# BARKLEY LAKE WATER DISTRICT

FINANCIAL AUDIT
December 31, 2017



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

FINANCIAL AUDIT

**DECEMBER 31, 2017** 

# TABLE OF CONTENTS

	PAGE
Independent Auditor's Report	1
Management's Discussion and Analysis	3
Financial Statements	
- Statement of Net Position - Proprietary Fund	9
- Statement of Revenues, Expenses and Changes in Fund Net Position - Proprietary Fund	10
- Statement of Cash Flows	11
Notes to the Financial Statements	13
Required Supplementary Information	
- Schedule of Proportionate Share of the Net Pension Liability	28
- Schedule of Required Contributions	29
- Schedule of Changes in Benefits and Assumptions	30
Independent Auditor's Report on Internal Control Over Financial Reporting and on	32
Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i>	

#### 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, 2017, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

#### Management's Responsibility for the Financial Statements

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

#### Auditor's Responsibility

Our responsibility is to express opinions 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.



To the Board of Commissioners May 29, 2018 Page 2 of 2

#### **Opinions**

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, 2017, 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 and Schedule of Changes in Benefits and Assumptions on pages 28 through 31, 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 May 29, 2018, 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

May 29, 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, 2017. 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 2017 operating revenues of \$2,569,292 increased 3.21% from , while 2017 operating expenses of \$2,657,766 increased 0.20% over .
- The District's net position, a measure of current financial resources, decreased by \$356,597, resulting in a December 31, 2017 balance of \$7,238,692.
- The District's unrestricted cash available for operating expenses was \$1,781,631 at December 31, 2017.
- The District's investment in utility plant, net of depreciation, including the construction in progress, was \$15,166,523 at December 31, 2017.

#### **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 \$7,238,692 at December 31, 2017.

The largest portion of the District's net position reflects its net investment in capital assets of \$4,546,268 (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 \$1,721,343 at December 31, 2017 and consisted of cash restricted for debt service and construction.

Unrestricted net position totaled \$971,081 at December 31, 2017.

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, 2017 as compared to are as follows:

#### **Net Position**

	2017	2016
Assets		***************************************
Current Assets	\$ 3,903,677	\$ 3,984,594
Capital Assets	15,166,523	15,511,946
Noncurrent Assets	575,036	575,036
Total Assets	19,645,236	20,071,576
<b>Deferred Outflows of Resources</b>		
Deferred Loss on Refunding Bonds	12,476	14,395
Deferred Outflow of Resources Related to Pension	510,337	346,137
Total Deferred Outflows of Resources	522,813	360,532
Liabilities		
Current Liabilities	474,908	451,963
Long-term Liabilities	12,249,081	12,384,856_
Total Liabilities	12,723,989	12,836,819
<b>Deferred Inflows of Resources</b>		
Deferred Outflow of Resources Related to Pension	205,368	
Total Deferred Outflows of Resources	205,368	n <del></del>
Net Position		
Net Investment in Capital Assets	4,546,268	4,612,392
Restricted - Expendable	1,721,343	1,938,404
Unrestricted	971,081	1,044,493
Total Net Position	\$ 7,238,692	\$ 7,595,289

# **Change in Net Position**

	2017	2016
Revenues		
Operating Revenues	\$ 2,569,292	\$ 2,489,299
Non-Operating Revenues	27,916	30,047
Capital Contributions	92,601	180,967
Total Revenues	2,689,809	2,700,313
Expenses		
Operating Expenses	2,657,766	2,652,409
Non-Operating Expenses	388,643	390,480
Total Expenses	3,046,409	3,042,889
Change in Net Position	(356,600)	(342,576)
Net Position, Beginning of Year	7,595,289	7,937,865
Adjustments	3	
Net Position, Ending of Year	\$ 7,238,692	\$ 7,595,289

#### **Capital Assets**

The District's investment in capital assets, net of depreciation as of December 31, 2017 was as follows:

