

MUHLENBERG COUNTY WATER DISTRICT
FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2018

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INDEPENDENT AUDITORS' REPORT

To the Board of Commissioners
Muhlenberg County Water District
Greenville, Kentucky

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of the Muhlenberg County Water District as of and for the year ended December 31, 2018 and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents. The prior year comparative information has been derived from the District's December 31, 2017 financial statements and, in our report dated October 9, 2018 we expressed an unqualified opinion on the respective financial statements.

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.

Auditors' 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 of material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities of the Muhlenberg County Water District as of December 31, 2018 and the respective changes in financial position and 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 on pages 3 - 7 and schedule of proportionate share of the net pension liability, schedule of pension contributions and schedule of changes in benefits and assumptions on pages 32 - 35 and schedule of proportionate share of the net other post employment benefit liability, schedule of other post employment benefit contributions and schedule of changes in other post employment benefit plan benefits and assumptions on pages 36 - 38 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 November 1, 2019, on our consideration of the Muhlenberg County Water District's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Muhlenberg County Water District's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Muhlenberg County Water District's internal control over financial reporting and compliance.



Madisonville, Kentucky
November 1, 2019

**MUHLENBERG COUNTY WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS
DECEMBER 31, 2018
(UNAUDITED)**

As management of the Muhlenberg County Water District, we offer readers of the District's financial statements this narrative overview and analysis of the financial activities of the District for the years ended December 31, 2018 and 2017. For the years ended December 31, 2018 and 2017, the Muhlenberg County Water District has prepared the financial statements based on the guidelines provided in Governmental Accounting Standards Board (GASB) Statement No. 34.

FINANCIAL HIGHLIGHTS

- The total assets and deferred outflows of resources of the Muhlenberg County Water District exceeded its liabilities and deferred inflows of resources at the close of the 2018 year by \$5,311,208 (net position). Of this amount, \$(570,166) represents the unrestricted net position.
- The District's total net position decreased by \$60,499. Normal operating and non-operating activities decreased the District's net position by \$81,389. Capital contributions and grants increased net position by \$20,890.
- The District's total long-term bond, notes payable and net pension and OPEB liability decreased by \$374,317 from the prior year. In the statement of net position, long-term bonds are presented inclusive of deferred premium costs totaling \$81,022.

OVERVIEW OF THE FINANCIAL STATEMENTS

This discussion and analysis is intended to serve as an introduction to the District's basic financial statements. The District's basic financial statements are comprised of 1) the basic financial statements, and 2) notes to the financial statements. This report also contains other required supplementary information in addition to the basic financial statements themselves.

Basic financial statements – The basic financial statements are designed to provide readers with a broad overview of the District's finances, in a manner similar to private-sector business.

The Statement of Net Position presents information on all of the District's assets, deferred outflows, liabilities, and deferred inflows. The difference between the total of assets and deferred outflows and the total of liabilities and deferred inflows is 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.

The Statement of Revenues, Expenses, and Changes in Net Position presents information showing how the District's net position changed during the year. All changes in net position are reported when the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in the future fiscal periods (e.g., earned but unused compensated absences and unbilled revenues).

The Statement of Cash Flows includes information on the District's cash receipts and payments and the changes in cash balances resulting from operating activities, investing activities and financing activities.

Notes to the Financial Statements – The notes provide additional information that is essential to a full understanding of the data provided in the fund financial statements. The notes to the financial statements can be found on pages 11 - 31.

DISTRICT FINANCIAL ANALYSIS

As noted earlier, net position may serve over time as a useful indicator of a government's financial position. In the case of the District, assets and deferred outflows exceeded liabilities and deferred inflows by \$5,311,208 as of December 31, 2018.

MUHLENBERG COUNTY WATER DISTRICT'S NET POSITION

<u>Assets and Deferred Outflows of Resources</u>	<u>2018</u>	<u>2017</u>
Current and other assets	\$ 2,413,996	\$ 2,327,369
Capital assets	<u>7,242,771</u>	<u>7,624,582</u>
Total Assets	9,656,767	9,951,951
Deferred outflows of resources	<u>505,377</u>	<u>669,908</u>
Total Assets and Deferred Outflows of Resources	<u>10,162,144</u>	<u>10,621,859</u>
 <u>Liabilities and Deferred Inflows of Resources</u>		
Current and other liabilities	776,647	783,137
Long-term liabilities	<u>3,833,196</u>	<u>4,207,513</u>
Total Liabilities	4,609,843	4,990,650
Deferred inflows of resources	<u>241,093</u>	<u>259,502</u>
Total Liabilities and Deferred Inflows of Resources	<u>4,850,936</u>	<u>5,250,152</u>
 <u>Net Position</u>		
Net investment in capital assets	5,221,749	5,232,764
Restricted	659,625	668,845
Unrestricted	<u>(570,166)</u>	<u>(529,902)</u>
Total Net Position	<u>\$ 5,311,208</u>	<u>\$ 5,371,707</u>

The largest portion of the District's net position (98%) reflects its investments in capital assets (e.g., land and construction in progress, buildings, plants and facilities, machinery and equipment, system studies and mapping and infrastructure), less any debt used to acquire those assets that is still outstanding. The District uses these capital assets to provide services to citizens; consequently, these assets are not available for future spending. Although the District's investment in its capital assets are reported net of related debt, it should be noted the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities.

An additional portion of the District's net position (12%) represents resources that are subject to external restriction on how they may be used. The remaining balance of unrestricted net position is a deficit of \$(570,166) primarily due to the recognition of post employment employee benefit obligations during this year.

As of December 31, 2018, the District is able to report positive balances in net position related to capital assets and restricted net position.

Analysis of the District's Operations – Overall the District had a decrease in net position of \$60,499. Total revenues decreased \$(11,861) due to no significant capital grant activity.

The following table provides a summary of the District's operations for the year ended December 31, 2018 and 2017.

MUHLENBERG COUNTY WATER DISTRICT		
CHANGES IN NET POSITION		
	<u>2018</u>	<u>2017</u>
Revenues		
Metered water sales	\$ 3,454,141	\$ 3,379,719
Other operating revenues	254,650	259,891
Other water sales	136,711	190,550
Capital grants and contributions	20,890	26,300
Investment income	15,180	13,251
Total Revenues	<u>3,881,572</u>	<u>3,869,711</u>
Expenses		
Source of supply purchases	1,280,266	1,282,644
Administrative and general expenses	1,143,543	1,116,885
Transmission and distribution expenses	552,690	503,932
Depreciation and amortization	509,402	521,522
Customer accounts expenses	162,944	166,023
Pumping expenses	133,989	168,248
Interest on debt and other	91,095	123,359
Payroll and other taxes	66,548	68,428
Bad debts	35,404	30,620
Water treatment	20,517	16,131
(Gain) loss on equipment disposal	(54,327)	(34,078)
Total Expenses	<u>3,942,671</u>	<u>3,963,714</u>
Change in net position	(60,499)	(94,003)
Net position - January 1	5,371,707	5,926,817
Cumulative effective of change in accounting principle	-	(461,107)
Net position - December 31	<u>\$ 5,311,208</u>	<u>\$ 5,371,707</u>

FINANCIAL ANALYSIS OF THE DISTRICT'S OPERATIONS

The following provides an explanation of revenues by source that changed significantly from the prior year:

- Metered water sales increased by \$74,422 or 2.20% due to improved efforts to prevent water loss.
- Other water sales decreased by \$53,839 or 28.25% due to decrease in sales to TVA.

The following provides an explanation of expenditures by function that changed significantly from the prior year:

- Administrative and general expenses increased by \$26,658 due to an increase in legal fees incurred.
- Transmission and distribution expenses increased by \$48,758 due to increased water main maintenance costs and technical services.

CAPITAL ASSETS AND DEBT ADMINISTRATION

Capital Assets

The District's investment in capital assets for business-type activities as of December 31, 2018, amounts to \$7,242,771 (net of accumulated depreciation). This investment in capital assets includes land, buildings, plants and facilities, machinery and equipment, and infrastructure. The total decrease in the District's net investment in capital assets for the fiscal year was 5%.

