

NORTHERN KENTUCKY WATER DISTRICT

December 31, 2018

*FINANCIAL STATEMENTS AND INDEPENDENT AUDITORS'
REPORT INCLUDING SUPPLEMENTARY INFORMATION*

**NORTHERN KENTUCKY WATER DISTRICT
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INDEPENDENT AUDITORS' REPORT

Board of Commissioners
Northern Kentucky Water District
Erlanger, Kentucky

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of the Northern Kentucky Water District (the District) as of and for the years ended December 31, 2018 and 2017 and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

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

Opinion

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

Emphasis of Matter

As discussed in the notes to the financial statements, the previously issued financial statements for the year ended December 31, 2017 and 2016 have been restated for the implementation of Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. Our opinion is not modified with respect to that matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, budgetary comparison information, schedule of the District's proportionate share of the net pension liability, schedule of the District's pension contributions, schedule of the District's proportionate share of the net OPEB liability, and schedule of the District's OPEB contributions on pages 1 – 5 and 43 – 47, respectively, 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 Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Northern Kentucky Water District's basic financial statements. The other supplementary information are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The other supplementary information is the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information is fairly stated in all material respects in relation to the basic financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report, dated June 27, 2019, on our consideration of the Northern Kentucky Water District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Northern Kentucky 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 the Northern Kentucky Water District's internal control over financial reporting and compliance.

VonLehman & Company Inc.

**NORTHERN KENTUCKY WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)**

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

Financial Highlights

The assets and deferred outflows of resources of the District exceeded its liabilities and deferred inflows at the close of the most recent year by \$199,541,056 (net position). This was an increase of \$11,463,422 in comparison to the prior year.

- Operating revenues increased \$1,241,408 or 2.3% from 2017.
- The debt coverage ratio increased from 1.78 in 2017 to 1.79 in 2018.

Overview of the Financial Statements

The discussion and analysis serves as an introduction to the District's basic financial statements. The basic financial statements are comprised of the Statement of Net Position, the Statement of Revenues, Expenses and Changes in Net Position, the Statement of Cash Flows and the Notes to the Financial Statements. The report also contains additional required supplementary information and other supplementary information in addition to the basic financial statements themselves.

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

The Statement of Net Position presents information on all the District's assets and liabilities, with the differences between the two reported as net position. Over time, increases or decrease 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 years presented. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future periods.

The Statement of Cash Flows presents information about the District's cash receipts and cash payments during the reporting period. The statement reports cash receipts, cash payments, and net changes in cash resulting from operations, investing, and financing activities and provides answers to such questions as where did cash come from, what was cash used for, and what was the change in cash balance during the reporting period.

Basis of Accounting

The District's financial statements are prepared using the accrual basis of accounting.

**NORTHERN KENTUCKY WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)
(Continued)**

Overview of Annual Financial Report

Table 1 provides a summary of the District's net position for 2018 compared to 2017.

**Table 1
Net Position**

	<u>December 31,</u>	
	<u>2018</u>	<u>2017</u> <u>(As Restated)</u>
Assets		
Current Assets	\$ 45,915,129	\$ 43,951,684
Restricted Assets Noncurrent	47,560,997	59,963,164
Miscellaneous Deferred Charges	4,898,364	4,310,958
Capital Assets	<u>344,987,843</u>	<u>347,347,973</u>
Total Assets	<u>443,362,333</u>	<u>455,573,779</u>
Deferred Outflows of Resources	<u>9,744,133</u>	<u>11,952,107</u>
Liabilities		
Current Liabilities	36,263,459	19,896,761
Restricted Liabilities Noncurrent	1,193,712	1,380,528
Other Noncurrent Liabilities	<u>212,947,721</u>	<u>255,541,050</u>
Total Liabilities	<u>250,404,892</u>	<u>276,818,339</u>
Deferred Inflows of Resources	<u>3,160,518</u>	<u>2,629,913</u>
Net Position		
Net Investment in Capital Assets	131,196,839	108,980,897
Restricted	46,367,285	58,582,636
Unrestricted	<u>21,976,932</u>	<u>20,514,101</u>
Total Net Position	<u>\$ 199,541,056</u>	<u>\$ 188,077,634</u>

The District's net position for 2018 increased 6.1% to \$199,541,056 compared to \$188,077,634 for 2017. The increase was mainly attributable to paying down \$8,675,000 of the Revenue Bond Anticipation Notes, Series 2017 and paying off the Kentucky Infrastructure Authority Loans F06-03 and C08-01 along with normal payments of debt.

A portion of the District's net position (23.2%) is considered to be restricted. This amount represents resources that are subject to external restrictions on how they may be used.

An additional portion of the District's net position (65.8%) reflects its investment in capital assets (e.g. land, buildings, infrastructure, machinery and equipment); less any related debt used to acquire those assets still outstanding. The District uses these capital assets to provide services to its customers. Consequently, these assets are not available for future spending. Although the District's investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities.

The remaining balance of unrestricted net position (11.0%) may be used to meet the District's ongoing obligations to customers and creditors.

**NORTHERN KENTUCKY WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)
(Continued)**

Table 2 shows the changes in net assets for 2018, as well as revenue and expense comparisons to 2017.

**Table 2
Changes in Net Position**

	<u>Years Ended December 31,</u>	
	<u>2018</u>	<u>2017 (As Restated)</u>
Operating Revenues		
Water Sales	\$ 53,605,092	\$ 52,459,216
Forfeited Discounts	856,519	814,193
Rents From Property	389,526	448,465
Other Water Revenues	<u>475,485</u>	<u>363,340</u>
Total Operating Revenues	<u>55,326,622</u>	<u>54,085,214</u>
Operating Expenses		
Operating and Maintenance Expense	26,129,086	24,461,156
Depreciation Expense	<u>12,089,960</u>	<u>11,846,075</u>
Total Operating Expenses	<u>38,219,046</u>	<u>36,307,231</u>
Net Operating Income	<u>17,107,576</u>	<u>17,777,983</u>
Non-Operating Income (Expense)		
Investment Income	1,664,146	944,480
Miscellaneous Non-Operating Income	457,666	347,598
Loss on Abandonment of Mains	(454,332)	(514,633)
Interest on Long-Term Debt and Customer Deposits	(7,997,633)	(8,135,812)
Amortization of Debt Premium and Bond Issuance Costs	1,050,606	895,431
Pension Expense	(1,489,278)	(1,948,542)
Other Post Employment Benefit Revenue	(214,646)	(143,324)
Arbitrage Expense	(133,418)	(111,934)
Gain on Sale of Capital Assets	<u>800</u>	<u>24,224</u>
Total Non-Operating Expenses	<u>(7,116,089)</u>	<u>(8,642,512)</u>
Change in Net Position Before Capital Contributions	9,991,487	9,135,471
Capital Contributions	<u>1,471,935</u>	<u>1,185,814</u>
Change in Net Position	<u>\$ 11,463,422</u>	<u>\$ 10,321,285</u>

In reviewing income before capital contributions, the financial statements showed net income for the year of \$9,991,487. Operating revenues increased 2.3% mainly as a result of increased water sales during the year. Operating expenses (including depreciation) increased 5.3% due mainly to an increase in materials and services needed for the efficient operation of the District, including personnel related expenses. Capital contributions decreased by \$286,121 (24.1%) primarily due to the decrease of mains constructed by other entities and contributed to the District.

The District budgeted for \$54,346,527 in operating revenues. Actual revenues were \$55,326,622, a difference of \$980,095. The largest difference was due to water sales being over budget by \$871,110. Operation, maintenance, and administration expenses were budgeted at \$28,396,537. Actual expenses were \$26,129,086, a difference of \$2,267,451. The largest portion of this difference was related to salaries and wages, and employee pension and benefits having a total combined budget of \$14,135,172, while actual expenses totaled \$12,902,322. The District budgeted for new positions that were not filled by year end.

**NORTHERN KENTUCKY WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)
(Continued)**

Capital Assets

At December 31, 2018, the capital assets reported were \$344,987,843 including land, buildings, water systems, equipment, and vehicles. This represents a net decrease of \$2,360,130, or (0.7%), over last year due. Additional information on the District's capital assets can be found in Note 6 of this report.

**Table 3
Capital Assets, Net of Depreciation**

	December 31,	
	2018	2017
Not Being Depreciated		
Land	\$ 3,267,226	\$ 3,291,127
Construction in Progress	7,333,224	19,220,094
Plant Acquisition Adjustment	5,516,136	5,516,136
Other Capital Assets		
Utility Plants		
Transmission and Distribution, Source of Supply, Pumping System, Power Generation, Water Treatment, and General Plant and Equipment	491,531,835	470,734,994
Subtotal	507,648,421	498,762,351
Less Accumulated Depreciation	162,660,578	151,414,378
Totals	\$ 344,987,843	\$ 347,347,973

Major capital additions during the year included adding mains for approximately \$12,512,000, sediment basins for approximately \$2,423,000, Lumley Tank Replacement for approximately \$1,846,000, ORPS Rehabilitation for approximately \$1,806,000, and services for approximately \$1,467,000.

Long-Term Liabilities

Table 4 summarizes the District's long-term liabilities at the end of 2018 as compared to 2017.

**Table 4
Outstanding Long-Term Liabilities at Year End**

Compensated Absences	\$ 662,920	\$ 604,437
Arbitrage Liability	555,707	485,129
Bond Indebtedness	166,682,895	178,004,127
Bond Anticipation Notes	17,414,267	26,357,067
Notes Payable	34,088,348	38,787,813
	\$ 219,404,137	\$ 244,238,573

At year-end, the District had \$218,185,510 in outstanding notes and bonds compared to \$243,149,007 last year. That is a decrease of 10.3% as shown in Table 4. The largest portion of this decrease was paying down \$8,675,000 of the Revenue Bond Anticipation Notes, Series 2017 and paying off the Kentucky Infrastructure Authority Loans F06-03 and C08-01 along with normal payments of debt.