	Balance	Additions	Balance	
	January 1, 2017	(Eliminations)	December 31, 2017	
Nondepreciable Assets				
Land	\$ 117,522	\$ -	\$ 117,522	
Construction in Progress	384,350	2,570	386,920	
Total Nondepreciable Assets	501,872	2,570	504,442	
Depreciable Assets				
Buildings	10,482,577	8,900	10,491,477	
Pumping Equipment	21,434	<b>⊕</b> ):	21,434	
Transmission Lines	12,355,459	203,580	12,559,039	
Meters	1,770,712	43,449	1,814,161	
Plant Equipment	532,486	48,589	581,075	
Office Equipment	120,167	₩:	120,167	
Vehicles	290,627	26,639	317,266	
Total Depreciable Assets	25,573,462	331,157	25,904,619	
Accumulated Depreciation	(10,563,388)	(679,150)	(11,242,538)	
Net Depreciable Assets	15,010,074	(347,993)	14,662,081	
<b>Net Capital Assets</b>	\$ 15,511,946	\$ (345,423)	\$ 15,166,523	

During the year ended December 31, 2017, the District continued work on the Highway 68/80 relocation project and an additional \$2,570 was charged to construction in progress. Total construction in progress at year end was \$386,920. Depreciation expense for the year was \$679,150.

#### **Long-term Debt**

Debt activity for the year ended December 31, 2017 was as follows:

	Jar	Balance nuary 1, 2017	Additions (Payments)	De	Balance cember 31, 2017		Current laturities
Bond Series 2005	\$	1,030,500	\$ (19,500)	\$	1,011,000	\$	20,500
Bond Series 2008C		2,275,000	(115,000)		2,160,000		120,000
Bond Series 2010A		3,860,500	(51,000)		3,809,500		53,000
Bond Series 2010B		1,710,985	(27,500)		1,683,485		28,500
Bond Series 2012E		1,200,000	(55,000)		1,145,000		55,000
Bond Series 2014		825,000	(12,500)		812,500		13,000
Premium on Bond 2012E		11,964	(718)	45	11,246		718
		10,913,949	(281,218)	2	10,632,731		290,718
Compensated Absences		19,430	1,398		20,828		2
Customer Deposits		311,489	6,650		318,139		4
Net Pension Liability	<u> </u>	1,421,206	146,895	-	1,568,101		*
	\$	12,666,074	\$ (126,275)	\$	12,539,799	\$	290,718
	-			_		_	

Interest expense of \$388,643 was paid during the year ended December 31, 2017.

## **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, 2017

#### Assets

#### **Current Assets**

Cash and Cash Equivalents	\$ 1,781,631
Accounts Receivable	380,841
Other Receivables	68,619
Inventory	183,526
Prepaid Expenses	24,089
Restricted Cash	•
Restricted Cash	1,464,971
Total Current Assets	3,903,677
Noncurrent Assets	
Restricted Cash	574,511
Total Restricted Cash	574,511
Capital Assets	-
Depreciable Capital Assets, Net of Depreciation	14,662,081
Non-depreciable Capital Assets	504,442
Total Capital Assets	15,166,523
Other Assets	
Utility Deposit	525
Total Other Assets	525
Total Noncurrent Assets	15,741,559
Total Assets	19,645,236_
<b>Deferred Outflows of Resources</b>	
Deferred Loss on Refunding Bonds	12,476
Deferred Outflow of Resources Related to Pension	510,337
Total Deferred Outflows of Resources	522,813

#### Liabilities

# **Current Liabilities**

Accounts Payable	46,687
Payroll Liabilities	24,661
Accrued Expenses:	
Taxes	6,034
Interest	106,808
Current Maturities of Long-Term Debt	290,718
Total Current Liabilities	474,908
Noncurrent Liabilities	
Compensated Absence	20,828
Customers' Deposits	318,139
Bonds Payable	10,342,013
Aggregate Net Pension Liability	1,568,101
Total Noncurrent Liabilities	12,249,081
Total Liabilities	12,723,989
Deferred Inflows of Resources	
Deferred Inflow of Resources Related to Pension	205,368
Total Deferred Outflows of Resources	205,368
Net Position	
Net Investment in Capital Assets	4,546,268
Restricted - Expendable	1,721,343
Unrestricted	971,081
Total Net Position	\$ 7,238,692