	<u>2018</u>	<u>2017</u>
Business-type activities:		
Capital assets, not being depreciated:		
Land	\$ <u>39,752</u>	\$ <u>39,752</u>
Total capital assets, not being depreciated	<u>39,752</u>	<u>39,752</u>
Capital assets, being depreciated:		
Plants and facilities	6,453,711	6,846,576
Buildings	285,582	303,847
Vehicles and equipment	430,990	379,619
Office furniture and equipment	<u>32,736</u>	<u>54,788</u>
Total capital assets, being depreciated	<u>7,203,019</u>	<u>7,584,830</u>
Business-type activities capital assets, net	<u>\$ 7,242,771</u>	<u>\$ 7,624,582</u>

Major capital asset transactions/events during the fiscal year included:

- Purchase of five new vehicles \$160,393.
- General equipment \$17,086.
- Construction equipment \$57,995

Additional information on the District's capital assets can be found in Note 4.

Long-term and other debt

At the end of the current year, the Muhlenberg County Water District had total debt of \$1,940,000 before deferred unamortized premium of \$81,022. No new debt was incurred during the year.

	<u>2018</u>	<u>2017</u>
Revenue bonds payable	\$ 1,940,000	\$ 2,285,000
Plus unamortized premiums	<u>81,022</u>	<u>106,818</u>
Total	<u>\$ 2,021,022</u>	<u>\$ 2,391,818</u>

Additional information on the District's long-term debt can be found in Note 6.

REQUEST FOR INFORMATION

The financial report is designed to provide our citizens, customers, investors and creditors with a general overview of the District's finances. If you have any questions about this report or need any additional information, contact the Office Manager, at P.O. Box 348, Greenville, Kentucky 42345 or call (270) 338-1300.

Muhlenberg County Water District
Statements of Net Position
December 31, 2018 and 2017

<u>ASSETS</u>			
<u>Assets</u>		<u>2018</u>	<u>2017</u>
Cash equivalents		\$ 830,091	\$ 749,241
Customer accounts receivable (less allowance for uncollectible accounts of \$18,885 and \$30,358)		285,810	275,608
Unbilled revenue		259,871	262,821
Other receivables		6,052	6,052
Prepayments		15,203	20,097
Inventory		121,849	103,912
Restricted assets:			
Cash equivalents		715,120	729,638
Investments, at fair value		180,000	180,000
Capital assets, net of depreciation		<u>7,242,771</u>	<u>7,624,582</u>
Total Assets		<u>9,656,767</u>	<u>9,951,951</u>
<u>Deferred Outflows of Resources</u>			
Related to pensions and other post employment benefits		<u>505,377</u>	<u>669,908</u>
Total Assets and Deferred Outflows		<u>10,162,144</u>	<u>10,621,859</u>
<u>LIABILITIES</u>			
<u>Liabilities</u>			
Trade accounts payable		131,180	135,011
Accrued liabilities		64,972	62,333
Accrued interest on debt		43,235	50,653
Customers' deposits		192,260	190,140
Long-term debt due in one year		345,000	345,000
Noncurrent liabilities:			
Long-term debt due after one year		1,676,022	2,046,818
Net pension and other post employment benefits liabilities		<u>2,157,174</u>	<u>2,160,695</u>
Total Liabilities		<u>4,609,843</u>	<u>4,990,650</u>
<u>Deferred Inflows of Resources</u>			
Related to pensions and other post employment benefits		<u>241,093</u>	<u>259,502</u>
Total Liabilities and Deferred Inflows		<u>4,850,936</u>	<u>5,250,152</u>
<u>NET POSITION</u>			
<u>Net Position</u>			
Net investment in capital assets		5,221,749	5,232,764
Restricted for:			
Debt Service, Customer Deposits and Equipment Upgrades		659,625	668,845
Unrestricted		<u>(570,166)</u>	<u>(529,902)</u>
Total Net Position		<u>\$ 5,311,208</u>	<u>\$ 5,371,707</u>

See accompanying notes to financial statements.

Muhlenberg County Water District
Statements of Revenues, Expenses, and Changes in Net Position
For the Years Ended December 31, 2018 and 2017

	<u>2018</u>	<u>2017</u>
<u>Operating Revenue</u>		
Water revenues	\$ 3,590,852	\$ 3,570,269
Other	<u>254,650</u>	<u>259,891</u>
Total Operating Revenues	<u>3,845,502</u>	<u>3,830,160</u>
<u>Operating Expenses</u>		
Source of supply purchases	1,280,266	1,282,644
Administrative and general expenses	1,143,543	1,116,885
Transmission and distribution expenses	552,690	503,932
Depreciation	535,198	547,318
Customer accounts expenses	162,944	166,023
Pumping expenses	133,989	168,248
Payroll and other taxes	66,548	68,428
Bad debts	35,404	30,620
Water treatment	<u>20,517</u>	<u>16,131</u>
Total Operating Expenses	<u>3,931,099</u>	<u>3,900,229</u>
<u>Operating Income (Loss)</u>	<u>(85,597)</u>	<u>(70,069)</u>
<u>Nonoperating Revenues (Expenses)</u>		
Investment income	15,180	13,251
Gain (loss) on capital asset disposals	54,327	34,078
Interest on debt	(88,513)	(103,240)
Debt amortization	25,796	25,796
Other interest expense	<u>(2,582)</u>	<u>(20,119)</u>
Total Nonoperating Revenue (Expenses)	<u>4,208</u>	<u>(50,234)</u>
<u>Net Income Before Capital Contributions</u>	(81,389)	(120,303)
<u>Capital Contributions and Grants</u>	<u>20,890</u>	<u>26,300</u>
<u>Change in Net Position</u>	(60,499)	(94,003)
<u>Net Position-Beginning of Year</u>	5,371,707	5,926,817
<u>Cumulative effect of change in accounting principle</u>	<u>-</u>	<u>(461,107)</u>
<u>Net Position-End of Year</u>	<u>\$ 5,311,208</u>	<u>\$ 5,371,707</u>

See accompanying notes to financial statements.

Muhlenberg County Water District
Statements of Cash Flows
For the Years Ended December 31, 2018 and 2017

	<u>2018</u>	<u>2017</u>
<u>Cash Flows from Operating Activities</u>		
Cash received from customers	\$ 3,838,250	\$ 3,818,358
Cash payments to suppliers for goods and services	(1,869,438)	(1,839,937)
Cash payments to employees for services	(1,395,976)	(1,394,157)
Net Cash Provided (Used) By Operating Activities	<u>572,836</u>	<u>584,264</u>
<u>Cash Flows From Capital and Related Financing Activities</u>		
Principal paid on capital debt	(345,000)	(395,000)
Contributed capital	20,890	26,300
Acquisition of property, plant, and equipment	(235,474)	(195,417)
Proceeds from equipment disposal	136,414	98,625
Interest paid on debt	(98,514)	(131,851)
Net Cash Provided (Used) By Capital and Related Financing Activities	<u>(521,684)</u>	<u>(597,343)</u>
<u>Cash Flows From Investing Activities</u>		
Income received on investments	<u>15,180</u>	<u>13,251</u>
Net Cash Provided (Used) By Investing Activities	<u>15,180</u>	<u>13,251</u>
<u>Net Increase (Decrease) in Cash Equivalents</u>	66,332	172
<u>Cash Equivalents-Beginning of Year</u>	<u>1,478,879</u>	<u>1,478,707</u>
<u>Cash Equivalents-End of Year</u>	<u>\$ 1,545,211</u>	<u>\$ 1,478,879</u>
<u>Reconciliation of Operating Income to Net Cash Provided</u>		
<u>By Operating Activities</u>		
Operating Income (Loss)	\$ (85,597)	\$ (70,069)
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	535,198	547,318
Provision for uncollectible accounts	(11,473)	-
Change in assets and liabilities		
Decrease (increase) in accounts receivable	4,221	(11,802)
Decrease (increase) in inventory	(17,937)	(21,576)
Decrease (increase) in prepayments	4,894	3,215
Decrease (increase) in deferred outflows	164,531	(430,309)
Increase (decrease) in accounts payable	(3,830)	(1,046)
Increase (decrease) in customer deposits	2,120	6,970
Increase (decrease) in accrued liabilities	2,639	12,801
Increase (decrease) in deferred inflows	(18,409)	111,713
Increase (decrease) in net pension and OPEB liabilities	(3,521)	437,049
Net Cash Provided (Used) By Operating Activities	<u>\$ 572,836</u>	<u>\$ 584,264</u>
<u>Reconciliation of Total Cash</u>		
Current Assets - Cash	\$ 830,091	\$ 749,241
Restricted Assets - Cash	715,120	729,638
Total Cash	<u>\$ 1,545,211</u>	<u>\$ 1,478,879</u>
<u>Non-cash Investing, Capital and Related Financing Activities - None</u>		

See accompanying notes to financial statements.