**NORTHERN KENTUCKY WATER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)
(Continued)**

Economic Factors and Next Year's Budget

The District's budget for 2019 projects a modest increase in water revenue due to the rate recovery of the first step of approved rate adjustment in 2019. Projections for interest income were also higher in 2019 as a result of anticipated higher interest rates, and a more strategic investment approach with respect to debt service reserves. A modest increase is anticipated for operating expenses as a result of the modest increase in employee related expenses along with the increase in cost for competitively bid chemicals coupled with the increased use of carbon in the GAC process as the contactors exhaust their carbon.

Contacting the District's Financial Management

This report is designed to provide our customers and creditors with a general overview of the District's finances and to show the District's accountability for the money it receives. If you have questions about this report or need additional financial information, contact the District Administrative Office at 2835 Crescent Springs Road, Erlanger, KY, 41018

**NORTHERN KENTUCKY WATER DISTRICT
STATEMENTS OF NET POSITION**

ASSETS AND DEFERRED OUTFLOWS OF RESOURCES

	December 31,	
	2018	2017 (As Restated)
Assets and Deferred Outflows of Resources		
Current Assets		
Cash and Cash Equivalents	\$ 27,545,107	\$ 24,740,059
Investments	905,611	667,273
Accounts Receivable		
Customers, Net	5,291,901	5,451,334
Unbilled Customers	6,100,000	6,100,000
Others	230,799	473,208
Assessments Receivable	147,073	138,842
Inventory Supplies for New Installation and Maintenance, at Cost	1,570,034	1,553,609
Prepaid Items	473,114	621,220
Restricted Assets - Cash and Cash Equivalents		
Bond Proceeds Fund	367,457	720,497
Debt Service Account	3,084,127	3,336,574
Improvement, Repair & Replacement	199,906	149,068
Total Current Assets	45,915,129	43,951,684
Noncurrent Assets		
Restricted Assets - Cash and Cash Equivalents		
Bond Proceeds Fund	6,025,577	20,333,425
Debt Service Account	17,120,875	15,187,484
Improvement, Repair and Replacement	4,356,847	4,841,083
Customer Deposits Fund	1,032,152	1,038,190
Restricted Assets - Investments		
Debt Service Reserve Account	19,025,546	18,562,982
Miscellaneous Deferred Charges	4,898,364	4,310,958
Capital Assets		
Land, System, Buildings and Equipment	500,315,197	479,542,257
Construction in Progress	7,333,224	19,220,094
Total Capital Assets	507,648,421	498,762,351
Less Accumulated Depreciation	162,660,578	151,414,378
Total Capital Assets, Net of Accumulated Depreciation	344,987,843	347,347,973
Total Noncurrent Assets	397,447,204	411,622,095
Total Assets	443,362,333	455,573,779
Deferred Outflows of Resources		
Deferred Outflows Related to Pension	4,027,097	5,586,334
Deferred Outflows Related to Other Postemployment Benefits	1,322,530	1,583,842
Deferred Loss on Refundings	4,394,506	4,781,931
Total Deferred Outflows of Resources	9,744,133	11,952,107
Total Assets and Deferred Outflows of Resources	\$ 453,106,466	\$ 467,525,886

See accompanying notes.

**NORTHERN KENTUCKY WATER DISTRICT
STATEMENTS OF NET POSITION
(Continued)**

LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION

	December 31,	
	2018	2017 (As Restated)
Liabilities and Deferred Inflows of Resources		
Current Liabilities		
Bonded Indebtedness	\$ 11,813,753	\$ 11,321,232
Bond Anticipation Note	17,414,267	267,800
Notes Payable	1,660,208	2,162,038
Accounts Payable	950,976	1,120,443
Accrued Payroll and Taxes	389,448	399,145
Compensated Absences	131,032	156,527
Other Accrued Liabilities	252,285	263,437
Liabilities Payable - Restricted Assets		
Accrued Interest Payable	3,084,127	3,336,574
Accounts Payable	567,363	869,565
Total Current Liabilities	36,263,459	19,896,761
Long-Term Liabilities (Net of Current Portion)		
Liabilities Payable - Restricted Assets		
Accounts Payable	161,560	342,338
Customer Deposits	1,032,152	1,038,190
Compensated Absences	531,888	447,910
Arbitrage Liability	555,707	485,129
Bond Indebtedness	154,869,142	166,682,895
Bond Anticipation Note	-	26,089,267
Notes Payable	32,428,140	36,625,775
Net Pension Liability	19,018,499	18,765,118
Net Other Postemployment Benefits Liability	5,544,345	6,444,956
Total Long-Term Liabilities	214,141,433	256,921,578
Total Liabilities	250,404,892	276,818,339
Deferred Inflows of Resources		
Deferred Inflows Related to Pension	1,969,132	2,292,472
Deferred Inflows Related to Other Postemployment Benefits	1,191,386	337,441
Total Deferred Inflows of Resources	3,160,518	2,629,913
Total Liabilities and Deferred Inflows of Resources	253,565,410	279,448,252
Net Position		
Net Investment in Capital Assets	131,196,839	108,980,897
Restricted For Debt Service Funds	36,146,421	33,750,466
Restricted For Capital Improvement Projects	10,588,323	24,832,170
Unrestricted	21,609,473	20,514,101
Total Net Position	199,541,056	188,077,634
Total Liabilities, Deferred Inflows of Resources, and Net Position	\$ 453,106,466	\$ 467,525,886

See accompanying notes.

**NORTHERN KENTUCKY WATER DISTRICT
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION**

	Years Ended December 31,	
	2018	2017 (As Restated)
Operating Revenues		
Water Sales	\$ 53,605,092	\$ 52,459,216
Forfeited Discounts	856,519	814,193
Rents From Property	389,526	448,465
Other Water Revenues	475,485	363,340
	55,326,622	54,085,214
Operating Expenses		
Operating and Maintenance Expense	26,129,086	24,461,156
Depreciation Expense	12,089,960	11,846,075
	38,219,046	36,307,231
Net Operating Income	17,107,576	17,777,983
Non-Operating Income (Expense)		
Investment Income	1,664,146	944,480
Miscellaneous Non-Operating Income	457,666	347,598
Loss on Abandonment of Mains	(454,332)	(514,633)
Interest on Long-Term Debt and Customer Deposits	(7,997,633)	(8,135,812)
Amortization of Debt Premiums and Bond Issuance Costs	1,050,606	895,431
Pension Expense	(1,489,278)	(1,948,542)
Other Post Employment Benefit Expense	(214,646)	(143,324)
Arbitrage Expense	(133,418)	(111,934)
Gain on Sale of Capital Assets	800	24,224
	(7,116,089)	(8,642,512)
Change in Net Position Before Capital Contributions	9,991,487	9,135,471
Capital Contributions	1,471,935	1,185,814
Change in Net Position	11,463,422	10,321,285
Net Position - Beginning of Year	188,077,634	177,756,349
Net Position - End of Year	\$ 199,541,056	\$ 188,077,634

See accompanying notes.

**NORTHERN KENTUCKY WATER DISTRICT
STATEMENTS OF CASH FLOWS**

	Years Ended December 31,	
	2018	2017
Cash Flows From Operating Activities		
Received from Customers	\$ 55,714,195	\$ 53,562,769
Paid to Suppliers for Goods and Services	(14,345,583)	(11,795,689)
Paid to or on Behalf of Employees for Services	(12,854,041)	(12,262,084)
	<u>28,514,571</u>	<u>29,504,996</u>
Cash Flows From Investing Activities		
Purchase of Investments	(39,802,641)	(32,831,611)
Proceeds from Sale of Investments	39,487,736	33,041,347
Investment Income	1,278,149	1,029,722
	<u>963,244</u>	<u>1,239,458</u>
Cash Flows From Capital and Related Financing Activities		
Principal Paid on Debt	(24,750,290)	(12,478,062)
Debt Proceeds	1,224,824	29,531,374
Interest Paid on Bonds and Notes	(8,250,080)	(7,606,132)
Acquisition and Construction of Capital Assets	(8,736,128)	(11,854,399)
Proceeds on Sale of Capital Assets	24,701	24,224
Payment on Arbitrage Liability	(62,840)	-
Miscellaneous Non-Operating Income	457,666	347,598
	<u>(40,092,147)</u>	<u>(2,035,397)</u>
Net Cash Used by Capital and Related Financing Activities		
	<u>(10,614,332)</u>	<u>28,709,057</u>
Cash and Cash Equivalents Beginning of Year	<u>70,346,380</u>	<u>41,637,323</u>
Cash and Cash Equivalents End of Year	<u>\$ 59,732,048</u>	<u>\$ 70,346,380</u>
Reconciliation of Operating Income to Net Cash Provided by Operating Activities		
Net Operating Income	\$ 17,107,576	\$ 17,777,983
Adjustments to Reconcile Net Operating Income to Net Cash Provided by Operating Activities		
Depreciation	12,089,960	11,846,075
Change in Assets and Liabilities		
Accounts Receivable, Net	401,842	(535,723)
Assessments Receivable	(8,231)	(7,754)
Inventory Supplies	(16,425)	92,463
Prepaid Expenses	148,106	10,432
Miscellaneous Deferred Charges	(587,406)	(241,090)
Accounts Payable	(652,447)	503,405
Accrued Payroll and Taxes	(9,697)	69,422
Accrued Compensated Absences	58,483	(38,445)
Other Accrued Liabilities	(11,152)	7,196
Customer Deposits	(6,038)	21,032
	<u>28,514,571</u>	<u>29,504,996</u>
Net Cash Provided by Operating Activities	<u>\$ 28,514,571</u>	<u>\$ 29,504,996</u>

See accompanying notes.