# BARKLEY LAKE WATER DISTRICT STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION - PROPRIETARY FUND FOR THE YEAR ENDED DECEMBER 31, 2017

Operating Revenues	
Charges for Services	\$ 2,535,742
Miscellaneous Revenue	33,550
Total Operating Revenues	2,569,292
Operating Expenses	
Salaries, Wages and Benefits	1,276,474
Purchased Power	178,721
Chemicals	110,333
Materials and Supplies	204,173
Contract Services	44,207
Transportation Expense	51,137
Insurance	36,564
Miscellaneous	16,959
Taxes	60,048
Depreciation and Amortization	679,150
Total Operating Expenses	2,657,766
Operating Income (Loss)	(88,474)
Non-operating Revenues (Expenses)	
Interest Revenue	11,144
Federal Interest Subsidy	16,772
Interest Expense	(388,643)
Total Non-operating Revenues (Expenses)	(360,727)
Capital Contributions	
Contributed Capital	92,601
Total Capital Contributions	92,601
Change in Net Position	(356,600)
Net Position, Beginning of Year	7,595,289
Adjustments	3_
Net Position, End of Year	\$ 7,238,692

# BARKLEY LAKE WATER DISTRICT STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2017

# **Cash Flows from Operating Activities**

Received from Customers	\$ 2,562,052
Paid to Suppliers for Goods and Services	(678,376)
Paid to Employees	(1,093,046)
Net Cash Provided (used) by Operating Activities	790,630
Cash Flows from Capital and Related Financing Activities	
Acquisition and Construction of Property, Plant and Equipment	(333,725)
Proceeds from Capital Grants	162,331
Proceeds from Federal Interest Subsidy	16,772
Principal Paid on Long-Term Debt	(280,500)
Interest Paid on Debt	(381,277)
Net Cash Provided (used) by Capital and Related Financing Activities	(816,399)
Cash Flows from Investing Activities	
Interest Income	11,144
Net Cash Provided (used) by Investing Activities	11,144
Net Increase (Decrease) in Cash	(14,625)
Cash and Cash Equivalents, Beginning of Year	3,835,738
Cash and Cash Equivalents, End of Year	\$ 3,821,113

# BARKLEY LAKE WATER DISTRICT STATEMENT OF CASH FLOWS, CONTINUED FOR THE YEAR ENDED DECEMBER 31, 2017

# Reconciliation of Operating Activities to Net Cash Flows from Operating Activities

# **Cash Flows from Operating Activities**

Operating Income (Loss)	\$ (88,474)
Adjustments - Operating Activities	
Depreciation and Amortization	679,150
Bad Debt	4,934
Pension Contributions	196,681
Adjustment	(6,368)
(Increase) Decrease in	
Accounts Receivable	(19,146)
Other Receivable	(804)
Inventory	19,705
Prepaid Insurance	(3,193)
Contributions Made Subsequent to Measurement Date	(8,618)
Increase (Decrease) in	
Accounts Payable	14,426
Accrued Taxes	322
Payroll Liabilities	(6,033)
Compensated Absence	1,398
Tenant Deposits Payable	6,650
Net Cash Provided (Used) by Operating Activities	\$ 790,630
Non-Cash Activities	
Capital and Related Financing Activities	\$
Investing Activities	\$ 9

#### 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.

#### 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 three 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, 2017 was \$380,841.

#### 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, 2017 totaled \$183,526.

#### 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 income during that period. The cost of maintenance and repairs is charged to income 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.

# 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
Vahialas	5 Voors		

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 so 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 \$12,476 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 \$510,337 for the year ended December 31, 2017 that relate to pensions as required by GASB Statement No. 68.