Muhlenberg County Water District
Notes to the Financial Statements
For the Year Ended December 31, 2018

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Muhlenberg County Water District, (the District), was established under the provisions of Chapter 74 of the Kentucky Revised Statutes in July 1962. Actual operations began in December 1967. The Muhlenberg County Judge Executive appoints a three member commission that oversees the District's water system which renders services based on user charges.

The accounting and reporting policies of the Commission relating to the fund included in the accompanying financial statements conform to accounting principles generally accepted in the United States of America applicable to state and local governments. Generally accepted accounting principles for local governments include those principles prescribed by the Governmental Accounting Standards Board (GASB), the American Institute of Certified Public Accountants in the publication entitled *Audits of State and Local Governmental Units* and by the Financial Accounting Standards Board (when applicable). The District follows GASB pronouncements as codified under GASB 62. The more significant accounting policies of the District are described below:

Reporting Entity

The District, for financial purposes, includes all of the accounts relevant to the operations of the Muhlenberg County Water District owned water system in accordance with generally accepted accounting principles. The District has adhered to the standards set forth in Statement No. 14, as amended by Statement No. 61 of the Governmental Accounting Standards Board in reporting the primary government (including blended component units), discretely presented component units, the reporting entity and related relationships with the District.

Basis of Presentation

The accounts of the District are organized in accordance with the uniform system of accounts adopted by the Public Service Commission of Kentucky. Those accounts are organized on the basis of a proprietary fund type, specifically an enterprise fund. The operations of each fund are summarized by providing a separate set of self balancing accounts which include its assets, deferred outflows, liabilities, deferred inflows, net position, revenues and expenses. The following funds are used by the District:

Proprietary Fund Types

Proprietary funds are accounted for using the economic resources measurement focus and the accrual basis of accounting. The accounting objectives are determinations of net income, financial position and cash flow. All assets, deferred outflows, liabilities, and deferred inflows are included on the Statement of Net Position.

Measurement Focus/Basis of Accounting

Measurement focus refers to what is being measured; basis of accounting refers to when revenues and expenditures are recognized in the accounts and reported in the financial statements. Basis of accounting relates to the timing of the measurement made, regardless of the measurement focus applied. The accounting and financial statements for a proprietary fund are reported using the economic resources measurement focus and the accrual basis of accounting. The economic resources measurement focus means all assets and all liabilities (whether current or non-current) are included on the statement of net position and the operating statements present increases (revenues) and decreases (expenses) in net total position. Under the accrual basis of accounting, revenues are recognized when earned and can be determined with reasonable accuracy, including

Muhlenberg County Water District
Notes to the Financial Statements
For the Year Ended December 31, 2018

unbilled water services which are accrued. Expenses are recognized at the time the liability is incurred.

Operating Revenues/Expenses

Proprietary funds distinguish operating revenues and expense from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations and consist primarily of charges to customers or agencies, cost of sales and services, administrative expenses, and depreciation of capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

Budgets

The District adopted a fixed budget for the fiscal year ended December 31, 2018. Flexible budgets prepared for several levels of possible activity are better for proprietary fund planning, control, and evaluation purposes than fixed budgets. For this reason, actual comparison of the fixed operating budget adopted by the District and the actual operating revenues and expenses are not shown in these financial statements.

The District is required to follow budgetary guidelines established by the Public Service Commission and the Department of Rural Development. Those guidelines require:

- 1) The District to submit a proposed budget for the fiscal year commencing the following January 1. The operating budget includes proposed expenditures and the means of financing them for the upcoming year.
- 2) The District is required to submit a budget to the Department of Rural Development for each fiscal year as stipulated in the bond agreement.

For the year ended December 31, 2018, the District has complied with budgetary guidelines.

Cash Equivalents/ Investments

Cash equivalents used for operations are deposited with Old National Bank. Cash equivalents used for debt service are deposited with Regions Bank. District ordinances authorize the District to invest in obligations of the U.S. Government and its instrumentalities, mutual funds, repurchase agreements, and demand deposits. All investments must be purchased through brokers/dealers or deposited with local financial institutions.

For the purpose of the statement of cash flows, the District considers cash equivalents to be all cash in banks and certificates of deposit with stated maturities of three months or less or available for withdrawal by management.

Compensated Absences

The District recognizes a liability for unpaid compensated absences arising from unpaid sick time in accordance with Governmental Accounting Standards Board (GASB) Statement 16. GASB Statement 16 requires employers to accrue a liability for future vacation, sick, and other leave benefits that meet the following conditions:

- 1) The employer's obligation relating to employees' rights to receive compensation for future absences is attributable to employees' services already rendered.

Muhlenberg County Water District
Notes to the Financial Statements
For the Year Ended December 31, 2018

- 2) The obligation relates to rights that vest or accumulate.
- 3) Payment of the compensation is probable.
- 4) The amount can be reasonably estimated.

Employees earn vacation leave on their hire date anniversary of each year. Employees hired during the first 6 months of any year will receive 5 days of vacation during the first year of employment and 10 days of vacation during the second year. Persons hired during the last 6 months of any year receive days on a prorated basis during the first year of employment. Vacation days after the second year of employment are earned as 10 days in the third to the fifth year, 15 days in the sixth through tenth year and 20 days after year ten. Vacation leave may not be carried forward from one year to the next. Each year employees receive 12 sick and/or personal days. Sick days may be carried forward into the next year if not used. Payment is made for any unused sick and personal leave upon resignation or retirement. Sick and personal leave benefits are limited to a maximum carryover of 50 days.

Prepaid Items

Payments made to vendors for services that will benefit periods beyond December 31, 2018 are recorded as prepaid items.

Capital Assets

Capital assets, which include property, plant and equipment, are stated at historical cost. Donated capital assets are stated at their fair market value on the date donated. Proprietary fund capital assets are recorded in the respective funds and depreciated using the straight line method. Repairs and maintenance are recorded as expenses. Estimated useful lives, in years, for depreciable assets are as follows:

Utility System	20 to 65 years
Furniture, Machinery and Equipment	5 to 10 years
Improvements	5 to 10 years
Vehicles	3 to 5 years

Allowance for Uncollectible Accounts

An allowance for uncollectible accounts has been provided based on prior years' loss experiences as a percentage of revenues billed. Based on past experience, management considers the allowance of \$18,885 adequate to provide for any losses on collection of the accounts receivable.

Inventory

Inventories are stated at cost using the first-in first-out (FIFO) method. Inventory consists primarily of replacement parts and supplies.

Restricted Assets

The restricted assets have been handled in accordance with the provisions of the various enterprise fund revenue bond resolutions, loan resolutions, loan agreements, or by state or federal laws and regulations. When both restricted and unrestricted resources are available for use, it is the District's policy to use restricted resources first, then unrestricted resources as needed. See Note 3 for information describing restricted net position.

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Estimates

The preparation of the District's financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Risk Management

The District is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disaster. During the year ended December 31, 2018, the District contracted with commercial insurance carriers for coverage of all risks mentioned above. Settled claims resulting from these risks have not exceeded commercial insurance coverage in any of the past three years. There were no significant reductions in coverage during the past three years.

Bond Premiums

Bond premiums on long-term debt are capitalized and amortized to interest expense over the terms of the respective bonds using a method that approximates the effective interest method. Issuance costs are reported as expenses.

Net Position

Net position represents the difference between the total of assets and deferred outflows and the total of liabilities and deferred inflows. Net position is classified into three categories: 1) Net position invested in capital assets consists of capital assets net of accumulated depreciation, reduced by the outstanding balance of any borrowing used for the acquisition, construction or improvements of those assets, and adding back unspent debt proceeds. 2) Restricted net position is reported as restricted when there are limitations imposed on its use either through enabling legislation adopted by the District or through external restrictions imposed by creditors, grantors, or laws or regulations of other governments. 3) Unrestricted net position represents amounts that do not meet the definition of "restricted" or "net investment in capital assets".

Reclassifications

Certain 2017 balances have been reclassified to conform to the 2018 presentation.

Adoption of New Accounting Pronouncements

GASB Statement No. 85

GASB Statement No. 85, *Omnibus 2017*, was issued in March, 2017. The provisions of this Statement are effective for periods beginning after June 15, 2017. The objective of this Statement is to address practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits [OPEB]). The District's management has determined the effect this statement will have on the financial statements is not material.

