Capital Assets	<u>\$ 14,639,260</u>	<u>\$ (601,881)</u>	<u>\$ 2</u>	<u>\$ 14,037,377</u>

Depreciation charged to expense was \$720,338 at December 31, 2019.

BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019

9. Interest Expense

The District incurred interest costs in 2019 of \$338,310. 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, 2019	Proceeds	Repayments	Balance December 31, 2019	Current Amount Due
Revenue Bonds 2005	\$ 990,500	\$ -	\$ 21,000	\$ 969,500	\$ 22,000
Revenue Bonds 2008C	2,040,000	-	130,000	1,910,000	135,000
Revenue Bonds 2010A	3,756,500	-	55,500	3,701,000	57,500
Revenue Bonds 2010B	1,654,985	-	30,000	1,624,985	30,500
Revenue Bonds 2012E	1,090,000	-	55,000	1,035,000	60,000
Revenue Bonds 2014	799,500	-	13,500	786,000	13,500
Premium on Bond 2012E	10,528	-	718	9,810	718
Total Bond Obligation	10,342,013	-	305,718	10,036,295	319,218
Compensated Absences	18,955	-	404	18,551	-
Customer Deposits	328,939	60,757	54,021	335,675	-
Net Pension Liability	1,784,398	-	25,152	1,759,246	-
Net OPEB	520,180	-	99,574	420,606	-
	<u>\$ 12,994,485</u>	<u>\$ 60,757</u>	<u>\$ 484,869</u>	<u>\$ 12,570,373</u>	<u>\$ 319,218</u>

BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019

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, 2019 for debt service (principal and interest) are as follows:

<u>Maturity</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
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	364,500	304,398	668,898
2025-2029	1,808,000	1,311,434	3,119,434
2030-2034	1,670,000	1,003,262	2,673,262
2035-2039	1,430,000	712,715	2,142,715
2040-2044	1,451,000	473,473	1,924,473
2045-2049	1,406,985	223,103	1,630,088
2050-2054	560,000	29,442	589,442
	<u>\$ 10,026,485</u>	<u>\$ 5,402,388</u>	<u>\$ 15,428,873</u>

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, 2019 were \$16,346.

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

**BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

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, 2019. 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: All eligible District employees participate in 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, 2019 was as follows:

Retirees and beneficiaries currently receiving benefits	61,938
Terminated employees entitled to but not yet receiving benefits	87,160
Active plan members	81,818
	<u>230,916</u>

**BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

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.

BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019

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, 2019 was 21.48% from January to June and 24.06% from July to December. This percentage includes a 5.26% contribution for insurance provided by the Program and a 16.22% contribution for pensions from January to June and a 4.76% contribution for insurance provided by the Program and a 19.30% contribution for pensions from July to December. Contributions related to the pension plan only, excluding insurance, from the District were \$114,832 for the year ended December 31, 2019.

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

Pension Liability: At December 31, 2019, the District reported a liability of \$1,759,246 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2019. 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, 2019. At the June 30, 2019 measurement date, the District's proportion was 0.025014%, a decrease of 0.004285% from the prior year.

BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019

11. Employee Benefits, Continued

For the year ended December 31, 2019, the District's total payroll for all employees was \$665,841. Total covered payroll was \$643,710. For the year ended December 31, 2019, the District recognized pension expense of \$256,517. At December 31, 2019, 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	\$ -	\$ 28,359
Net difference between expected and actual experience	37,486	-
Changes in actuarial assumptions	178,056	-
Changes in proportion and difference between employer contributions and proportionate share of contributions	51,371	174,492
District's contributions subsequent to the measurement date	63,921	-
Total	<u>\$ 330,834</u>	<u>\$ 202,851</u>

The total Deferred Outflows and Deferred Inflows recognized in relation to the pension at December 31, 2019 are \$330,834 and \$202,851, 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,	
2020	\$ 78,482
2021	(7,189)
2022	(9,245)
2023	2,014
2024	-
Total	<u>\$ 64,062</u>

Actuarial Assumptions: For financial reporting, the actuarial valuation as of June 30, 2019 was performed by GRS Retirement Consulting. The total pension liability, net pension liability, and sensitivity information as of June 30, 2019 were based on an actuarial valuation date as of June 30, 2018. The total pension liability was rolled-forward from the valuation date (June 30, 2018) to the plan's fiscal year ending June 30, 2019, using generally accepted actuarial principles. GRS did not perform the actuarial valuation as of June 30, 2018 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

**BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

11. Employee Benefits, Continued

results of GRS' replication. Subsequent to the actuarial valuation date (June 30, 2018), 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, 2019, which were also used to determine the Total Pension Liability and Net Pension Liability as of June 30, 2019:

Inflation	2.30%
Payroll Growth	2.00%
Salary Increases	3.30% - 10.30%, varies by service
Investment Rate of Return	6.25%

The mortality table used for active members was a PUB-2010 General Mortality table, for the Non-Hazardous System, and the Pub-2010 Public Safety Mortality table for the Hazardous System, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2010. The mortality table used for healthy retired members was a system-specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from MP-2014 mortality improvement scale using a base year of 2019. The mortality table used for the disabled members was PUB-2010 Disabled Mortality table, with a 4-year set-forward for both male and female rates, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2010.