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 so will not be recognized as an inflow of resources (revenue) until that time. The District has deferred inflows of resources of \$205,368 for the year ended December 31, 2017 that relate to pensions as required by GASB Statement No. 68.

#### 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 \$20,828 at December 31, 2017.

#### 1. Summary of Significant Accounting Policies, Continued

#### n. Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions and pension expense, information about the fiduciary net position of the 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. 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.

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.

#### 1. Summary of Significant Accounting Policies, Continued

#### q. Date of Management's Review

In preparing the financial statements, management has evaluated events and transactions for potential recognition or disclosure through May 29, 2018, 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.

As of December 31, 2017, the composition of the customer deposit fund is as follows:

Cash in Bank - Checking	\$ 310,501
Certificates of Deposit	 56,055
Total Customers' Deposit	\$ 366,556

#### 3. Customers' Deposits Fund, Continued

As of December 31, 2017, the District's liability for customers' deposit was:

Meter Deposits	\$ 315,302
Interest Payable	2,837
Total Customers' Deposit Liability	\$ 318,139

#### 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 1<sup>st</sup> to a maximum of \$477,803.

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

Cash in Bank - Sinking Fund	\$ 17,439
Cash in Bank - System Refunding	210,404
Cash in Bank - Sinking Fund	113,389
Cash in Bank - Regions Refunding	59,999
Cash in Bank - Regions Refunding	51,436
Certificate of Deposit - Sinking Fund	99,646
Total Bond Sinking and Reserve Funds	\$ 552,313

#### 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	Month	nly Deposit	Maximu	m Requirement
2005	\$	540	\$	64,800
2008C		-		14
2010A		1,755		210,600
2010B		755		90,600
2012E		=		18
2014		295		35,400

#### 5. Depreciation Fund, Continued

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, 2017, the depreciation cash and certificates of deposit totaled \$1,096,494.

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 accounts as detailed below. Initial funding was obtained through the 2008 bond issue.

Cash in Bank - Construction	\$	16,589
Cash in Bank - Regions Construction		7,530
	(	
Total Construction Funds	\$	24,119

#### 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.

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, 2017, the District held balances at two financial institutions. The highest cash day for one institution consisted of a bank balance totaling \$4,107,535. That balance was covered by \$500,000 Federal Deposit Insurance and the remainder by pledged securities of \$3,912,356. The deposits were fully collateralized during the fiscal year ended December 31, 2017.

#### 7. Deposits and Investments, Continued

The second institution had a highest cash day balance of \$255,098. 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, 2017, the deposits were fully collateralized.

#### 8. Capital Assets

Capital asset activity for the year ended December 31, 2017:

		Balance						Balance
	Jar	nuary 1, 2017	Addition	ıs	Elimina	tions	Dece	mber 31, 2017
Depreciable Assets								
Buildings - Water Plant	\$	10,474,079	\$		\$	Ę	\$	10,474,079
Buildings - General Plant		8,498	8,90	00		5		17,398
Pumping Equipment		21,434	ĺ	OH:		+		21,434
Transmission Lines		12,355,459	203,58	80		=		12,559,039
Meters		1,770,712	43,44			<u>-</u>		1,814,161
Plant Equipment		532,486	48,58			-		581,075
Office Equipment		120,167	ŕ	-				120,167
Vehicles		290,627	26,63	39_		-	·	317,266
Total Danna sights Assats		25 572 462	221.14					25 004 610
Total Depreciable Assets	_	25,573,462	331,15	5/	-		-	25,904,619
Accumulated Depreciation								
Buildings - Water Plant		3,526,248	250,58	82		<u>=</u>		3,776,830
Buildings - General Plant		2,070	1,23	34				3,304
Pumping Equipment		21,434	=					21,434
Transmission Lines		4,805,710	315,37	76		·		5,121,086
Meters		1,507,823	56,25	50		-		1,564,073
Plant Equipment		381,992	25,89	95		-		407,887
Office Equipment		109,836	4,37	70		-		114,206
Vehicles		208,275	25,44	43		<del></del>		233,718
Total Accumulated Depreciation		10,563,388	679,15	50		19 <b>4</b> 1		11,242,538
Net Depreciable Assets		15,010,074	(347,99	93)		0.55		14,662,081
Non-Depreciable Assets								
Land		117,522		-				117,522
Construction in Progress		384,350	2,57	70		3.75		386,920
Total Non-Depreciable Assets		501,872	2,57	70				504,442
Net Capital Assets		15,511,946	\$ (345,42	23)	\$		\$	15,166,523