GASB Statement No. 86

GASB Statement No. 86, *Certain Debt Extinguishment issues*, was issued in May, 2017. The provisions of this Statement are effective for periods beginning after June 15, 2017. The requirements of this Statement will increase consistency in accounting and financial reporting for debt extinguishments by establishing uniform guidance for derecognizing debt that is defeased in

Muhlenberg County Water District
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substance, regardless of how cash and other monetary assets placed in an irrevocable trust for the purpose of extinguishing that debt were acquired. The requirements of this Statement also will enhance consistency in financial reporting of prepaid insurance related to debt that has been extinguished. In addition, this Statement will enhance the decision-usefulness of information in notes to financial statements regarding debt that has been defeased in substance. The District does not currently have any transactions meeting this criteria.

Recent Accounting Pronouncements

As of December 31, 2018, the GASB has issued the following statements not yet required to be adopted by the District.

GASB Statement No. 83

GASB Statement No. 83, *Certain Asset Retirement Obligations*, was issued in November 2016. The provisions of this Statement are effective for periods beginning after June 15, 2018. This statement will enhance comparability of financial statements among governments by establishing uniform criteria for governments to recognize and measure certain asset retirement obligations (ARO), including obligations that may not have been previously reported. The Statement also will enhance the decision usefulness of the information provided to the financial statement users by requiring disclosures related to those AROs. This Statement establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for AROs. This Statement requires that recognition occur when the liability is both incurred and reasonably estimable. The determination of when the liability is incurred should be based on the occurrence of external laws, regulations, contracts, or court judgments, together with the occurrence of an internal event that obligates a government to perform asset retirement activities. Laws and regulations may require governments to take specific actions to retire certain tangible capital assets at the end of the useful lives of those capital assets. Other obligations to retire capital assets may arise from contracts or court judgments. Internal obligating events include the occurrence of contamination, placing into operation a tangible capital asset that is required to be retired, abandoning a tangible capital asset before it is placed into operation, or acquiring a tangible capital asset that has an existing ARO. The District's management has not yet determined the effect this statement will have on the financial statements.

GASB Statement No. 84

GASB Statement No. 84, *Fiduciary Activities*, was issued in January 2017. The provisions of this Statement are effective for periods beginning after December 15, 2018. The requirements of this Statement will enhance consistency and comparability by (1) establishing specific criteria for identifying activities that should be reported as fiduciary activities and (2) clarifying whether and how business-type activities should report their fiduciary activities. Greater consistency and comparability enhances the value provided by the information reported in financial statements for assessing government accountability and stewardship. The District's management has not yet determined the effect this statement will have on the financial statements.

GASB Statement No. 87

GASB Statement No. 87, *Leases*, was issued in June, 2017. The provisions of this Statement are effective for periods beginning after December 15, 2019. This Statement will increase the usefulness of governments' financial statements by requiring reporting of certain lease liabilities that currently are not reported. It will enhance comparability of financial statements among governments by requiring lessees and lessors to report leases under a single model. This Statement also will enhance the decision-usefulness of the information provided to financial statement users

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by requiring notes to financial statements related to the timing, significance, and purpose of a government's leasing arrangements. The District's management has not yet determined the effect this statement will have on the financial statements.

GASB Statement No. 88

GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, was issued in April, 2018. The provisions of this Statement are effective for periods beginning after June 15, 2018. The requirements of this Statement will improve financial reporting by providing users of financial statements with essential information that currently is not consistently provided. In addition, information about resources to liquidate debt and the risks associated with changes in terms associated with debt will be disclosed. As a result, users will have better information to understand the effects of debt on a government's future resource flows. The District's management has not yet determined the effect this statement will have on the financial statements.

GASB Statement No. 89

GASB Statement No. 89, *Accounting for Interest Cost Incurred Before The End of a Construction Period*, was issued in June, 2018. The provisions of this Statement are effective for periods beginning after December 15, 2019. The requirements of this Statement will improve financial reporting by providing users of financial statements with more relevant information about capital assets and the cost of borrowing for a reporting period. The resulting information also will enhance the comparability of information about capital assets and the cost of borrowing for a reporting period for both governmental activities and business-type activities. The District's management has not yet determined the effect this statement will have on the financial statements.

GASB Statement No. 90

GASB Statement No. 90, *Majority Equity Interests - An Amendment of GASB Statements No. 14 and No. 61*, was issued in August, 2018. The provisions of this Statement are effective for periods beginning after December 15, 2018, with earlier adoptions encouraged. The requirements of this Statement will improve financial reporting by providing users of financial statements with essential information related to presentation of majority equity interests in legally separate organizations that previously was reported inconsistently. In addition, if the government acquires a 100 percent equity interest, it is to account for its assets, deferred outflows of resources, liabilities, and deferred inflows of resources at acquisition value at the date the government acquired a 100 percent equity interest in the component unit. The District's management has not yet determined the effect this statement will have on the financial statements.

Subsequent Events

Date of Management Evaluation

The District has evaluated subsequent events through November 1, 2019, the date which the financial statements were available to be issued.

Muhlenberg County Water District
Notes to the Financial Statements
For the Year Ended December 31, 2018

2. DEPOSITS AND INVESTMENTS

1. Statement of Net Position Cash Presentation

The captions on the statement of net position for cash, investments and restricted assets enumerated as to deposits and investments and the amounts in total are as follows:

	<u>Deposits</u>	<u>Investments</u>	<u>Total</u>
Cash equivalents	\$ 830,091	\$ -	\$ 830,091
Restricted assets:			
Cash equivalents	715,120	-	715,120
Investments	<u>180,000</u>	<u>-</u>	<u>180,000</u>
Total	<u>\$ 1,725,211</u>	<u>\$ -</u>	<u>\$ 1,725,211</u>

2. Deposits

Old National Bank

At year-end, the carrying amount of the District's deposits held by Old National Bank were \$1,388,333 and the bank balances were \$1,437,794. Of the bank balances, \$250,000 was covered by federal depository insurance, with \$1,187,794 covered by collateral held by the pledging financial institution's agent or trust department in the District's name.

Regions Bank

At year-end, the carrying amount of the District's deposits held by Regions Bank in the Regions Trust Cash Sweep RTCS III account were \$336,878 and the bank balances were \$336,878. Of the bank balances, \$250,000 was covered by federal depository insurance, with \$86,878 covered by perfected liens on Regions Bank's securities in an amount not less than 105% of the total excess deposits. In the event of a default, the collateral reverts to the Collateral Agent to be distributed to the account owners. The collateral may include United States Government Obligations, United States Senior Debt Agencies and municipal securities with an underlying rating of A or better. The RTCS fund is a permitted account as authorized by the Kentucky Rural Water Finance Program.

3. Investments

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Investments held for longer periods are subject to increased risk of adverse interest rate changes. The District does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The custodial credit risk for investments is the risk that a government will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party if the counterparty to the transaction fails.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the District's investment in a single issuer. The District does not place any limit on the amount that may be

Muhlenberg County Water District
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invested with one issuer. At December 31, 2018, the District had 100% of its investments in fully collateralized certificates of deposit.

Identification

At December 31, 2018, the District had the following investments:

Investment	Maturities	Fair Value
Certificates of Deposit:		
Old National Bank	1/1/2021	\$ 180,000
Total Investments		<u>\$ 180,000</u>

3. NET POSITION

Net Investment in Capital Assets

A portion of the net position consists of capital assets net of accumulated depreciation and reduced by outstanding debt attributed to the acquisition, construction or improvement of the assets.

Net Investment in Capital Assets

Capital Assets, Net of Depreciation	\$ 7,242,771
Less Revenue Bonds Payable	(1,940,000)
Less Unamortized Bond Premium	<u>(81,022)</u>
Total	<u>\$ 5,221,749</u>

Net Position Restricted for Debt Retirement and Customer Deposits

A portion of the net position is reserved for debt retirement and customer deposits. The reserved portion is calculated as follows:

	Depreciation Fund	Payment/ Escrow Fund	Customer Deposits & Equipment Upgrades	Total
Cash equivalents	\$ 69,587	\$ 437,014	\$ 208,519	\$ 715,120
Investments:				
Certificates of deposit	180,000	-	-	180,000
Totals	<u>\$ 249,587</u>	<u>\$ 437,014</u>	<u>\$ 208,519</u>	<u>\$ 895,120</u>

Debt Requirement Restricted Assets

Depreciation Fund	\$ 249,587
Payment and Escrow Funds	437,014
Customer Deposit Cash and Equipment Upgrades	<u>208,519</u>
Total	\$ 895,120

Current Portion of Debt Interest and Customer Deposits

Customer Deposits	\$ (192,260)
Accrued Interest Payable	<u>(43,235)</u>
Total	(235,495)

<u>Net Position Restricted for Debt Interest and Customer Meter Deposits</u>	<u>\$ 659,625</u>
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Muhlenberg County Water District
Notes to the Financial Statements
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Customer Deposits

Customer deposits for utility services are segregated and invested on a short-term basis. At December 31, 2018, customer deposits of \$196,700 (including \$4,440 inactive deposits) were deposited in an interest bearing account in Old National Bank for the purpose of refunding customer deposits.