**NORTHERN KENTUCKY WATER DISTRICT
STATEMENTS OF CASH FLOWS
(Continued)**

	Years Ended December 31,	
	2018	2017
Supplemental Schedule of Noncash Capital and Related Financing Activities		
Change in Fair Value of Investments	\$ <u>(152,523)</u>	\$ <u>(40,312)</u>
Contributions of Capital Assets	\$ <u>1,471,935</u>	\$ <u>1,185,814</u>
Capitalized Interest and Labor	\$ <u>-</u>	\$ <u>166,593</u>
Pension Expense	\$ <u>(1,489,278)</u>	\$ <u>(1,948,542)</u>
Other Post Employment Benefit Expense	\$ <u>(214,646)</u>	\$ <u>(143,324)</u>
Amortization Expense	\$ <u>(1,050,606)</u>	\$ <u>(961,337)</u>
Reconciliations of Cash and Cash Equivalents to the Statement of Net Position		
Cash and Cash Equivalents - Current	\$ 27,545,107	\$ 24,740,059
Cash and Cash Equivalents - Restricted	<u>32,186,941</u>	<u>45,606,321</u>
Cash and Cash Equivalents December 31, 2018	\$ <u>59,732,048</u>	\$ <u>70,346,380</u>

See accompanying notes.

**NORTHERN KENTUCKY WATER DISTRICT
NOTES TO THE FINANCIAL STATEMENTS**

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The following is a summary of certain significant accounting policies followed in the preparation of these financial statements.

Reporting Entity

The Northern Kentucky Water District (the District) was established August 28, 1996 and became operational January 1, 1997 as a result of a merger agreement executed by the Kenton County Water District No. 1 and the Campbell County Kentucky Water District. The District was organized and operates under the provisions of Kentucky Revised Statutes (Chapter 74). The District owns and operates water production and distribution facilities which are used to furnish water supplies within their service area as approved by the Commonwealth of Kentucky Public Service Commission.

Basis of Accounting and Presentation

The accompanying financial statements have been prepared in conformity with generally accepted accounting principles (GAAP) for state and local governments. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles for state and local governments in the United States of America.

The District's operations are presented as a single enterprise fund. All assets, deferred outflows of resources, liabilities, deferred inflows of resources, net position, revenues, and expenses are accounted for through a single enterprise fund with revenues recorded when earned and expenses recorded at the time liabilities are incurred.

Use of Estimates

The process of preparing financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires the use of estimates and assumptions regarding certain types of assets, deferred outflows of resources, liabilities, deferred inflows of resources, revenues, and expenses. Certain estimates relate to unsettled transactions and events as of the date of the financial statements. Other estimates relate to assumptions about the ongoing operations and may impact future periods. Accordingly, upon settlement, actual results may differ from estimated amounts.

Operating Revenues and Expenses

Enterprise funds distinguish operating revenues and expenses from non-operating items in accordance with the flow of economic resources measurement focus and the accrual basis of accounting. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. Revenues from water sales, forfeited discounts, rents from property, and other water revenues are reported as operating revenues. Operating expenses for enterprise funds includes the costs of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

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 they are needed.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Cash and Cash Equivalents

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

The District is authorized by bond resolution to invest in direct obligations of the United States, or obligations guaranteed by the United States, obligations of certain federal agencies and instrumentalities, including U.S. dollar-denominated deposits in commercial banks which are insured by the Federal Deposit Insurance Corporation or fully collateralized by the foregoing, and public housing bonds or project notes issued by public housing authorities annual contribution contracts with the United States or by requisition or payment agreement with the United States.

Investments

Investments are reported at fair value based on quoted market prices.

Accounts Receivable - Customers

The District follows a quarterly cycle billing procedure with approximately one-third of the meter readings billed each month. When meter readings are delayed, bills are rendered based on estimated meter readings to promote consistency of water revenue. In order to accomplish a proper matching of revenues with expenses and to fairly state assets, an analysis is prepared of the final quarterly billings in the year to determine the estimated amount of water delivered but unbilled at year end.

Accounts receivable are stated at their contractual outstanding balances, net of any allowance for doubtful accounts. Accounts are considered past due if any portion of an account has not been paid in full within the contractual terms of the account. The District begins to assess its ability to collect receivables that are over 90 days past due and provides for an adequate allowance for doubtful accounts based on the District's collection history, the financial stability and recent payment history of the customer, and other pertinent factors. Receivables are written off as uncollectible after the District has used reasonable collection efforts and deems them uncollectible. Based on these criteria, the District has estimated an allowance for doubtful accounts of \$35,000 at December 31, 2018 and 2017.

Assessments Receivable

Direct assessments from property owners are recorded as a receivable by the District at the time the improvement project is completed.

Inventory

Inventory is valued at the lower of cost, using the moving average method, or market. Inventories consist of expendable supplies held for new water line installations and maintenance and are charged to expenditures on an "as used" basis.

Deferred Inflows and Outflows of Resources

Deferred inflows of resources represent an acquisition of net position that applies to a future period, and is therefore deferred until that time. A deferred gain on refunding results from the difference in the carrying value of the refunded debt and the reacquisition price. The District also recognizes deferred inflows of resources related to pensions and other postemployment benefits.

Deferred outflows of resources represent a consumption of net positions that applies to a future period, and therefore deferred until that time. A deferred loss on refunding results from the difference in the carrying value of the refunded debt and the reacquisition price. The District also recognizes deferred outflows of resources related to pensions and other postemployment benefits.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Capital Assets

Prior to 1978, capital assets were recorded as expenditures at the time of purchase and capitalized to the Plant Fund. No depreciation was provided on capital assets and continuing property records were not maintained.

The District obtained an independent appraisal which includes a detailed listing of District buildings, structures and contents. The appraisal serves as the basis for detailed property records that is updated on a continuous basis.

Capital assets are stated at cost or appraised value and depreciated over the estimated useful lives of the related assets. The cost of current repairs and maintenance is charged to expense, while the cost of replacements or betterments is capitalized.

Depreciation of the capital assets is computed on the straight-line method over the estimated the following useful lives of the assets:

Structures and Improvements	35 - 40 Years
Supply Mains	35 - 45 Years
Pumping and Water Treatment Equipment	20 - 40 Years
Distribution Reservoirs and Mains	30 - 75 Years
Services, Meters, Hydrants	35 - 75 Years
Office Furniture and Equipment	5 - 25 Years
Other Equipment	7 - 20 Years

Prior to the year ended December 31, 2018, the interest cost of borrowed funds used to finance construction projects was capitalized when material. Interest earned on the proceeds of tax-exempt borrowing arrangements restricted to the acquisition of qualifying assets was offset against interest costs in determining the amount to be capitalized. For the year ended December 31, 2018, the District adopted Governmental Accounting Standards Board Statement No. 89, *Accounting for Interest Cost Incurred before the End of Construction Period*. This guidance requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest costs incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund. The requirements of this Statement are applied prospectively. \$-0- and \$166,593 of interest was capitalized for the years ended December 31, 2018 and 2017, respectively.

Construction in Progress

Capitalizable costs incurred on projects which are not in use or ready for use are held in construction in progress. When the asset is ready for use, related costs are transferred to the appropriate capital asset account.

Capital Contributions

These contributions represent assessments/reimbursements to recover the costs of new services and extensions of the distribution system. The District does not include the amount of costs incurred and contributed by outside contractors for installation of distribution systems which the District absorbs and provides for their operations and maintenance.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Pensions

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

Postemployment Benefits Other Than Pensions (OPEB)

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the County Employees Retirement System (CERS) and additions to/deductions from CERS' fiduciary net position have been determined on the same basis as they are reported by CERS. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Compensated Absences

Employees of the District are entitled to paid vacation and sick depending on length of service and other factors. The amounts recorded for accumulated vacation and sick for the years ended December 31, 2018 and 2017 were \$662,920 and \$604,437, respectively.

Net Position

Net position represents the difference between assets, deferred outflows of resources, liabilities, and deferred inflows of resources. Net position is classified as net investment in capital assets, restricted, and unrestricted. Net investment in capital assets consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances on any borrowings used for the acquisition, construction or improvement of those assets. Outstanding debt which has not been spent is included in the same net position component as the unspent proceeds. Net position is reported as restricted when there are limitations imposed on its use through enabling legislation or through external restrictions imposed by creditors, grantors, or laws and regulations of other governments. All other net position that does not meet the definition of "restricted" or "net investment in capital assets" is considered unrestricted.

Bond Premiums and Issue Costs

Bonds payable are reported, net of any premium, which are amortized over the life of the applicable bonds using the straight-line method, which approximates the effective interest method. Issuance costs are recognized as an expense in the year incurred.

NOTE 2 – DEPOSITS AND INVESTMENTS

Investment Policy

General Policy

It is the policy of the District to invest public funds in a manner that will provide the highest investment return with the maximum security of principal while meeting the daily cash flow demands of the District and conforming to all state statutes and District regulations governing the investments of public funds.

NOTE 2 – DEPOSITS AND INVESTMENTS (Continued)

Authorized Investment Instruments

1. Obligations of the United States and of its agencies and instrumentalities, including obligations subject to repurchase agreements, provided that delivery of these obligations subject to repurchase agreements is taken either directly or through an authorized custodian.
2. Obligations and contracts for future delivery or purchase of obligations backed by the full faith and credit of the United States or a United States government agency.
3. Obligations of any corporation of the United States government.
4. Certificates of deposit issued by or other interest-bearing accounts of any bank or savings and loan institution which are insured by the Federal Deposit Insurance Corporation or similar entity or which are collateralized, to the extent uninsured, by any obligations permitted by Section 41.240(4) of the Kentucky Revised Statutes.

Limitations of Investment Transactions

With regard to the investments authorized, the following limitations shall apply:

No investment shall be purchased for the District on a margin basis or through the use of any similar leveraging technique.

Deposits and Investments

The District had investments in certificates of deposit as of December 31, 2018 and 2017 in the amounts of \$905,611 and \$667,273, respectively.