Depreciation charged to expense was \$679,150 at December 31, 2017.

#### 9. Interest Expense

The District incurred interest costs in 2017 of \$388,643. 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	Orig	ginal 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						Balance		Current
	Jai	nuary 1, 2017	F	Proceeds	Re	payments	Dece	ember 31, 2017	An	nount Due
Revenue Bonds 2005	\$	1,030,500	\$		\$	19,500	\$	1,011,000	\$	20,500
Revenue Bonds 2008C		2,275,000		7 <b>%</b> .0		115,000		2,160,000		120,000
Revenue Bonds 2010A		3,860,500		:::::::::::::::::::::::::::::::::::::::		51,000		3,809,500		53,000
Revenue Bonds 2010B		1,710,985		•		27,500		1,683,485		28,500
Revenue Bonds 2012E		1,200,000		-		55,000		1,145,000		55,000
Revenue Bonds 2014		825,000		; <b>=</b> 1;		12,500		812,500		13,000
Premium on Bond 2012E		11,964		[ <b>*</b> .		718	0	11,246		718
Total Bond Obligation		10,913,949		±.		281,218		10,632,731		290,718
Compensated Absences		19,430		1,398		2		20,828		::±:
Customer Deposits		311,489		63,763		57,113		318,139		::=:
Net Pension Liability		1,421,206		146,895				1,568,101		8. <b>e</b> .
	\$	12,666,074	\$	212,056	\$	338,331	\$	12,539,799	\$	290,718

#### 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, 2017 for debt service (principal and interest) are as follows:

Maturity	Principal	Interest	Total
2018	\$ 290,000	\$ 375,606	\$ 665,606
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
2023-2027	1,918,000	1,449,164	3,367,164
2028-2032	1,628,000	1,124,700	2,752,700
2033-2037	1,575,000	821,413	2,396,413
2038-2042	1,342,500	567,938	1,910,438
2043-2047	1,427,500	321,190	1,748,690
2048-2052	1,086,485	90,186	1,176,671
2053-2057	67,500	 936	 68,436
	\$ 10,621,485	\$ 6,143,265	\$ 16,764,750

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, 2017 were \$16,772.

#### 10. Long-term Debt, Continued

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 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 includes 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, 2017. The requirement that the District be audited within 150 days of year-end was met.

#### 11. Employee Benefits

#### General Information about the Pension Plan

**Plan Description:** CERS is 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 <a href="https://kyret.ky.gov">https://kyret.ky.gov</a>.

#### 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.

#### 11. Employee Benefits, Continued

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, 2017 was 18.68% from January to June and 19.18% from July to December. This percentage includes a 4.73% contribution for insurance provided by the Program and a 13.95% contribution for pensions from January to June and a 4.70% contribution for insurance provided by the Program and a 14.48% contribution for pensions from July to December. Contributions related to the pension plan only, excluding insurance, from the District were \$99,289 for the year ended December 31, 2017.

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

At December 31, 2017, the District reported a liability of \$1,568,101 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2017. The total pension liability used to calculate the net pension liability was based on an actuarial valuation as of June 30, 2017. The District's proportion of the net pension liability was based on the contributions to CERS during the fiscal year ended June 30, 2017. At June 30, 2017, the District's proportion was 0.02679%, a decrease of 0.00208% from the prior year.