Equipment Upgrades

At December 31, 2018, the District had \$11,819 of monies restricted for funding the purchase and repayment of debt related to automated meters that were installed during 2014.

4. **CAPITAL ASSETS**

A summary of proprietary fund property, plant and equipment at December 31, 2018 for business-type activities follows:

	Beginning Balance	Increases	Decreases	Ending Balance
Business-type activities:				
Capital assets, not being depreciated:				
Land	\$ 39,752	\$ -	\$ -	\$ 39,752
Total capital assets, not being depreciated	<u>39,752</u>	<u>-</u>	<u>-</u>	<u>39,752</u>
Capital assets, being depreciated:				
Plants and facilities	14,492,484	-	-	14,492,484
Buildings	851,850	-	-	851,850
Vehicles and equipment	1,008,500	235,474	(191,750)	1,052,224
Office furniture and equipment	288,433	-	-	288,433
Total capital assets, being depreciated	<u>16,641,267</u>	<u>235,474</u>	<u>(191,750)</u>	<u>16,684,991</u>
Less accumulated depreciation for:				
Plants and facilities	(7,645,908)	(392,865)	-	(8,038,773)
Buildings	(548,003)	(18,265)	-	(566,268)
Vehicles and equipment	(628,881)	(102,016)	109,663	(621,234)
Office furniture and equipment	(233,645)	(22,052)	-	(255,697)
Total accumulated depreciation	<u>(9,056,437)</u>	<u>(535,198)</u>	<u>109,663</u>	<u>(9,481,972)</u>
Total capital assets, being depreciated, net	<u>7,584,830</u>	<u>(299,724)</u>	<u>(82,087)</u>	<u>7,203,019</u>
Business-type activities capital assets, net	<u>\$ 7,624,582</u>	<u>\$ (299,724)</u>	<u>\$ (82,087)</u>	<u>\$ 7,242,771</u>

5. **EMPLOYEES' RETIREMENT PLAN**
County Employees' Retirement System

Plan Description

The District is a participant in the Commonwealth of Kentucky's County Employees' Retirement System (CERS), a cost-sharing multiple-employer defined benefit pension plan administered by the Kentucky Retirement Systems Board of Trustees (KRS Board) established pursuant to Kentucky Revised Statutes (KRS) Section 78.630. KRS Section 61.645 grants the authority to establish and amend the benefit terms to the KRS Board. All local employees participating in CERS are classified as having either a hazardous or nonhazardous position for the purpose of KRS 61.592. Kentucky Retirement Systems issues a publicly available comprehensive annual financial report containing CERS information that can be obtained at <https://kyret.ky.gov>.

Muhlenberg County Water District
Notes to the Financial Statements
For the Year Ended December 31, 2018

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, non-hazardous and hazardous employees are grouped into three tiers, based on hire date.

Non-hazardous members:

Tier 1	Participation Date	Prior to September 1, 2008
	Unreduced retirement	27 years of service or 65 years old
	Reduced retirement	Minimum 5 years of service and 55 years old Minimum 25 years of service and any age
Tier 2	Participation Date	September 1, 2008 and December 31, 2013
	Unreduced retirement	Minimum 5 years of service and 65 years old
	Reduced retirement	Age of 57 or older and sum of service years plus age equal 87 Minimum 10 years of service and 60 years old
Tier 3	Participation Date	After December 31, 2013
	Unreduced retirement	Minimum 5 years of service and 65 years old
	Reduced retirement	Age of 57 or older and sum of service years plus age equal 87 Not available

Contributions

State statute requires active members to contribute a percentage of creditable compensation based on the tier:

	<u>Required Contributions</u>
Tier 1	5%
Tier 2	5% plus 1% for insurance
Tier 3	5% plus 1% for insurance

Employers are required by state statute (KRS 78.545) to contribute the remaining amounts necessary to pay benefits when due. These contribution rates are determined by the KRS Board annually based upon actuarial valuations. For the year ended December 31, 2018, the employer contribution rate was 14.48% from January 1, 2018 through June 30, 2018 and 16.22% from July 1, 2018 through December 31, 2018, respectively of members' nonhazardous salaries. The employer contribution when combined with employee contributions are expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The contribution requirements and the amounts contributed to CERS for the year ending December 31, 2018 were \$137,931. Of this amount, \$104,144 is considered contributed to the pension requirement and \$33,787 is considered contributed to the health insurance requirement.

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

At December 31, 2018, the District reported a net pension liability of \$1,670,266 for its proportionate share of the CERS net pension liability. The net pension liability was measured as of June 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2017, using generally accepted actuarial principles. The District's proportion of the net pension liability was determined using the District's actual contributions for the plan year ended June 30, 2018. This method is expected to be reflective of the District's long-term contribution effort. At June 30, 2018, the District's proportion

Muhlenberg County Water District
Notes to the Financial Statements
For the Year Ended December 31, 2018

was 0.027424 percent for nonhazardous classified employees.

For the year ended December 31, 2018, the District recognized pension expense of \$228,986. At December 31, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

<u>Types of Deferred Resources</u>	<u>Deferred Outflows</u>	<u>Deferred Inflows</u>	<u>Net Amounts</u>
Net difference between projected & actual earnings on pension plan investments	\$ 77,669	\$ 97,696	\$ (20,027)
Changes in proportion and differences between employer contributions and proportionate share of contributions	33,569	23,882	9,687
Change of Assumptions	163,234	-	163,234
Contributions subsequent to the measurement date	56,827	-	56,827
Difference between expected & actual experience	<u>54,479</u>	<u>24,449</u>	<u>30,030</u>
Total	<u>\$ 385,778</u>	<u>\$ 146,027</u>	<u>\$ 239,751</u>

The \$56,827 reported as deferred outflows of resources related to pensions resulting from the District's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ending December 31, 2019.

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

<u>Years Ending</u>	<u>Amortization (Accretion)</u>
December 31, 2019	\$ 134,018
December 31, 2020	77,563
December 31, 2021	(19,693)
December 31, 2022	<u>(8,964)</u>
Total	<u>\$ 182,924</u>

Actuarial assumptions

The total pension liability, net pension liability and sensitivity information in the June 30, 2018 actuarial valuation was based on an actuarial valuation date of June 30, 2017. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending June 30, 2018, using generally accepted actuarial principles. There were no changes in actuarial assumptions since June 30, 2017. 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 rate of pay 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 the member's final pay rate to 50% of average pay for one child, 65% of average pay for two children, or 75% of average pay for three children.

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For the Year Ended December 31, 2018

Valuation date	June 30, 2017
Experience study	July 1, 2008 - June 30, 2013
Actual cost method	Entry age normal
Amortization method	Level percentage of pay
Remaining amortization period	25 years, closed
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	3.05%, average
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. 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.

Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of an actuarial experience study. The actuarial assumption used in the June 30, 2018 valuation were based on the results of the most recent actuarial experience study for the period July 1, 2008 - June 30, 2013.

Muhlenberg County Water District
Notes to the Financial Statements
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The target allocation and best estimates of arithmetic nominal rates of return for each major class are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Nominal Return
US Equity:		
US Large Cap	5.00 %	4.50 %
US Mid Cap	6.00 %	4.50 %
US Small Cap	6.50 %	5.50 %
Non-US Equity:		
International Developed	12.50 %	6.50 %
Emerging Markets	5.00 %	7.25 %
Global Bonds	4.00 %	3.00 %
Credit Fixed:		
Global IG Credit	2.00 %	3.75 %
High Yield	7.00 %	5.50 %
Emerging Market Debt	5.00 %	6.00 %
Illiquid Private	10.00 %	8.50 %
Private Equity	10.00 %	6.50 %
Real Estate	5.00 %	9.00 %
Absolute Return	10.00 %	5.00 %
Real Return	10.00 %	7.00 %
Cash	2.00 %	1.50 %
Total	100.00 %	

Discount rate

The discount rate used to measure the total pension liability for the plan was 6.25% for nonhazardous employees. The projection of cash flows used to determine the discount rate assumed that local employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 25 year (closed) amortization period of the unfunded actuarial accrued liability. The discount rate determination does not use a municipal bond rate.