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 2014 through 2018 is outlined in a report dated April 18, 2019. 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.

**BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

11. Employee Benefits, Continued

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
US Equity	18.75%	4.30%
Non-US Equity	18.75%	4.80%
Private Equity	10.00%	6.65%
High Yield	15.00%	2.60%
Core Bonds	13.50%	1.35%
Cash	1.00%	0.20%
Real Estate	5.00%	4.85%
Opportunistic	3.00%	2.97%
Real Return	15.00%	4.10%
Total	100.00%	3.89%

Discount Rate: The projection of cash flows used to determine the discount rate of 6.25% assumes that the funds receive the required employer contributions each future year, as determined by the current funding policy established in statute as last amended by House Bill 362 (passed in 2018). 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	\$ 2,200,317	\$ 1,759,246	\$ 1,391,617

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: All eligible District employees participate in 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>.

**BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

11. Employee Benefits, Continued

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

Retirees and beneficiaries currently receiving benefits	35,157
Terminated employees entitled to but not yet receiving benefits	8,214
Active plan members	81,470
	<u>124,841</u>

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, 2019, the monthly contribution was \$13.58/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, 2019, were \$32,275.

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, 2019, the District reported a liability of \$420,606 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, 2019, 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

BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019

11. Employee Benefits, Continued

post-employment benefits plan during the year ending June 30, 2019, relative to the contributions of all members for the year ended June 30, 2019. At the June 30, 2019 measurement date, the District's proportion was 0.025007%, a decrease of 0.004291% from the prior year.

For the year ended December 31, 2019, the District's total payroll for all employees was \$665,841. The total covered payroll was \$643,710. 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, 2019, the District recognized expense related to other post-employment benefits of \$32,794. At December 31, 2019, 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	\$ -	\$ 18,682
Net difference between expected and actual experience	-	126,907
Change of assumptions	124,461	832
Changes in proportion and differences between employer contributions and proportionate share of contributions	27,022	65,503
Employer contributions subsequent to the measurement date	20,272	-
	<u>\$ 171,755</u>	<u>\$ 211,924</u>

BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019

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,	
2020	\$ (9,365)
2021	(9,365)
2022	(3,425)
2023	(14,790)
2024	(18,722)
Thereafter	<u>(4,774)</u>
Total	<u><u>\$ (60,441)</u></u>

Actuarial assumptions: The Kentucky Retirement Systems Board of Trustees adopted new actuarial assumptions since June 30, 2018. These assumptions are documented in the reported titled "Kentucky Retirement Systems 2018 Actuarial Experience Study for the Period Ending June 30, 2018". The total OPEB liability as of June 30, 2019 was determined using the following updated assumptions:

Inflation	2.30%
Payroll Growth Rate	2.00%
Salary Increases	3.30% to 10.30%, varies by service
Investment Rate of Return	6.25%
Healthcare Trend Rates	
Pre-65	Initial trend starting at 7.00% at January 1, 2020, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 12 years
Post-65	Initial trend starting at 5.00% at January 1, 2020, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 10 years

The mortality table used for active members was a PUB-2010 General Mortality table, for the Non-Hazardous System, and PUB-2010 Public Safety Mortality table for the Hazardous System, projected with the ultimate rate from the MP-2014 improvement scale using a base year of 2010. The mortality table used for the healthy retired members was a system specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2019. The mortality table used for the disabled members was PUB-2010 Disabled Mortality table, with a 4-year set-forward to both male and female rates,

projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2010.

**BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019**

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	18.75%	4.30%
Non-US Equity	18.75%	4.80%
Private Equity	10.00%	6.65%
High Yield	15.00%	2.60%
Core Bonds	13.50%	1.35%
Cash	1.00%	0.20%
Real Estate	5.00%	4.85%
Opportunistic	3.00%	2.97%
Real Return	15.00%	4.10%
Total	100.00%	3.89%

Discount Rate: The projection of cash flows used to determine the discount rate of 5.68% assumed that local employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 24-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 3.13%, as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 28, 2019. Current assets, future contributions, and investment earnings are projected to be sufficient to pay the projected benefit payments from the retirement system. However, the cost associated with the implicit employer subsidy was not included in the calculation of the system's actuarially determined contributions, and any cost associated with the implicit subsidy will not be paid out of the system's trusts. Therefore, the municipal bond rate was applied to future expected benefits payments associated with the implicit subsidy.