For the year ended December 31, 2017, the District recognized pension expense of \$196,681. At December 31, 2017, the District reported deferred outflows of resources and deferred inflows of resources related to pension from the following sources:

		Deferred itflows of		Deferred of
	R	esources	R	esources
Net difference between projected and actual investment earnings on pension plan investments	\$	124,192	\$	104,796
Net difference between expected and actual experience		1,945		39,805
Changes in actuarial assumptions		289,357		*
Changes in proportion and difference between employer contributions and proportionate share of contributions		40,893		60,767
District's contributions subsequent to the measurement date	_	53,950		·
Total	\$	510,337	\$	205,368

#### 11. Employee Benefits, Continued

The total Deferred Outflows and Deferred Inflows recognized in relation to the pension at December 31, 2017 are \$510,337 and \$205,368, 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 Dece	embe	er 31,
2018	\$	128,225
2019		102,478
2020		40,451
2021		(20,135)
2022		-
Total	\$	251,019

Actuarial Assumptions: For financial reporting, the actuarial valuation as of June 30, 2017 was performed by Gabriel Roeder Smith (GRS). The total pension liability, net pension liability, and sensitivity information as of June 30, 2017 were based on an actuarial valuation date as of June 30, 2016. The total pension liability was rolled-forward from the valuation date (June 30, 2016) to the plan's fiscal year ending June 30, 2017, using generally accepted actuarial principles. GRS did not perform the actuarial valuation as of June 30, 2016, 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 results of GRS' replication. Subsequent to the actuarial valuation date (June 30, 2016), 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, 2017, which were also used to determine the Total Pension Liability and Net Pension Liability as of June 30, 2017:

Inflation 2.30%

Salary Increases 3.05%, average, including inflation

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 (set back 1 year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. 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

#### 11. Employee Benefits, Continued

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.

**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 26 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.

				Current		
	19	% Decrease (5.25%)	Di	scount Rate (6.25%)	19	% Increase (7.25%)
District's Proportionate Share of Net Pension Liability	\$	1,977,714	\$	1,568,101	\$	1,225,463

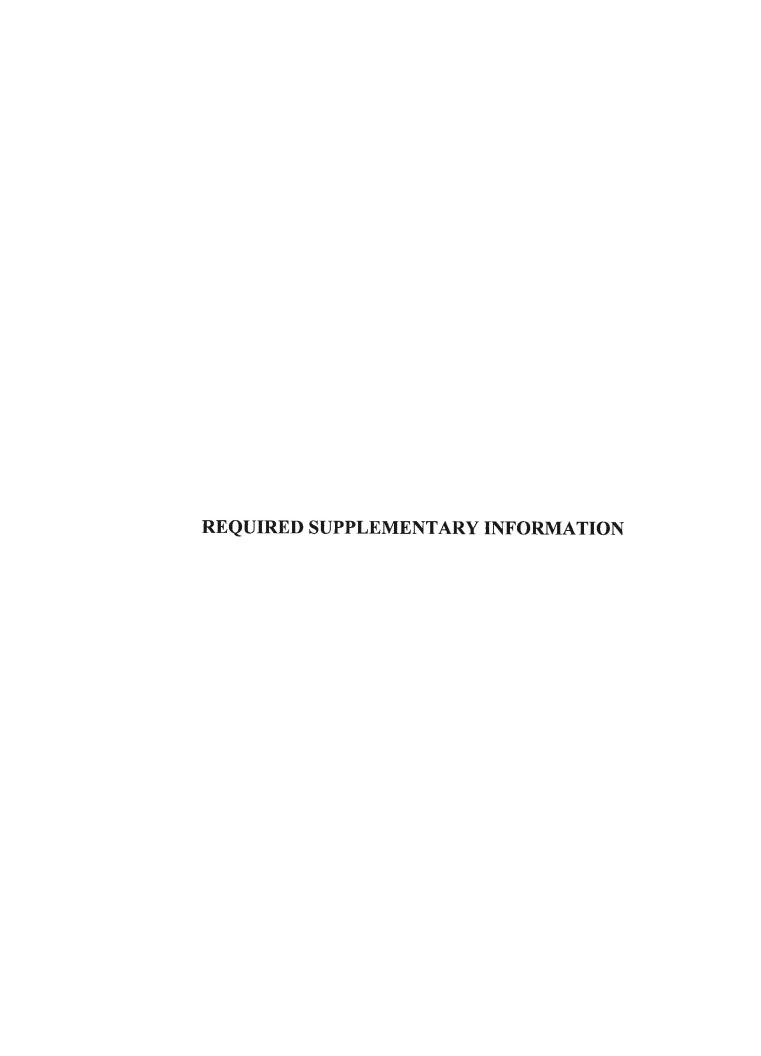
**Pension Plan Fiduciary Net Position:** Detailed information about the pension plan's fiduciary net position is available in the separately issued KRS financial report.