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

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

	<u>1% Decrease (5.25%)</u>	<u>Current Discount Rate (6.25%)</u>	<u>1% Increase (7.25%)</u>
<i>Nonhazardous</i>			
District's proportionate share of the net pension liability	\$ 2,102,692	\$ 1,670,266	\$ 1,307,969

Changes of assumptions: There have been no changes in actuarial assumptions since June 30, 2017.

Muhlenberg County Water District
Notes to the Financial Statements
For the Year Ended December 31, 2018

Payables to the pension plan

At December 31, 2018, the District had paid its contractually required employee and employer contributions primarily for the month ended December 31, 2018, within prescribed time limits.

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the separately issued comprehensive annual financial report issued by the Kentucky Retirement Systems and can be found at <https://kyret.ky.gov>.

Other Post-Employment Benefit Plan (OPEB)

Plan Description

Under the provision of Kentucky Revised Statute 61.645, the Board of Trustees of Kentucky Retirement Systems administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). The Muhlenberg County Water District is a participating member of the CERS. The plan issues publicly available financial statements which may be found at <https://kyret.ky.gov>.

The Kentucky Retirement Systems Insurance Fund (Insurance Fund) was established to provide hospital and medical insurance for members receiving benefits from the KERS, CERS, and SPRS. Although the assets of the systems are invested as a whole, each system's assets are used only for the payment of benefits to the members of that plan and the administrative costs incurred by those receiving an insurance benefit.

The CERS Non-hazardous Insurance Fund is a cost-sharing multiple-employer defined benefit OPEB plan that covers substantially all regular full-time members employed in positions of each participating county, city and school board, and any additional eligible local agencies electing to participate in the System. The plan provides for health insurance benefits to plan members. OPEB may be extended to beneficiaries of plan members under certain circumstances.

Membership in the CERS Non-hazardous Insurance Fund consisted of the following at June 30, 2017, the date of the latest actuarial valuation:

<u>Membership Status</u>	<u>2017</u>
Retirees & beneficiaries	
currently receiving benefits	33,481
Inactive members entitled to	
but not yet receiving benefits	8,230
Active plan members	<u>81,891</u>
Total	<u><u>123,602</u></u>

Muhlenberg County Water District
Notes to the Financial Statements
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Actuarial assumptions

The total OPEB liability, net OPEB liability and sensitivity information in the June 30, 2018 actuarial valuation was based on an actuarial valuation date of June 30, 2016. The total OPEB liability was rolled-forward from the valuation date to the plan's fiscal year ending June 30, 2017, using generally accepted actuarial principles. There was no legislation enacted during the 2017 legislative session that had a material change in benefit provisions for any of the systems. However, subsequent to the actuarial valuation date (June 30, 2016), but prior to the measurement date, and before the required 2019 experience study, 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 which were used in performing the actuarial assumptions which were used in performing the actuarial valuation as of June 30, 2018.

Valuation date	June 30, 2017
Experience study	July 1, 2008 - June 30, 2013
Actual cost method	Entry age normal
Amortization method	Level percent of pay
Remaining amortization period	27 years, closed
Asset valuation method	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized
Inflation	3.25%
Salary increases	4.00%, average
Payroll growth rate	4.00%, CERS non-hazardous
Investment rate of return	7.50% net of plan investment expense, including inflation
Healthcare Trend Rates	
Pre - 65	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.
Post - 65	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 4.05% over a period of 2 years.

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.

Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of an actuarial experience study. The actuarial assumption used in the June 30, 2018 valuation were based on the results of the most recent actuarial experience study for the period July 1, 2008 - June 30, 2013.

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

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For the Year Ended December 31, 2018

Asset Class	Target Allocation	Long Term Expected Nominal Return
US Equity:		
US Large Cap	5.00 %	4.50 %
US Mid Cap	6.00 %	4.50 %
US Small Cap	6.50 %	5.50 %
Non-US Equity:		
International Developed	12.50 %	6.50 %
Emerging Markets	5.00 %	7.25 %
Global Bonds	4.00 %	3.00 %
Credit Fixed:		
Global IG Credit	2.00 %	3.75 %
High Yield	7.00 %	5.50 %
Emerging Market Debt	5.00 %	6.00 %
Illiquid Private	10.00 %	8.50 %
Private Equity	10.00 %	6.50 %
Real Estate	5.00 %	9.00 %
Absolute Return	10.00 %	5.00 %
Real Return	10.00 %	7.00 %
Cash	2.00 %	1.50 %
Total	<u>100.00 %</u>	

Discount rate

The single discount rate of 5.85% for CERS Non-hazardous is based on the long-term expected rate of return on OPEB plan investments of 6.25% and a long-term municipal bond rate of 3.62% as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2018. However, the cost associated with the implicit employer subsidy was not included in the calculation of the System's actuarial determined contributions, and any cost associated with the implicit subsidy will not be paid out of the System's trust. Therefore, the municipal bond rate was applied to future expected benefit payments associated with the implicit subsidy.

Implicit Subsidy

The fully-insured premiums KRS pays for the KERS, CERS, and SPRS Health Insurance Plans are blended rates based on the combined experience of active and retired members. Since the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit employer subsidy for non-Medicare eligible retirees. Participating employers should adjust their contributions by the implicit subsidy in order to determine the total employer contribution for GASB 75 purposes. This adjustment is needed for contributions made during the measurement period and for the purpose of deferred outflows related to contributions made after measurement date. The District's implicit subsidy for the year ended December 31, 2018 was \$5,811 and is expected to be \$7,855 for the year ending December 31, 2019.

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

The following presents the District's proportionate share of the net OPEB liability calculated using the discount rate of percent, as well as what the plan's net position liability would be if it were

Muhlenberg County Water District
Notes to the Financial Statements
For the Year Ended December 31, 2018

calculated using a discount rate that is one percentage point lower (4.85%) or one percentage point higher (6.85%) than the current rate (5.85%):

	<u>1% Decrease</u> <u>(4.85%)</u>	<u>Current</u> <u>Discount</u> <u>Rate (5.85%)</u>	<u>1% Increase</u> <u>(6.85%)</u>
<i>Nonhazardous</i>			
District's proportionate share of the net OPEB liability	\$ 632,415	\$ 486,908	\$ 362,962

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rate

The following presents the Commission's proportionate share of the net OPEB liability calculated using the current healthcare cost trend rates (see details in Actuarial Assumptions above), as well as what the District's proportionate share of the net OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower or one percentage point higher than the current rates.

	<u>1% Decrease</u>	<u>Current</u> <u>Healthcare</u> <u>Cost Trend</u> <u>Rate</u>	<u>1% Increase</u>
<i>Nonhazardous</i>			
District's proportionate share of the net OPEB liability	\$ 362,508	\$ 486,908	\$ 633,540

Contributions

Participating employers are required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 78.545(33), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contributions rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. As of December 31, 2018, the employer contribution rate was 4.70% from January 1, 2018 through June 30, 2018 and 5.26% from July 1, 2018 through December 31, 2018, respectively of members' nonhazardous salaries. The District contributed \$33,787 or 100% of the required contribution to the insurance fund for the year ended December 31, 2018.

Employees hired after September 1, 2008 are required to contribute an additional 1% of their covered payroll to the insurance fund. Contributions are deposited to an account created for the payment of health insurance benefits under 26 USC Section 401(h). These members are classified in the Tier 2/Tier 3 structure of benefits and the 1% contribution to 401(h) account is non-refundable.

Muhlenberg County Water District
Notes to the Financial Statements
For the Year Ended December 31, 2018

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

At December 31, 2018, the District reported a net OPEB liability of \$486,908 for its proportionate share of the CERS net OPEB liability. The net OPEB liability was measured as of June 30, 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of June 30, 2016, rolled forward to June 30, 2017 using generally accepted actuarial principles. The District's proportion of the net OPEB liability was determined using the District's actual contributions for the plan year ended June 30, 2017. This method is expected to be reflective of the District's long-term contribution effort. At June 30, 2018, the District's proportion was 0.027424 percent for nonhazardous classified employees.