Custodial Credit Risk – Deposits. For deposits, this is the risk that in the event of a bank failure, the District’s deposits may not be returned. The District maintains deposits with financial institutions insured by the Federal Deposit Insurance Corporation (FDIC). As allowed by law, the depository bank should pledge securities along with FDIC insurance at least equal to the amount on deposit at all times. As of December 31, 2018 and 2017, the District’s deposits are entirely insured and/or collateralized with securities held by the financial institutions on the District’s behalf and the FDIC insurance.

Custodial Credit Risk – Investments. For an investment, this is the risk that, in the event of the failure of the counterparty, the District will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The District had no custodial credit risk at December 31, 2018 and 2017.

Credit Risk – Investments. The District’s investments are subject to minimal credit risk because they are invested in Federal Agency securities which are generally considered free of default risk due to the perceived stability of the U.S. Government.

NOTE 3 – RESTRICTED ASSETS

Restricted assets consist of monies and other resources which are restricted legally as described below:

Bond Proceeds Fund – These assets contain the bond proceeds plus investment interest earned that are available for paying the cost of construction and acquisition contracts relating to the water system as provided in the various bond ordinances.

	December 31	
	2018	2017
Cash and Cash Equivalents	\$ <u>6,393,034</u>	\$ <u>21,053,922</u>

NOTE 3 – RESTRICTED ASSETS (Continued)

Debt Service Reserve Account – These assets hold an amount that will equal the aggregate debt service reserve requirement (defined as the maximum annual debt service requirement in any succeeding bond fiscal year). The account assets are:

	December 31	
	2018	2017
Cash and Cash Equivalents	\$ 10,018,475	\$ 11,791,611
Purchase and Resale Agreements	2,569,827	2,569,827
FAMC and FHLB Discount Notes	4,101,219	4,129,628
FHLB Bonds	2,229,383	-
Accrued Interest Receivable and CD Market Change	106,642	71,916
	\$ 19,025,546	\$ 18,562,982

Debt Service Account – These assets accumulate monies for the purpose of paying interest on the bonds when due and payable and paying the principal of the bonds when due and payable. The account assets are:

Cash and Cash Equivalents	\$ 20,205,002	\$ 18,524,058
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Improvement, Repair, and Replacement – These assets are available to make major repairs and replacements and to pay the cost of construction of additions, extensions and improvements to the water system. The account assets are:

Cash and Cash Equivalents	\$ 4,556,753	\$ 4,990,151
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Customer Deposits – These assets are available to security deposits paid by customers to receive water services. When services are terminated, the deposit is applied to any unpaid bills or refunded to the customer if all billings have been paid. The account assets are:

Cash and Cash Equivalents	\$ 1,032,152	\$ 1,038,190
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NOTE 4 – ACCOUNTS RECEIVABLE

Accounts Receivable Arising From Billings of Metered Water Sales, Net of Allowance	\$ 5,291,901	\$ 5,451,334
Accrual for Estimated Unbilled Water Revenue	6,100,000	6,100,000
Other	230,799	473,208
Total	\$ 11,622,700	\$ 12,024,542

NOTE 5 – FAIR VALUE MEASUREMENT

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Observable inputs are developed based on market data obtained from sources independent of the reporting entity. Unobservable inputs are developed based on information available about the assumptions market participants would use in pricing the asset. The classification of securities within the fair value hierarchy is based upon the activity level in the markets for the security type and the inputs used to determine their fair value, as follows:

LEVEL 1 – Unadjusted price quotations in active markets/exchanges for identical assets or liabilities that the District has the ability to access.

LEVEL 2 – Other observable inputs (included but no limited to, quotes process for similar assets or liabilities in the markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets and liabilities (such as interest rates, yield curves, volatilities, loss severities, credit risks, and default rates) or other market- corroborated inputs)..

LEVEL 3 – Unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available.

The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3. The inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the fair value hierarchy classification is determined based on the lowest level input that is significant to the fair value measurement in its entirety.

Restricted assets are classified in Level 2 and are subject to pricing by an alternative pricing source due to lack of information available by the primary vendor.

The following table sets forth by level, within the fair value hierarchy, the District's assets at fair value at December 31, 2018:

	Level 1	Level 2	Level 3	Total
Restricted Assets				
Purchase and Resale Agreements	\$ -	\$ 2,569,827	\$ -	\$ 2,569,827
FAMC and FHLB Discount Notes	-	4,101,219	-	4,101,219
FHLB Bonds	-	2,229,383	-	2,229,383
Total Restricted Assets at Fair Value	<u>\$ -</u>	<u>\$ 8,900,429</u>	<u>\$ -</u>	<u>\$ 8,900,429</u>

The following table sets forth by level, within the fair value hierarchy, the District's assets at fair value at December 31, 2017:

Restricted Assets				
Purchase and Resale Agreements	\$ -	\$ 2,569,827	\$ -	\$ 2,569,827
FAMC and FHLB Discount Notes	-	4,129,628	-	4,129,628
Total Restricted Assets at Fair Value	<u>\$ -</u>	<u>\$ 6,699,455</u>	<u>\$ -</u>	<u>\$ 6,699,455</u>

NOTE 6 – CAPITAL ASSETS

Capital asset activity for the District for the year ended December 31, 2018, was as follows:

	Balance December 31, 2017	Additions	Deductions	Balance December 31, 2018
Land, System, Buildings and Equipment				
Land and Land Rights	\$ 3,291,127	\$ -	\$ (23,901)	\$ 3,267,226
Structures and Improvements	123,135,000	4,352,622	-	127,487,622
Lake River and Other Intakes	1,463,171	-	-	1,463,171
Supply Mains	2,865,693	-	-	2,865,693
Power Generation Plant	3,491,523	-	-	3,491,523
Pumping Equipment	11,814,012	38,262	-	11,852,274
Water Treatment Equipment	30,038,924	110,116	-	30,149,040
Distribution Reservoirs and Standpipes	9,567,871	1,846,222	-	11,414,093
Transmissions and Distribution Mains	207,168,705	12,511,711	(741,821)	218,938,595
Services	31,035,373	1,466,765	(309,005)	32,193,133
Meters and Meter Installations Hydrants	19,355,847	561,275	(208,417)	19,708,705
Other Plant and Miscellaneous Equipment	10,108,730	673,632	(38,849)	10,743,513
Office Furniture and Equipment	3,419,128	-	-	3,419,128
Transportation Equipment	3,917,317	117,390	-	4,034,707
Tools, Shop, and Garage Equipment	3,873,388	174,705	-	4,048,093
Laboratory Equipment	739,344	63,000	-	802,344
Power Operated Equipment	626,988	174,817	-	801,805
Communication Equipment	1,245,582	4,416	-	1,249,998
Miscellaneous Equipment	6,287,274	-	-	6,287,274
Utility Plant Acquisition Adjustment	581,124	-	-	581,124
Acquisition Adjustment - Newport	545,925	-	-	545,925
	<u>4,970,211</u>	<u>-</u>	<u>-</u>	<u>4,970,211</u>
Total Land, System, Buildings and Equipment	479,542,257	22,094,933	(1,321,993)	500,315,197
Construction in Progress	<u>19,220,094</u>	<u>7,451,896</u>	<u>(19,338,766)</u>	<u>7,333,224</u>
Total Capital Assets	498,762,351	29,546,829	(20,660,759)	507,648,421
Less Accumulated Depreciation	<u>151,414,378</u>	<u>12,089,960</u>	<u>(843,760)</u>	<u>162,660,578</u>
Capital Assets - Net	<u>\$ 347,347,973</u>	<u>\$ 17,456,869</u>	<u>\$ (19,816,999)</u>	<u>\$ 344,987,843</u>

NOTE 7 – ARBITRAGE

The Tax Reform Act of 1986 (Act) substantially revised the treatment to be afforded to earnings on the proceeds of tax-exempt debt, and requires the District to calculate and remit rebatable arbitrage earnings to the Internal Revenue Service. Certain of the District's debt and interest earned on the proceeds thereof are subject to the requirements of the Act. The District has accrued a liability for estimated rebatable arbitrage earnings and has set aside such earnings as restricted cash. At December 31, 2018 and 2017, the arbitrage rebate liability was \$555,707 and \$485,129, respectively.

Rebate calculations are prepared annually. However, any liability due is only required to be paid every 5 years from the original date of the bond. During the year ended December 31, 2018, the District paid \$62,840 for the Water District Refunding Revenue Bonds, Series 2013B. In the upcoming year, no payment is due and therefore no current portion is accrued for.

NOTE 8 – LONG-TERM DEBT

Revenue Bonds

Water District Revenue Bonds, Series 2011

In May 2011, the District sold \$30,830,000 of its Revenue Bonds in order to fund various construction projects. The bonds maturing on or after February 1, 2021 are subject to redemption, in whole or in part, beginning February 1, 2021.

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

Years	Interest Rates	Principal Amount	Interest Amount	Total Debt Service
2019	3.00%	\$ 1,015,000	\$ 1,058,987	\$ 2,073,987
2020	3.00%	1,055,000	1,022,662	2,077,662
2021	4.00%	1,095,000	979,662	2,074,662
2022	4.00%	1,140,000	934,962	2,074,962
2023	4.00%	1,185,000	888,462	2,073,462
2024-2028	4.00-4.25%	6,715,000	3,663,468	10,378,468
2029-2033	4.25-5.00%	8,350,000	2,032,125	10,382,125
2034-2035	5.00%	3,950,000	200,000	4,150,000
Total		\$ <u>24,505,000</u>	\$ <u>10,780,328</u>	\$ <u>35,285,328</u>

Water District Refunding Revenue Bonds, Series 2012

In June 2012, the District issued \$54,840,000 of Refunding Revenue Bonds, Series 2012 for the purpose of refunding in advance of maturity the District's outstanding Revenue Bonds Series 1997, 1998, 2001A and 2002A-REF in the principal amount of \$63,350,000. The bonds were sold at a premium of \$9,620,827, for total source of funds of \$64,460,827. The 2012 bonds maturing on or after February 2022 are subject to redemption after 2022 at a redemption price of 100%.