#### 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, 2017 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.



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

Non-Hazardous	2017	2016	2015	7	2014
City's Proportion of the Net Pension Liability (Asset)	0.02679%	0.02887%	0.02688%	0	0.02465%
City's Proportionate Share of the Net Pension Liability (Asset)	\$ 1,568,101	\$ 1,421,206	\$ 1,568,101 \$ 1,421,206 \$ 1,155,890 \$ 799,806	€	908,662
City's Covered-Employee Payroll	\$ 697,564	\$ 650,755	\$ 697,564 \$ 650,755 \$ 649,895 \$ 619,402	₩	519,402
City's Proportionate Share of the Net Pension Liability (Asset) as a Percentage of Its Covered-Employee Payroll	224.80%	218.39%	177.86%	, ,	129.13%
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	53.30%	\$5.50%	59.97%		%08.99

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 FOR THE YEARS ENDED DECEMBER 31

Non-Hazardous	2017		2016		2015		2014	
Contractually Required Contribution	\$	99,289	\$	86,839	\$	81,301	\$	82,112
Contributions in Relation to the Contractually Required Contribution		(99,289)		(86,839)		(81,301)		(82,112)
Contribution Deficiency (Excess)	\$	-	\$	( <del>4</del> )	\$	747	\$	¥8
City's Covered-Employee Payroll	\$	697,564	\$	650,755		649,895	\$	619,402
Contributions as a Percentage of Covered- Employee Payroll		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 CHANGES IN BENEFITS AND ASSUMPTIONS, CONTINUED FOR THE YEAR ENDED DECEMBER 31, 2017

#### **County Employee Retirement System**

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:

#### 2015:

- The assumed investment rate of return was decreased from 7.75% to 7.50%.
- The assumed rate of inflation was reduced from 3.50% to 3.25%.
- The assumed rate of wage inflation was reduced from 1.00% to 0.75%.
- The Payroll growth assumption was reduced from 4.50% to 4.00%.
- The mortality table used for active members is RP-2000 Combine Mortality Table projected with Scale BB to 2013 (multiplied by 5-% 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.

#### 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 5-% 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

# BARKLEY LAKE WATER DISTRICT SCHEDULE OF CHANGES IN BENEFITS AND ASSUMPTIONS, CONTINUED FOR THE YEAR ENDED DECEMBER 31, 2017

Method and assumptions used in calculations of actuarially determined contributions — The actuarially determined contribution rates are determined on an annual basis beginning with the fiscal year ending 2018, determined as of July 1, 2017. The amortization period of the unfunded liability has been reset as of July 1, 2013 to a closed 30-year period. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

Actuarial Cost Method Entry Age

Amortization Method Level Percentage of Payroll (2% Payroll Growth Assumed)

Remaining Amortization Period 26-Year Closed Period Asset Valuation Method 5-Year Smoothed Market

Investment Rate of Return 6.25% Inflation 2.30%

Salary Increase 3.30% to 11.55% (Varies by Service)

# 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, 2017, 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 May 29, 2018.

#### **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 that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

To the Board of Commissioners May 29, 2018 Page 2 of 2

#### **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 May 29, 2018

Calhour & company