For the year ended December 31, 2018, the District recognized OPEB expense of \$51,623. At December 31, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

<u>Types of Deferred Resources</u>	<u>Deferred Outflows</u>	<u>Deferred Inflows</u>	<u>Net Amounts</u>
Net difference between projected & actual earnings on pension plan investments	\$ -	\$ 33,538	\$ (33,538)
Changes in proportion and differences between employer contributions and proportionate share of contributions	-	3,660	(3,660)
Change of Assumptions	97,243	1,125	96,118
Contributions subsequent to the measurement date, including implicit subsidy	22,356	-	22,356
Difference between expected & actual experience	-	56,743	(56,743)
Total	<u>\$ 119,599</u>	<u>\$ 95,066</u>	<u>\$ 24,533</u>

The \$22,356 of deferred outflows of resources resulting from the District's contributions subsequent to the measurement date and June 30, 2018 implicit subsidy 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 related to pensions will be recognized in pension expense as follows:

<u>Years Ending December 31,</u>	<u>Amortization (Accretion)</u>
2019	\$ 996
2020	996
2021	996
2022	7,510
2023	(4,966)
2024 and thereafter	(3,355)
Total	<u>\$ 2,177</u>

Payables to the OPEB plan

At December 31, 2018, the District had paid its contractually required employee and employer

Muhlenberg County Water District
Notes to the Financial Statements
For the Year Ended December 31, 2018

contributions primarily for the month ended December 31, 2018, within prescribed time limits.

6. DEBT OBLIGATIONS
Revenue Bonds Payable

Description	Interest Rate	Maturity Date	Balance 12/31/2018	Due in One Year
Waterworks Refunding Bonds				
Series 2007-D	4.175%-4.55%	2027	1,050,000	100,000
Waterworks Refunding Bonds				
Series 2013-B	2.30%-4.30%	2021	265,000	130,000
Waterworks Construction Bonds				
Series 2013-C	4.30%-4.80%	2023	625,000	115,000
Total			1,940,000	\$ 345,000
Less current portion			(345,000)	
Plus unamortized bond premium on long-term debt			81,022	
Long-term portion			\$ 1,676,022	

Series 2007-D

A bond resolution dated July 1, 2007, authorized issuance of \$1,895,000 of refunding revenue bonds maturing in annual installments through 2027. Interest is paid semi-annually on January 1, and July 1, from 4.175% to 4.55% per annum and principal is payable annually on July 1.

Series 2013-B

A bond resolution dated March 27, 2013, authorized issuance of \$1,255,000 of refunding revenue bonds maturing in annual installments through 2021. Interest is paid semi-annually on January 1, and July 1, from 2.300% to 4.300% per annum and principal is payable annually on January 1.

Series 2013-C

A bond resolution dated March 27, 2013, authorized issuance of \$1,150,000 of refunding revenue bonds maturing in annual installments through 2023. Interest is paid semi-annually on January 1, and July 1, from 2.300% to 4.800% per annum and principal is payable annually on January 1.

Principal and interest requirements of the revenue bonds payable exclusive of unamortized bond premium as of December 31, 2018 are:

Year Ending December 31,	Principal	Interest & Fees	Total
2019	345,000	81,203	426,203
2020	290,000	67,425	357,425
2021	295,000	54,830	349,830
2022	240,000	43,173	283,173
2023	250,000	32,133	282,133
2024	120,000	23,660	143,660
2025	125,000	18,200	143,200
2026	135,000	12,512	147,512
2027	140,000	6,370	146,370
Total	\$ 1,940,000	\$ 339,506	\$ 2,279,506

Muhlenberg County Water District
Notes to the Financial Statements
For the Year Ended December 31, 2018

Changes in Business-Type Activities Debt

A summary of changes in the business-type activities debt for the year ended December 31, 2018 follows:

	Balance 12/31/2017	Loans Incurred	Principal Payments	Balance 12/31/2018	Due Within One Year
Business-Type Activities:					
Revenue Bonds Payable	\$ 2,285,000	\$ -	\$ 345,000	\$ 1,940,000	\$ 345,000
Total Business-Type Activities	<u>\$ 2,285,000</u>	<u>\$ -</u>	<u>\$ 345,000</u>	1,940,000	<u>\$ 345,000</u>
Unamortized bond premium				81,022	
Long-term debt due in one year				(345,000)	
Long-term debt due after one year				<u>\$ 1,676,022</u>	

7. COMMITMENTS

Purchase Contracts

Central City Municipal Water and Sewer

On June 20, 2011, the District entered into a new agreement with the City of Central City, Kentucky to continue to purchase treated water from the City's new water treatment plant. The contract became effective April 1, 2012 for a period of 50 years and states that the initial rate will be \$2.63 per 1,000 gallons of water purchased. The District purchased \$1,287,175 and \$1,259,629 from Central City during the years ended December 31, 2018 and 2017, respectively.

Todd County Water District

On May 1, 2006, the District entered into a long-term contract with Todd County Water District for the purchase of treated water. The contract for water is for a period of 25 years and calls for water sales not to exceed 800,000 gallons per month at a rate of \$4.85 per 1,000 gallons. Water rate increases imposed by Todd County Water District will be passed onto the District as they occur. The District purchased \$3,533 and \$3,708 from Todd County Water District during the years ended December 31, 2018 and 2017, respectively.

Wholesale Contract

The District sells water on a wholesale basis to the City of Drakesboro, Kentucky. The original October 1967 contract was amended in May 1997, to extend water sales to October 2047. The District has the authority by the Public Service Commission of Kentucky, to periodically adjust the rates charged to the City of Drakesboro. Total sales to the City of Drakesboro during the years ended December 31, 2018 and 2017 were \$80,190 and \$75,171, respectively.

8. PUBLIC SERVICE COMMISSION REGULATIONS

The District is required to file with the Public Service Commission (PSC) a report of its gross earnings or receipts derived from intra-state business for the preceding calendar year. The District has satisfied this requirement. The District has also filed the 2018 annual PSC Report as required. Further, the PSC requires that all customer deposit refunds be paid with interest. This District has fulfilled this requirement.

9. LITIGATION

The District is not aware of any pending or threatened litigation in which it is involved which would have a material effect on these financial statements.

Muhlenberg County Water District
Notes to the Financial Statements
For the Year Ended December 31, 2018

10. **CHANGE IN ACCOUNTING PRINCIPLE**

During 2017 the District implemented GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (OPEB)*. GASB Statement No. 75 changed how governments' measure and report long-term obligations and annual costs associated with other post-employment benefits they provide. Under the new standard GASB requires that cost-sharing governments report a net OPEB liability, OPEB expense, and OPEB related deferred inflows and outflows of resources based on their proportionate share of the collective amounts for all the governments in the plan.

Cumulative effect of change in accounting principle:

Net OPEB liability	(552,382)	
Deferred outflows of resources related to pensions	120,195	
Deferred inflows of resources related to pensions	<u>(28,920)</u>	
Cumulative effect of change in accounting principle		<u>\$ (461,107)</u>

REQUIRED SUPPLEMENTARY INFORMATION

Muhlenberg County Water District
County Employees Retirement System
Schedule of Proportionate Share of the Net Pension Liability
Last Ten Years (1)

	<u>December 31,</u> <u>2018</u>	<u>December 31,</u> <u>2017</u>	<u>December 31,</u> <u>2016</u>	<u>December 31,</u> <u>2015</u>	<u>December 31,</u> <u>2014</u>
<u>Nonhazardous</u>					
District's proportion of the net pension liability (asset)	0.027424 %	0.027477 %	0.025642 %	0.030526 %	0.031616 %
District's proportion of the net pension liability (asset)	\$ 1,670,266	\$ 1,608,313	\$ 1,262,538	\$ 1,312,459	\$ 1,025,728
District's covered employee payroll	\$ 677,129	\$ 668,998	\$ 633,013	\$ 631,069	\$ 672,959
District's proportionate share of the net pension liability (asset) as a percentage of its covered employee payroll	246.67 %	240.41 %	199.45 %	207.97 %	152.42 %
Plan fiduciary net position as a percentage of the total pension liability (2)	53.54 %	53.30 %	55.50 %	59.97 %	66.80 %

(1) The amounts presented for the fiscal year were determined as of the prior fiscal year ending June 30. District payroll is reported for its' covered employees on calendar years ending December 31.

(2) This will be the same percentage for all participant employers in the CERS plan.