The Water District Refunding Revenue Bonds, Series 2012 are scheduled to mature as follows:

2019	5.00%	\$ 3,650,000	\$ 1,982,500	\$ 5,632,500
2020	5.00%	4,150,000	1,787,500	5,937,500
2021	5.00%	4,365,000	1,574,625	5,939,625
2022	5.00%	4,590,000	1,350,750	5,940,750
2023	5.00%	4,720,000	1,118,000	5,838,000
2024-2027	5.00%	20,000,000	1,957,750	21,957,750
Total		\$ <u>41,475,000</u>	\$ <u>9,771,125</u>	\$ <u>51,246,125</u>

NOTE 8 – LONG-TERM DEBT (Continued)

Water District Revenue Bonds, Series 2013A

In June 2013, the District sold \$26,400,000 of its Revenue Bonds in order to fund various construction projects. The 2013 bonds maturing on or after February 2023 are subject to redemption after 2023 at a redemption price of 100%.

The Water District Revenue Bonds, Series 2013A are scheduled to mature as follows:

<u>Years</u>	<u>Interest Rates</u>	<u>Principal Amount</u>	<u>Interest Amount</u>	<u>Total Debt Service</u>
2019	5.00%	\$ 720,000	\$ 1,008,026	\$ 1,728,026
2020	5.00%	755,000	971,151	1,726,151
2021	5.00%	795,000	932,401	1,727,401
2022	5.00%	835,000	891,651	1,726,651
2023	5.00%	880,000	848,776	1,728,776
2024-2028	4.00-5.00%	5,095,000	3,542,105	8,637,105
2029-2033	4.00-4.13%	6,295,000	2,343,855	8,638,855
2034-2038	4.13-4.25%	7,785,000	847,130	8,632,130
Total		<u>\$ 23,160,000</u>	<u>\$ 11,385,095</u>	<u>\$ 34,545,095</u>

Water District Refunding Revenue Bonds, Series 2013B

In September 2013, the District issued \$24,120,000 of Refunding Revenue Bonds, Series 2013B for the purpose of refunding advance of maturity the District's outstanding Revenue Bonds Series 2002B, 2003A, and 2003B in the principal amount \$25,685,000. The bonds were sold at a premium of \$1,789,625, for a total source of funds of \$25,909,625. The 2013 bonds maturing on or after February 2023 are subject to redemption after 2023 at a redemption price of 100%.

The reacquisition price exceeded the net carrying amount of the refunded debt by \$364,880. This amount is netted against the new debt and amortized over the remaining life of the new debt. The refunding reduces its total debt service over 18 years by \$1,302,804 and obtains an economic gain (difference between the present values of the old and new debt service) of \$1,081,327.

The Water District Refunding Revenue Bonds, Series 2013B are scheduled to mature as follows:

2019	5.00%	\$ 1,230,000	\$ 688,450	\$ 1,918,450
2020	5.00%	1,295,000	625,325	1,920,325
2021	5.00%	1,355,000	559,075	1,914,075
2022	5.00%	1,430,000	489,450	1,919,450
2023	5.00%	1,500,000	416,200	1,916,200
2024-2028	4.00-5.00%	8,555,000	1,031,750	9,586,750
Total		<u>\$ 15,365,000</u>	<u>\$ 3,810,250</u>	<u>\$ 19,175,250</u>

Water District Refunding Revenue Bonds, Series 2014B

In December 2014, the District issued \$15,805,000 of Refunding Revenue Bonds, Series 2014B for the purpose of refunding advance of maturity the District's outstanding Revenue Bonds Series 2003C and 2004 in the principal amount \$16,715,000. The bonds were sold at a premium of \$1,263,374, for a total source of funds of \$17,068,374. The 2014 bonds maturing on or after August 2023 are subject to redemption after 2023 at a redemption price of 100%.

NOTE 8 – LONG-TERM DEBT (Continued)

The reacquisition price exceeded the net carrying amount of the refunded debt by \$290,040. This amount is netted against the new debt and amortized over the remaining life of the new debt. The refunding reduces its total debt service over 15 years by \$1,678,190 and obtains an economic gain (difference between the present values of the old and new debt service) of \$1,469,689.

The Water District Refunding Revenue Bonds, Series 2014B are scheduled to mature as follows:

<u>Years</u>	<u>Interest Rates</u>	<u>Principal Amount</u>	<u>Interest Amount</u>	<u>Total Debt Service</u>
2019	5.00%	\$ 1,980,000	\$ 293,638	\$ 2,273,638
2020	5.00%	1,505,000	206,513	1,711,513
2021	5.00%	440,000	157,888	597,888
2022	5.00%	465,000	135,263	600,263
2023	3.00%	485,000	116,363	601,363
2024-2028	3.00-4.00%	2,670,000	319,215	2,989,215
2029	3.13%	590,000	9,219	599,219
Total		\$ <u>8,135,000</u>	\$ <u>1,238,099</u>	\$ <u>9,373,099</u>

Water District Refunding Revenue Bonds, Series 2016A

In November 2016, the District issued \$41,905,000 of Refunding Revenue Bonds, Series 2016A for the purpose of refunding advance of maturity the District's outstanding Revenue Bonds Series 2009 and for the current refunding of the outstanding Revenue Bond Series 2006 in the principal amount \$44,340,000. The bonds were sold at a premium of \$5,161,005, for a total source of funds of \$47,066,005. The 2016 bonds maturing on or after August 2026 are subject to redemption after 2026 at a redemption price of 100%.

The reacquisition price exceeded the net carrying amount of the refunded debt by \$2,629,474. This amount is netted against the new debt and amortized over the remaining life of the new debt. The refunding reduces its total debt service over 15 years by \$1,678,190 and obtains an economic gain (difference between the present values of the old and new debt service) of \$7,844,962.

The Water District Refunding Revenue Bonds, Series 2016A are scheduled to mature as follows:

2019	5.00%	\$ 2,005,000	\$ 1,582,525	\$ 3,587,525
2020	5.00%	2,380,000	1,472,900	3,852,900
2021	5.00%	2,325,000	1,355,275	3,680,275
2022	5.00%	2,450,000	1,235,900	3,685,900
2023	5.00%	2,685,000	1,107,525	3,792,525
2024-2028	3.00-5.00%	15,065,000	3,425,625	18,490,625
2029-2031	3.00-4.00%	10,630,000	502,525	11,132,525
Total		\$ <u>37,540,000</u>	\$ <u>10,682,275</u>	\$ <u>48,222,275</u>

Rural Development Loan 91-02

In August 2000, the District closed on a loan agreement with the Department of Agriculture for the Sub District C Construction project. The amount of the loan was \$2,287,000 with an annual interest rate of 5.00%. The repayment of the loan is on a 40 year amortization schedule.

NOTE 8 – LONG-TERM DEBT (Continued)

The following is a schedule of future debt service requirements to maturity:

Years	Principal Amount	Interest Amount	Total Debt Service
2019	\$ 43,525	\$ 85,825	\$ 129,350
2020	51,000	83,325	134,325
2021	54,000	80,700	134,700
2022	56,000	77,950	133,950
2023	59,000	75,075	134,075
2024-2028	342,000	326,900	668,900
2029-2033	437,000	230,025	667,025
2034-2038	563,000	105,625	668,625
2039	135,475	3,250	138,725
Total	\$ 1,741,000	\$ 1,068,675	\$ 2,809,675

Rural Development Loan 91-03

In December, 2017, the District closed on a loan agreement with the Department of Agriculture for the purpose of making certain improvements to the Water System. The amount of the loan was \$1,733,000 with an annual interest rate of 2.75%. The repayment of the loan is on a 40 year amortization schedule.

The following is a schedule of future debt service requirements to maturity:

2019	\$ -	\$ 47,658	\$ 47,658
2020	26,500	47,293	73,793
2021	27,000	46,558	73,558
2022	28,000	45,801	73,801
2023	28,500	45,024	73,524
2024-2028	156,000	212,671	368,671
2029-2033	177,500	189,784	367,284
2034-2038	204,000	163,598	367,598
2039-2043	233,500	133,574	367,074
2044-2048	267,500	99,172	366,672
2049-2053	306,000	59,785	365,785
2054-2057	278,500	15,627	294,127
Total	\$ 1,733,000	\$ 1,106,545	\$ 2,839,545

The District is in compliance with Section 726-subsection (iii) of the 1985 General Bond Resolution (as amended November 17, 1987) which requires that the net annual income and revenues, as adjusted, be equal to at least one and twenty hundredths (1.20) times the maximum annual debt service requirement coming due in any future twelve (12) month period beginning February 1, and ending January 31, on all Bonds outstanding payable from pledged receipts.

NOTE 8 – LONG-TERM DEBT (Continued)

Revenue Bond Anticipation Note

In April 2017, the District issued \$26,000,000 of Revenue Bond Anticipation Notes, Series 2017 in order to fund various construction projects. The bonds were sold at a premium of \$535,600, for a total source of funds of \$26,535,600.

The following is a schedule of future debt service requirements to maturity:

<u>Years</u>	<u>Interest Rates</u>	<u>Principal Amount</u>	<u>Interest Amount</u>	<u>Total Debt Service</u>
2019	3.00%	\$ <u>17,325,000</u>	\$ <u>390,000</u>	\$ <u>17,715,000</u>

Fiscal Court of Kenton County, Kentucky

The Kenton County Water District received a \$100,000 deferred payment loan at 3.0%. This loan was required as a local match to qualify for a \$750,000 Community Development Block Grant for Phase 1 of a water project in southern Kenton County. This loan will become due and payable only after sufficient customers in southern Kenton County are obtained in order to reduce the user rates, including surcharges, to approximately \$26 per month.

Taylor Mill Purchase Financing

In March 2004, the Water District purchased the assets of the Taylor Mill Water System for \$3,000,000. The purchase price will be paid over 14 years without interest. The balance of this loan was paid in full in June, 2018.