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 5.68%, 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.

BARKLEY LAKE WATER DISTRICT
NOTES TO FINANCIAL STATEMENTS, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019

11. Employee Benefits, Continued

	1% Decrease (4.68%)	Current Discount Rate (5.68%)	1% Increase (6.68%)
District's Proportionate Share of Net OPEB Liability	\$ 563,440	\$ 420,606	\$ 302,921

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	\$ 312,807	\$ 420,606	\$ 551,326

OPEB plan fiduciary net position: Detailed information about the OPEB plan's fiduciary net position is available in the separately issued Kentucky Retirement Systems financial report.

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, 2019 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.

REQUIRED SUPPLEMENTARY INFORMATION

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

Non-Hazardous	2019	2018	2017	2016	2015	2014
Total Net pension Liability (Asset) for County Employee Retirement System	\$ 7,033,044,552	\$ 6,090,304,793	\$ 5,853,307,463	\$ 4,923,618,237	\$ 4,299,525,565	\$ 3,244,376,263
District's Proportion of the Net Pension Liability (Asset)	0.025014%	0.029299%	0.02679%	0.02887%	0.02688%	0.02465%
District's Proportionate Share of the Net Pension Liability (Asset)	\$ 1,759,246	\$ 1,784,398	\$ 1,568,101	\$ 1,421,206	\$ 1,155,890	\$ 799,806
District's Covered-Employee Payroll	\$ 643,710	\$ 673,054	\$ 697,564	\$ 650,755	\$ 649,895	\$ 619,402
District's Proportionate Share of the Net Pension Liability (Asset) as a Percentage of Its Covered-Employee Payroll	273.30%	265.12%	224.80%	218.39%	177.86%	129.13%
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	50.45%	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	2019	2018	2017	2016	2015	2014
Contractually Required Contribution	\$ 114,832	\$ 103,018	\$ 99,289	\$ 86,839	\$ 81,301	\$ 82,112
Contributions in Relation to the Contractually Required Contribution	\$ (114,832)	(103,018)	(99,289)	(86,839)	(81,301)	(82,112)
Contribution Deficiency (Excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
District's Covered-Employee Payroll	\$ 643,710	\$ 673,054	\$ 697,564	\$ 650,755	\$ 649,895	\$ 619,402
Contributions as a Percentage of Covered-Employee Payroll	17.84%	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	<u>2019</u>	<u>2018</u>
Total Net Other Post-Employment Benefits Liability (Asset) for County Employee Retirement System	\$1,681,954,950	\$ 1,775,480,122
District's Proportion of the Net Other Post-Employment Benefits Liability (Asset)	0.025007%	0.029298%
District's Proportionate Share of the Net Other Post-Employment Benefits Liability (Asset)	\$ 420,606	\$ 520,180
District's Covered Payroll	\$ 643,710	\$ 673,054
District's Proportionate Share of the Net Other Post-Employment Benefits Liability as a Percentage of Its Covered Payroll	65.34%	77.29%
Plan Fiduciary Net Position as a Percentage of the Total Net Position	60.44%	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	<u>2019</u>	<u>2018</u>
Contractually Required Other Post-Employment Benefits Contribution (Implicit Subsidy Omitted)	\$ 32,275	\$ 33,424
Contribution in Relation to the Contractually Required Other Post- Employment Benefits Contribution	<u>(32,275)</u>	<u>(33,424)</u>
Contribution Deficiency (Excess)	<u>\$ -</u>	<u>\$ -</u>
District's Covered Payroll	\$ 643,710	\$ 673,054
Contributions as a Percentage of Barkley Lake Water District's Covered Payroll	5.01%	4.97%

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
NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION
FOR THE YEAR ENDED DECEMBER 31, 2019

County Employee Retirement System – Net Pension Liability

Changes of benefits terms – During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. Benefits paid to the spouses of deceased members have been increased from 25% of the member's final pay rate to 75% of the member's average pay. If the member does not have a surviving spouse, benefits paid to surviving dependent children have been increased from 10% of member's final pay to 50% of average pay for one child, 65% over age pay for two children, and 75% of average pay for three children. The Total Pension Liability beginning June 30, 2018 is determined using these updated benefit provisions.