Muhlenberg County Water District
County Employees Retirement System
Schedule of Pension Contributions
Last Ten Years (1)

	<u>December 31,</u> <u>2018</u>	<u>December 31,</u> <u>2017</u>	<u>December 31,</u> <u>2016</u>	<u>December 31,</u> <u>2015</u>	<u>December 31,</u> <u>2014</u>
<u>Nonhazardous</u>					
Contractually required contributions	\$ 104,143	\$ 95,858	\$ 83,853	\$ 79,731	\$ 100,144
Contributions in relation to the contractually required contributions	<u>104,143</u>	<u>95,858</u>	<u>83,853</u>	<u>79,731</u>	<u>100,144</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
District's covered employee payroll	\$ 677,129	\$ 678,780	\$ 633,013	\$ 631,069	\$ 672,959
Contributions as a percentage of covered employee payroll					
January to June rates	14.48 %	13.95 %	12.42 %	12.75 %	13.74 %
July to December rates	16.22 %	14.48 %	13.95 %	12.42 %	12.75 %

Notes:

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a 10 year trend is compiled, the District will present information as it becomes available.

Contractually required employer contributions exclude the portion of contributions paid to CERS but allocated to the insurance fund of CERS. The above contributions only include those allocated directly to the CERS pension fund.

Muhlenberg County Water District
County Employees Retirement System
Schedule of Changes in Pension Benefits and Assumptions
For the Year Ended December 31, 2018

Changes of Benefit Terms:

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.

2018: House Bill 185 was enacted, which updated benefit provisions for active members who die in the line of duty.

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%.
- Payroll growth assumption was reduced from 4.50% to 4.00%.
- The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).
- For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.
- The assumed rates of Retirement, Withdrawal and Disability were updated to more accurately reflect experience.

Method and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates are determined on a biennial basis beginning with the fiscal years ended 2017, determined as of June 30, 2015. 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:

Valuation date	June 30, 2015
Experience study	July 1, 20018 - June 30, 2013
Actual cost method	Entry age normal
Amortization method	Level percentage of pay
Remaining amortization period	28 years, closed
Asset valuation method	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized
Inflation	3.25%
Salary increases	4.00 %, average
Investment rate of return	7.50%, net of pension plan investment expense including inflation

Muhlenberg County Water District
County Employees Retirement System
Schedule of Changes in Pension Benefits and Assumptions
For the Year Ended December 31, 2018

Changes of Assumptions continued:

2017

The actuarial valuation as of June 30, 2017, was performed by Gabriel Roeder Smith. 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 which 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 June 30, 2017.

Inflation	2.30%
Salary increases	3.05%, average
Investment rate of return	6.25%, net of pension plan investment expense including inflation

2018

There have been no changes in actuarial assumptions since June 30, 2017.

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a 10 year trend is compiled, the District will present information for those years for which information is available.

Muhlenberg County Water District
County Employees Retirement System OPEB Plan
Schedule of Proportionate Share of the Net Other Post Employment Benefits Liability
Last Ten Years (1)

	<u>December 31, 2018</u>	<u>December 31, 2017</u>	<u>December 31, 2016</u>
<u>Nonhazardous</u>			
District's proportion of the net OPEB liability (asset)	0.027424 %	0.027477 %	0.027477 %
District's proportion of the net OPEB liability (asset)	\$ 486,908	\$ 552,382	\$ 433,272
District's covered employee payroll	\$ 677,129	\$ 673,780	\$ 633,013
District's proportionate share of the net OPEB liability (asset) as a percentage of its covered employee payroll	71.91 %	81.98 %	68.45 %
Plan fiduciary net position as a percentage of the total OPEB liability (2)	57.62 %	52.39 %	55.24 %

(1) The amounts presented for the fiscal year were determined as of the prior fiscal year ending June 30. District payroll is reported for its' covered employees on calendar years ending December 31.

(2) This will be the same percentage for all participant employers in the CERS plan.

Muhlenberg County Water District
County Employees Retirement System OPEB Plan
Schedule of Other Post Employment Benefit Contributions
Last Ten Years (1)

	<u>December 31, 2018</u>	<u>December 31, 2017</u>	<u>December 31, 2016</u>
<u>Nonhazardous</u>			
Statutorily required contributions	\$ 33,787	\$ 31,763	\$ 29,651
Contributions in relation to the contractually required contributions	<u>33,787</u>	<u>31,763</u>	<u>29,651</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
District's covered employee payroll	\$ 677,129	\$ 673,780	\$ 633,013
Contributions as a percentage of covered employee payroll			
January to June rates	4.70 %	4.73 %	4.64 %
July to December rates	5.26 %	4.70 %	4.73 %

Notes:

Contributions in relation to statutorily required OPEB contributions are the contributions an employer actually made to the OPEB Plan, as distinct from the statutorily required contributions.

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a 10 year trend is compiled, the District will present information as it becomes available.

Contractually required employer contributions exclude the portion of contributions paid to CERS but allocated to the pension fund of CERS. The above contributions only include those allocated directly to the CERS insurance fund.

Muhlenberg County Water District
County Employees Retirement System OPEB Plan
Schedule of Changes in OPEB Benefits and Assumptions
For the Year Ended December 31, 2018

Change of Assumptions

2017

The actuarial valuation was performed as of June 30, 2016. Gabriel Roeder Smith Retirement Consulting rolled forward from the valuation date to the plan's fiscal year end of June 30, 2017 using generally accepted actuarial principles. 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 which 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 June 30, 2017. Specifically, a 2.30% price inflation assumption and an assumed rate of return of 6.25%.

2018

There have been no changes in actuarial assumptions since June 30, 2017.

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a 10 year trend is compiled, the District will present information for those years for which information is available.



**INDEPENDENT AUDITORS' 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
Muhlenberg County Water District
Greenville, Kentucky

We have audited, 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, the financial statements of the business-type activities of the Muhlenberg County Water District, as of and for the year ended December 31, 2018 and the related notes to the financial statements, which collectively comprise the Muhlenberg County Water District's basic financial statements and have issued our report thereon dated November 1, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Muhlenberg County Water District's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Muhlenberg County Water District's internal control. Accordingly, we do not express an opinion on the effectiveness of the 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 and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify a deficiency in internal control described in the accompanying schedule of findings and responses that we consider to be a significant deficiency. (2018-1 and 2017-1).

Compliance and Other Matters

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

Muhlenberg County Water District's Response to Findings

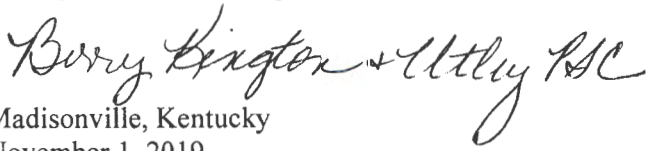
Muhlenberg County Water District's response to the findings identified in our audit is described in the accompanying schedule of findings and responses. Muhlenberg County Water District's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

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.

We also noted certain matters that we have reported to management of the Muhlenberg County Water District, in a separate letter dated November 1, 2019.

This report is intended solely for the information of the District commission and management. However, this report is a matter of public record and its distribution is not limited.


Madisonville, Kentucky
November 1, 2019

Muhlenberg County Water District
Schedule of Findings and Responses
For The Year Ended December 31, 2018

2018-1 Segregation of Duties

Condition

There is an absence of appropriate segregation of duties consistent with appropriate control objectives.

Criteria

A prudent control environment requires various functions of internal control be allocated among various employees.

Effect

Although no instances were noted, lack of segregation of duties can create situations where assets are not properly safeguarded and errors and irregularities may go undetected.

Cause

Lack of personnel.

Recommendation

We recommend that management review its financial operation for opportunities to separate incompatible functions. Where segregation of duties cannot be achieved due to the size of the staff, management should maintain its awareness of the weakness and compensate with other controls.

Response

We concur with the finding.

2017-1 Segregation of Duties

Condition

There is an absence of appropriate segregation of duties consistent with appropriate control objectives.

Criteria

A prudent control environment requires various functions of internal control be allocated among various employees.

Effect

Although no instances were noted, lack of segregation of duties can create situations where assets are not properly safeguarded and errors and irregularities may go undetected.

Cause

Lack of personnel.

Recommendation

We recommend that management review its financial operation for opportunities to separate incompatible functions. Where segregation of duties cannot be achieved due to the size of the staff, management should maintain its awareness of the weakness and compensate with other controls.

Response

We concur with the finding.