Kentucky Infrastructure Authority Loan F06-03

In January, 2007, the District entered into an agreement with the Kentucky Infrastructure Authority (KIA) for a reimbursement loan for the cost of constructing various projects to the District's water system. The full amount of allowable funds was \$4,000,000 at an interest rate of 3.0% and with a scheduled maturity date in June, 2028. As of December 31, 2010, all funds have been received. The balance of this loan was paid in full in December, 2018.

Kentucky Infrastructure Authority Loan C08-01

In January, 2009, the District entered into an agreement with the Kentucky Infrastructure Authority (KIA) for a reimbursement loan for the cost of constructing various projects to the District's water system. The full amount of allowable funds was \$6,000,000 at an interest rate of 3.0%. As of December 31, 2010, all funds have been received. The balance of this loan was paid in full in December, 2018.

Kentucky Infrastructure Authority Loan F08-07

In November, 2008, the District entered into an agreement with the Kentucky Infrastructure Authority (KIA) for a reimbursement loan for the cost of constructing various projects to the District's water system. The full amount of allowable funds is \$4,000,000 at an interest rate of 1.0%. As of December 31, 2013, all funds have been received.

NOTE 8 – LONG-TERM DEBT (Continued)

The Kentucky Infrastructure Authority Loan F08-07 is scheduled to mature as follows:

Years	Principal Amount	Interest Amount	Total Debt Service
2019	\$ 192,819	\$ 35,431	\$ 228,250
2020	194,752	33,015	227,767
2021	196,704	30,575	227,279
2022	198,676	28,110	226,786
2023	200,668	25,620	226,288
2024-2028	1,033,922	89,875	1,123,797
2029-2032	<u>865,078</u>	<u>24,472</u>	<u>889,550</u>
Total	<u>\$ 2,882,619</u>	<u>\$ 267,098</u>	<u>\$ 3,149,717</u>

Kentucky Infrastructure Authority Loan F09-02

In October, 2010, the District entered into an agreement with the Kentucky Infrastructure Authority (KIA) for a reimbursement loan for the cost of constructing various projects to the District's water system. The full amount of allowable funds is \$8,000,000 at an interest rate of 2.0%. As of December 31, 2013, all funds have been received.

The Kentucky Infrastructure Authority Loan F09-02 is scheduled to mature as follows:

2019	\$ 1,100,917	\$ 406,071	\$ 1,506,988
2020	1,123,045	381,176	1,504,221
2021	1,145,619	355,782	1,501,401
2022	1,168,646	329,876	1,498,522
2023	1,192,135	303,450	1,495,585
2024-2028	6,329,886	1,101,892	7,431,778
2029-2033	<u>6,261,195</u>	<u>356,864</u>	<u>6,618,059</u>
Total	<u>\$ 18,321,443</u>	<u>\$ 3,235,111</u>	<u>\$ 21,556,554</u>

Kentucky Infrastructure Authority Loan F13-012

In May, 2013, the District entered into an agreement with the Kentucky Infrastructure Authority (KIA) for a reimbursement loan for the cost of constructing various projects to the District's water system. The full amount of allowable funds is \$8,000,000 at an interest rate of 2.0%. As of December 31, 2017, \$4,523,000 has been received. Payments will not begin until one year after the initiation of operation of the project, and therefore a maturity date has not been determined.

Kentucky Infrastructure Authority Loan F14-015

In December, 2013, the District entered into an agreement with the Kentucky Infrastructure Authority (KIA) for a reimbursement loan for the cost of constructing various projects to the District's water system. The full amount of allowable funds is \$4,000,000 at an interest rate of 2.0%. As of December 31, 2018, \$3,545,910 has been received.

NOTE 8 – LONG-TERM DEBT (Continued)

The Kentucky Infrastructure Authority Loan F14-015 is scheduled to mature as follows:

Years	Principal Amount	Interest Amount	Total Debt Service
2019	\$ 150,801	\$ 68,679	\$ 219,480
2020	153,452	65,650	219,102
2021	156,149	62,567	218,716
2022	158,893	59,431	218,324
2023	161,686	56,239	217,925
2024-2028	852,071	231,320	1,083,391
2029-2033	929,632	142,678	1,072,310
2034-2038	908,805	45,968	954,773
Total	<u>\$ 3,471,489</u>	<u>\$ 732,532</u>	<u>\$ 4,204,021</u>

Kentucky Infrastructure Authority Loan F15-011

In November, 2014, the District entered into an agreement with the Kentucky Infrastructure Authority (KIA) for a reimbursement loan for the cost of constructing various projects to the District's water system. The full amount of allowable funds is \$4,000,000 at an interest rate of 2.0%. As of December 31, 2018, \$3,535,094 has been received.

The Kentucky Infrastructure Authority Loan F15-011 is scheduled to mature as follows:

2019	\$ 150,341	\$ 68,470	\$ 218,811
2020	152,983	65,450	218,433
2021	155,672	62,377	218,049
2022	158,409	59,249	217,658
2023	161,193	56,067	217,260
2024-2028	849,472	230,614	1,080,086
2029-2033	926,796	142,243	1,069,039
2034-2038	906,035	45,828	951,863
Total	<u>\$ 3,460,901</u>	<u>\$ 730,298</u>	<u>\$ 4,191,199</u>

Kentucky Infrastructure Authority Loan B15-003

In July, 2016, the District entered into an agreement with the Kentucky Infrastructure Authority (KIA) for a reimbursement loan for the cost of constructing various projects to the District's water system. The full amount of allowable funds is \$1,500,000 at an interest rate of 0.75%. As of December 31, 2018, \$1,392,195 has been received.

The Kentucky Infrastructure Authority Loan B15-003 is scheduled to mature as follows:

2019	\$ 65,330	\$ 12,470	\$ 77,800
2020	65,821	11,848	77,669
2021	66,315	11,221	77,536
2022	66,814	10,590	77,404
2023	67,316	9,954	77,270
2024-2028	344,242	40,064	384,306
2029-2033	357,372	23,434	380,806
2034-2037	295,686	6,348	302,034
Total	<u>\$ 1,328,896</u>	<u>\$ 125,929</u>	<u>\$ 1,454,825</u>

NORTHERN KENTUCKY WATER DISTRICT

NOTE 8 – LONG-TERM DEBT (Continued)

Changes in long-term debt are as follows:

Governmental Activities	Debt Outstanding December 31, 2017	Additions of New Debt	Retirements and Repayments	Debt Outstanding December 31, 2018	Amounts Due Within 1 Year
Bond Indebtedness					
Rural Development Loan 91-02	\$ 1,787,000	\$ -	\$ 46,000	\$ 1,741,000	\$ 43,525
Rural Development Loan 91-03	1,733,000	-	-	1,733,000	-
Series 2011	25,490,000	-	985,000	24,505,000	1,015,000
Series 2011 Bond Premium	180,557	-	9,804	170,753	9,804
Series 2012	44,950,000	-	3,475,000	41,475,000	3,650,000
Series 2012 Bond Premium	5,907,216	-	562,592	5,344,624	562,592
Series 2013 A	23,845,000	-	685,000	23,160,000	720,000
Series 2013 A Bond Premium	1,029,826	-	50,236	979,590	50,235
Series 2013 B	16,535,000	-	1,170,000	15,365,000	1,230,000
Series 2013 B Bond Premium	1,282,564	-	119,308	1,163,256	119,308
Series 2014 B	10,015,000	-	1,880,000	8,135,000	1,980,000
Series 2014 B Bond Premium	1,010,699	-	84,225	926,474	84,225
Series 2016	39,450,000	-	1,910,000	37,540,000	2,005,000
Series 2016 Bond Premium	4,788,265	-	344,067	4,444,198	344,064
Total Bond Indebtedness	178,004,127	-	11,321,232	166,682,895	11,813,753
Bond Anticipation Notes					
Series 2017	26,000,000	-	8,675,000	17,325,000	17,325,000
Series 2017 BAN Premium	357,067	-	267,800	89,267	89,267
Total Bond Anticipation Notes	26,357,067	-	8,942,800	17,414,267	17,414,267
Notes Payable					
KIA SRF Loan F06-03	2,400,016	-	2,400,016	-	-
KIA Loan C08-01	1,992,230	-	1,992,230	-	-
KIA Loan F08-07	3,073,524	-	190,905	2,882,619	192,819
KIA Loan F09-02	19,400,668	-	1,079,225	18,321,443	1,100,917
KIA Loan F13-012	4,523,000	-	-	4,523,000	-
KIA Loan F14-015	3,287,143	258,767	74,421	3,471,489	150,801
KIA Loan F15-011	2,633,963	901,131	74,193	3,460,901	150,341
KIA Loan B15-003	1,327,269	64,926	63,299	1,328,896	65,330
City of Taylor Mill, KY	50,000	-	50,000	-	-
Kenton County Fiscal Court	100,000	-	-	100,000	-
Total Notes Payable	38,787,813	1,224,824	5,924,289	34,088,348	1,660,208
Arbitrage Liability	485,129	133,418	62,840	555,707	-
Compensated Absences	604,437	128,147	69,664	662,920	131,032
Total Long-Term Debt	\$ 243,753,444	\$ 1,352,971	\$ 26,257,985	\$ 218,848,430	\$ 31,019,260

NOTE 9 – PENSION PLAN

General Information about the Pension Plan

Plan description: County Employees Retirement System consists of two plans, Non-hazardous and Hazardous. Each plan is a cost-sharing multiple-employer defined benefit pension plan administered by the Kentucky Retirement Systems (KRS) under the provision of Kentucky Revised Statute 61.645. The plan covers all regular full-time members employed in non-hazardous and hazardous duty positions of each participating county, city, and any additional eligible local agencies electing to participate in CERS. The District participates in the non-hazardous plan.

NOTE 9 – PENSION PLAN (Continued)

Benefits provided: The non-hazardous system provides for retirement, disability, and death benefits to system members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances.