Changes of Assumption – In the June 30, 2019, 2017, and 2015 actuarial valuations, the following changes in actuarial assumptions were made:

	June 30, 2019	June 30, 2017	June 30, 2015	June 30, 2014
Inflation	2.30%	2.30%	3.25%	3.50%
Payroll Growth	2.00%	0.75%	0.75%	1.00%
Salary Increases	3.30% to 10.30%	3.05%	4.00%	4.50%
Investment Rate of Return	6.25%	6.25%	7.50%	7.75%

In the June 30, 2019 actuarial valuation, the mortality table used for active members was a PUB-2010 General Mortality table, for the Non-Hazardous System, and Pub-2010 Public Safety Mortality table for the Hazardous System, projected with the ultimate rates from the MP-2014 improvement scale using base year of 2010. The mortality table used for health retired members was a system-specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2019. The mortality table used for the disabled members was PUB-2010 Disable Mortality table, with a 4-year set-forward for both male and female rates, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2010.

Beginning with the June 30, 2015 actuarial valuation, 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 one year for females). For disabled members, the RP-2000 Combined Disability Mortality Table projected with Scale BB to 2013 (set back four years for males) is used for the period after disability retirement.

For periods prior to the June 30, 2015 actuarial valuation, the mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (setback one year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (setback four years for males) is used for the period after disability retirement.

For periods prior to the June 30, 2015 actuarial valuation, the rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward five years was used for the period after disability retirement.

BARKLEY LAKE WATER DISTRICT
NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019

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 2019 are calculated as of June 30, 2017. Based on the June 30, 2017 actuarial evaluation report (produced by the prior actuary), the actuarial methods and assumptions used to calculate these contribution rates are below:

Valuation Date	June 30, 2017
Experience Study	July 1, 2008 - June 30, 2013
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent of Pay
Remaining Amortization Period	26 Years, Closed
Payroll Growth Rate	2.00%
Asset Valuation Method	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized
Inflation	2.30%
Salary Increase	3.30% to 11.55%, varies by service
Investment Rate of Return	6.25%

County Employee Retirement System – Net OPEB Liability

Changes in Benefits Terms – During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. The system shall now pay 100% of the insurance premium for spouses and children of all active duty members who die in the line of duty. The Total OPEB Liability beginning June 30, 2018 was determined using these updated benefit provisions.

Changes of Assumptions – In the June 30, 2019 actuarial valuation, the following changes in actuarial assumptions were made:

	June 30, 2019	June 30, 2017
Inflation	2.30%	2.30%
Payroll Growth	2.00%	0.75%
Salary Increases	3.30% to 10.30%	3.05%
Investment Rate of Return	6.25%	6.25%

In the June 30, 2019 actuarial valuation, the mortality table used for active members was a PUB-2010 General Mortality table, for the Non-Hazardous System, and PUB-2010 Public Safety Mortality table for the Hazardous System, projected with the ultimate rates from the MP-2014 improvement scale using a base year of 2010. The mortality table used for healthy retired members was a system-specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2019. The mortality table used for the disabled members was PUB-2010 Disable Mortality table, with a 4-year set-forward for both male and female rates, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2010.

BARKLEY LAKE WATER DISTRICT
NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION, CONTINUED
FOR THE YEAR ENDED DECEMBER 31, 2019

County Employee Retirement System – Net OPEB Liability, Continued

Beginning with the June 30, 2017 actuarial valuation, 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 one year for females). For disabled members, the RP-2000 Combined Disability Mortality Table projected with Scale BB to 2013 (set back four years for males) is used for the period after disability retirement.

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 2019 are calculated as of June 30, 2017. Based on the June 30, 2017 actuarial valuation report (produced by the prior actuary), the actuarial methods and assumptions used to calculate these contribution rates are below:

Valuation Date	June 30, 2017
Experience Study	July 1, 2008 - June 30, 2013
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent of Pay
Remaining Amortization Period	26 Years, Closed
Payroll Growth Rate	2.00%
Asset Valuation Method	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized
Inflation	2.30%
Salary Increases	3.30% to 11.55%, varies by service
Investment Rate of Return	6.25%
Healthcare Trend Rates	
Pre-65	Initial trend starting at 7.25% at January 1, 2019 and gradually decreasing to an ultimate trend rate of 4.05% over a period of 13 years
Post-65	Initial trend starting at 5.10% at January 1, 2019 and gradually decreasing to an ultimate trend rate of 4.05% over a period of 11 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, 2019, 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 25, 2020.

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.

Adding Value to Your Bottom Line

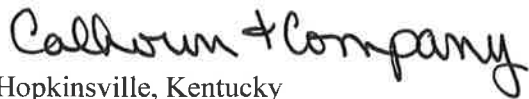
Member AICPA-KYCPA

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.



Hopkinsville, Kentucky
June 25, 2020