Tier 1: Retirement Eligibility for Members Whose Participation Began Before 09/01/2008

Age	Years of Service	Allowance Reduction
65	1 month	None
Any	27	None
55	5	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
Any	25	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.

Tier 2: Retirement Eligibility for Members Whose Participation Began On or After 09/01/2008 but before 01/01/2014

Age	Years of Service	Allowance Reduction
65	5	None
57	Rule of 87	None
60	10	6.5% per year for first five years, and 4.5% for next five years before age 65 or Rule of 87 (age plus years of service).

Tier 3: Retirement Eligibility for Members Whose Participation Began On or After 01/01/2014

Age	Years of Service	Allowance Reduction
65	5	None
57	Rule of 87	None

Benefit Formula for Tiers 1 and 2

Final Compensation	X	Benefit Factor	X	Years of Service
Average of the five highest if participation began before 09/01/2008.		2.20% if:		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
			Member begins participating prior to 08/01/2004.	
Average of the last complete five if participation began on or after 09/01/2008 but before 01/01/2014.		2.00% if:		
			Member begins participating on or after 08/01/2004 and before 09/01/2008.	
		Increasing percent based on service at retirement* plus 2.00% for each year of service over 30 if:	Member begins participating on or after 09/01/2008 but before 01/01/2014.	

* **Service (and Benefit Factor): 10 years or less (1.10%); 10 - 20 years (1.30%); 20 - 26 years 26 - 30 years (1.75%)**

NOTE 9 – PENSION PLAN (Continued)

Benefit Formula for Tiers 3					
(A-B) = C X 75% = D then B+D = Interest					
A	B	C	D		Total
5 Year Geometric Average Return	Less Guarantee Rate	Upside Sharing Interest	Interest Rate Earned	Interest Rate Earned (4% + Upside)	Interest Credited to Members' Accounts
7.39%	4.00%	3.39%	2.54%	6.54%	\$4,786,000

For post-retirement death benefits, if the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a \$5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

For disability benefits, members participating before August 1, 2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula. Members participating on or after August 1, 2004 but before January 1, 2014 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% for non-hazardous of final rate of pay or the amount calculated under the benefit formula based upon actual service. Members participating on or after January 1, 2014 may retire on account of disability provided the member has at least 60 months of service credit. The hypothetical account which includes member contributions, employer contributions, and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 20% for non-hazardous of the member's monthly final rate of pay or the annuitized account into a single life annuity option. Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

For pre-retirement death benefits, the beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

The Kentucky General Assembly has the authority to increase, suspend, or reduce Cost of Living Adjustments. Senate Bill 2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (1) the system is over 100.00% funded or (2) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

During the 2018 legislative session, House Bill 185 was enacted, which provided increased pension benefits for the beneficiaries of active members who die in the line of duty.

Contributions:

The employee contribution rate is set by state statute. For the years ended December 31, 2018 and 2017, non-hazardous employees contribute 5% of their annual creditable compensation. Employees hired on or after September 1, 2008, contribute an additional 1% to health insurance.

The employer contribution rates are set by the KRS Board under Kentucky Revised Statute 61.565 based on an annual actuarial valuation, unless altered by legislation enacted by the Kentucky General Assembly. For the fiscal years ended June 30, 2019, 2018, and 2017, participating employers contributed 21.48% (16.22% pension fund and 5.26% insurance fund), 19.18% (14.48% pension fund and 4.70% insurance fund), and 18.68% (13.95% pension fund and 4.73% insurance fund), respectively, for the non-hazardous system of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years was a percentage of each employee's creditable compensation. Contributions to the pension fund (excluding the insurance portion) from the District were \$1,230,042 and \$1,099,103 for the years ended December 31, 2018 and 2017, respectively.

NOTE 9 – PENSION PLAN (Continued)

Plan Information for December 31, 2018 Financial Statements

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

At December 31, 2018, the District reported a liability of \$19,018,499 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2017 and was rolled-forward from the valuation date to June 30, 2018, using generally accepted actuarial principles. The District's proportion of the net pension liability was based on the District's share of contributions to the pension plan relative to the contributions of all participating employers. At December 31, 2018, the District's proportion for the non-hazardous system was 0.312275%, which was a decrease of 0.008315% from its proportion measured as of December 31, 2017.

For the year ended December 31, 2018, the District recognized pension expense of \$1,489,278. At December 31, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Net difference between projected and actual earnings on pension plan investments	\$ 884,374	\$ 1,112,417
Difference between expected and actual experience	620,330	278,391
Changes of assumptions	1,858,661	-
Changes in proportion and difference between employer contributions and proportionate share of contributions	-	578,324
Contributions after measurement date	<u>663,732</u>	<u>-</u>
Total	<u>\$ 4,027,097</u>	<u>\$ 1,969,132</u>

The \$663,732 reported as deferred outflows of resources related to pensions resulting from District contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended 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>	
2019	\$ 1,207,022
2020	563,239
2021	(273,952)
2022	<u>(102,076)</u>
Total	<u>\$ 1,394,233</u>

NOTE 9 – PENSION PLAN (Continued)

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

Valuation Date	June 30, 2017
Experience Study	July 1, 2008 – June 30, 2013
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level percentage of payroll
Remaining Amortization Period	25 years
Asset Valuation Method	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized
Inflation	2.30%
Salary Increase	3.05%, 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 (male mortality rates are multiplied by 50% and female mortality rates are multiplied by 30%). The mortality table for healthy retired members and beneficiaries is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (female mortality rates are set back one year). The mortality table for disabled members is the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (male mortality rates are set back four years). There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

The long-term expected return on plan assets was determined by using a building-block method in which best-estimate ranges of expected future real rate of returns are developed for each asset class. The ranges are combined by weighting the expected future real rate of return by the target asset allocation percentage.

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

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long Term Expected Real Rate of Return</u>
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
EMD	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	<u>2.00</u>	1.50
Total	<u><u>100.00</u></u> %	

NOTE 9 – PENSION PLAN (Continued)

Discount rate: The discount rate used to measure the total pension liability was 6.25%. The single discount rate was based on the expected rate of return on pension plan investments for the system. Based on the stated assumptions and the projection of cash flows as of each fiscal year ending, the pension plan's fiduciary net position and future contributions were projected to be sufficient to finance all the future benefit payments of the current plan member. Therefore, the long-term expected rate of return on pension plan investments was applied to all period of projected benefit payments to determine the total pension liability for the system. The projection of cash flows used to determine the single discount rate assumes that the participating employers in the system contributes the actuarially determined contribution rate in all future years.

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

	<u>1% Decrease (5.25%)</u>	<u>Current Discount Rate (6.25%)</u>	<u>1% Increase (7.25%)</u>
Non-hazardous	\$ 23,942,321	\$ 19,018,499	\$ 14,893,199

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

Plan Information for December 31, 2017 Financial Statements

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

At December 31, 2017, the District reported a liability of \$18,765,118 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2016. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year end, June 30, 2017, using generally accepted actuarial principles. The District's proportion of the net pension liability was based on the District's share of contributions to the pension plan relative to the contributions of all participating employers. At December 31, 2017, the District's proportion for the non-hazardous system was 0.320590%, which was a decrease of 0.014610% from its proportion measured as of December 31, 2016.

For the year ended December 31, 2017, the District recognized pension expense of \$1,948,542. At December 31, 2017, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Net difference between projected and actual earnings on pension plan investments	\$ 1,486,175	\$ 1,254,072
Difference between expected and actual experience	23,275	476,339
Changes of assumptions	3,462,673	-
Changes in proportion and difference between employer contributions and proportionate share of contributions	55,160	562,061
Contributions after measurement date	<u>559,051</u>	<u>-</u>
Total	<u>\$ 5,586,334</u>	<u>\$ 2,292,472</u>

NOTE 9 – PENSION PLAN (Continued)

The \$559,051 reported as deferred outflows of resources related to pensions resulting from District contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2018. 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>	
2018	\$ 1,221,393
2019	1,209,314
2020	545,058
2021	<u>(240,954)</u>
Total	<u>\$ 2,734,811</u>

Actuarial assumptions: The total pension liability in the June 30, 2017 actuarial valuation was determined using the following actuarial methods and assumptions, applied to all periods included in the measurement:

Valuation Date	June 30, 2016
Experience Study	July 1, 2008 – June 30, 2013
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level percentage of payroll, closed
Remaining Amortization Period	27 years
Asset Valuation Method	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized
Inflation	3.25%
Salary Increase	4.00%, Average
Investment Rate of Return	7.50% Net of pension plan investment expense, including inflation

The mortality for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (male mortality rates are multiplied by 50% and female mortality rates are multiplied by 30%). The mortality table for healthy retired members and beneficiaries is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (female mortality rates are set back one year). The mortality table for disabled members is the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (male mortality rates are set back four years). There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

The long-term expected return on plan assets was determined by using a building-block method in which best-estimate ranges of expected future real returns are developed for each asset class. The ranges are combined by weighting the expected future real rate of return by the target asset allocation percentage.

NOTE 9 – PENSION PLAN (Continued)

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

<u>Asset Class</u>	<u>Target Allocation</u>		<u>Long Term Expected Real Rate of Return</u>	
US Equity	17.50	%	5.97	%
International Equity	17.50		7.85	
Global Bonds	4.00		2.63	
Global Credit	2.00		3.63	
High Yield	7.00		5.75	
Emerging Market Debt	5.00		5.50	
Private Equity	10.00		8.75	
Real Estate	5.00		7.63	
Absolute Return	10.00		5.63	
Real Return	10.00		6.13	
Private Equity	10.00		8.25	
Cash	2.00		1.88	
Total	<u>100.00</u>	%		

Discount rate: The discount rate used to measure the total pension liability was 6.25%. The single discount rate was based on the expected rate of return on pension plan investments for the system. Based on the stated assumptions and the projection of cash flows as of each fiscal year ending, the pension plan's fiduciary net position and future contributions were projected to be sufficient to finance all the future benefit payments of the current plan member. Therefore, the long-term expected rate of return on pension plan investments was applied to all period of projected benefit payments to determine the total pension liability for the system. The projection of cash flows used to determine the single discount rate assumes that the participating employers in the system contributes the actuarially determined contribution rate in all future years.

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

	<u>1% Decrease (5.25%)</u>	<u>Current Discount Rate (6.25%)</u>	<u>1% Increase (7.25%)</u>
Non-hazardous	\$ 23,666,870	\$ 18,765,118	\$ 14,664,840

Changes of assumptions: Subsequent to the actuarial valuation date, but prior to the measurement dates, the KRS Board of Trustees adopted updated actuarial assumptions which will be used in performing the actuarial valuation as of June 30, 2017. Specifically, total pension liability as of June 30, 2017 is determined using a 2.30% price inflation assumption for the systems, and the assumed rate of return is 6.25%.

Payable to the Pension Plan

At December 31, 2018 and 2017, the District reported a payable of \$102,843 and \$108,510 for the outstanding amount of contributions to the pension plan required for the years ended December 31, 2018 and 2017, respectively.

NOTE 9 – PENSION PLAN (Continued)

Pension plan fiduciary net position: Detailed information about the pension plan’s fiduciary net position is available in the separately issued Kentucky Retirement Systems Comprehensive Annual Financial Report on the KRS website at www.kyret.ky.gov.

401(k) Plan and 457 Plan

The District also permits employees to participate in a voluntary 401(k) or 457 plan. There is no employer match.

NOTE 10 – OPEB PLAN

General Information about the OPEB Plan

Plan description: County Employees Retirement System consists of two plans, Non-hazardous and Hazardous. Each plan is a cost-sharing multiple-employer defined benefit OPEB plan administered by the Kentucky Retirement Systems (KRS) under the provision of Kentucky Revised Statute 61.645. The plan covers all regular full-time members employed in non-hazardous and hazardous duty positions of each participating county, city, and any additional eligible local agencies electing to participate in CERS. The District participates in the non-hazardous plan.

Benefits provided: The KRS’ Insurance Fund was established to provide hospital and medical insurance for eligible members receiving benefits from CERS. The eligible non-Medicare retirees are covered by the Department of Employee Insurance (DEI) plans. KRS submits the premium payments to DEI. The Board contracts with Humana to provide health care benefits to the eligible Medicare retirees through a Medicare Advantage Plan. The Insurance Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance.

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for members who began participating on, or after July 1, 2003. Once members reach a minimum vesting period of 10 years, non-hazardous employees whose participation began on, or after July 1, 2003, earn \$10 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on, or after July 1, 2003 earn \$15 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee’s spouse receives \$10 per month for insurance benefits for each year of the deceased employee’s earned hazardous service. This dollar amount is subject to adjustment annually, which is currently 1.5% based upon Kentucky Revised Statutes. This benefit is not protected under the inviolable contract provisions of KRS 61.692. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

The amount of contribution paid by the Insurance Fund is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are as follows:

Portion Paid by Insurance Fund	
Years of Service	Paid by Insurance Fund (%)
20 + Years	100.00%
15 - 19 Years	75.00%
10 - 14 Years	50.00%
4 - 9 Years	25.00%
Less Than 4 Years	0.00%

NOTE 10 – OPEB PLAN (Continued)

During the 2018 legislative session, House Bill 185 was enacted, which provided increased pension benefits for the beneficiaries of active members who die in the line of duty.

Contributions: The employee contribution rate is set by state statute. Non-hazardous employees contribute 5%. Employees hired on or after September 1, 2008, contribute an additional 1% to health insurance.

The employer contribution rates are set by the KRS Board under Kentucky Revised Statute 61.565 based on an annual actuarial valuation, unless altered by legislation enacted by the Kentucky General Assembly. For the fiscal years ended June 30, 2019, 2018, and 2017, participating employers contributed 21.48% (16.22% pension fund and 5.26% insurance fund), 19.18% (14.48% pension fund and 4.70% insurance fund), and 18.68% (13.95% pension fund and 4.73% insurance fund), respectively, for the non-hazardous system of each employee’s creditable compensation. The actuarially determined rates set by the Board for the fiscal years was a percentage of each employee’s creditable compensation. Contributions to the insurance fund from the District were \$399,058 and \$364,575 for the years ended December 31, 2018 and 2017, respectively.

Plan Information for December 31, 2018 Financial Statements

At December 31, 2018, the District reported a liability of \$5,544,345 for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of June 30, 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of June 30, 2017. The total OPEB liability was rolled-forward from the valuation date to the plan’s fiscal year end, June 30, 2018, using generally accepted actuarial principles. The District’s proportion of the net OPEB liability was based on the District’s share of contributions to the OPEB plan relative to the contributions of all participating employers. At December 31, 2018, the District’s proportion for the non-hazardous system was 0.312275%, which was a decrease of 0.008315% from its proportion measured as of December 31, 2017.

For the year ended December 31, 2018, the District recognized OPEB expense of \$214,646. At December 31, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Net difference between projected and actual earnings on pension plan investments	\$ -	\$ 381,897
Difference between expected and actual experience	-	646,120
Changes of assumptions	1,107,288	12,810
Changes in proportion and difference between employer contributions and proportionate share of contributions	-	150,559
Contributions after measurement date	<u>215,242</u>	<u>-</u>
Total	<u>\$ 1,322,530</u>	<u>\$ 1,191,386</u>

NOTE 10 – OPEB PLAN (Continued)

\$215,242 reported as deferred outflows of resources related to OPEB resulting from District contributions subsequent to the measurement date will be recognized as a reduction of the net OPEB liability in the year ended December 31, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

<u>Years Ending December 31,</u>	
2019	\$ (9,220)
2020	(9,220)
2021	(9,220)
2022	64,951
2023	(77,058)
Thereafter	<u>(44,331)</u>
Total	<u>\$ (84,098)</u>

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

Valuation Date	June 30, 2017
Experience Study	July 1, 2008 – June 30, 2013
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Pay
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
Payroll Growth Rate	4.00%
Inflation	3.25%
Salary Increase	4.00%, Average
Investment Rate of Return	7.50%
Healthcare Cost Trend Rates (Pre-65)	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.
Healthcare Cost Trend Rates (Post-65)	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.

The mortality for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (male mortality rates are multiplied by 50% and female mortality rates are multiplied by 30%). The mortality table for healthy retired members and beneficiaries is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (female mortality rates are set back one year). The mortality table for disabled members is the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (male mortality rates are set back four years). There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

The long-term expected return on plan assets was determined by using a building-block method in which best-estimate ranges of expected future real returns are developed for each asset class. The ranges are combined by weighting the expected future real rate of return by the target asset allocation percentage.

NOTE 10 – OPEB PLAN (Continued)

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

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long Term Expected Real Rate of Return</u>
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
EMD	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
	<u>100.00</u> %	

Discount rate: The discount rate used to measure the total OPEB liability was 5.85% for non-hazardous and 5.97% for hazardous. The single discount rate was based on the expected rate of return on the OPEB plan investments of 6.25% and a municipal bond rate of 3.62%, as reported in Fidelity Index’s “20-Year Municipal GO AA Index” as of June 30, 2018. 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.

Sensitivity of the District’s proportionate share of the net OPEB liability to changes in the discount rate: The following present’s the District’s proportionate share of the net OPEB liability, as well as what the District’s proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (4.85% for non-hazardous and 4.97% for hazardous) or 1-percentage-point higher (6.88% for non-hazardous and 6.97% for hazardous) than the current rate:

	<u>1% Decrease</u>	<u>Current Discount</u>	<u>1% Increase</u>
Non-hazardous	\$ 7,201,215	\$ 5,544,345	\$ 4,132,994

NOTE 10 – OPEB PLAN (Continued)

Sensitivity of the District's proportionate share of the net OPEB liability to changes in the healthcare cost trend rates: The following present's the District's proportionate share of the net OPEB liability, 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 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates:

	<u>1% Decrease</u>	<u>Current Healthcare Cost Trend Rate</u>	<u>1% Increase</u>
Non-hazardous	\$ 4,127,820	\$ 5,544,345	\$ 7,214,020

Changes of assumptions: There have been changes in actuarial assumptions since June 30, 2017.

Plan Information for December 31, 2017 Financial Statements

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

At December 31, 2017, the District reported a liability of \$6,444,956 for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of June 30, 2017, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of June 30, 2016. The total OPEB liability was rolled-forward from the valuation date to the plan's fiscal year end, June 30, 2017, using generally accepted actuarial principles. The District's proportion of the net OPEB liability was based on the District's share of contributions to the OPEB plan relative to the contributions of all participating employers. At December 31, 2018, the District's proportion for the non-hazardous system was 0.320590%, which was a decrease of 0.014610% from its proportion measured as of December 31, 2016.

For the year ended December 31, 2017, the District recognized OPEB expense of \$143,324. At December 31, 2017, the District reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Net difference between projected and actual earnings on pension plan investments	\$ -	\$ 304,585
Difference between expected and actual experience	-	17,901
Changes of assumptions	1,402,382	-
Changes in proportion and difference between employer contributions and proportionate share of contributions	-	14,955
Contributions after measurement date	<u>181,460</u>	<u>-</u>
Total	<u>\$ 1,583,842</u>	<u>\$ 337,441</u>

NOTE 10 – OPEB PLAN (Continued)

\$181,460 reported as deferred outflows of resources related to OPEB resulting from District contributions subsequent to the measurement date will be recognized as a reduction of the net OPEB liability in the year ended December 31, 2018. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

<u>Years Ending December 31,</u>		
2018	\$	183,234
2019		183,234
2020		183,234
2021		183,234
2022		259,380
Thereafter		<u>72,625</u>
Total	\$	<u>1,064,941</u>

Actuarial assumptions: The total OPEB liability in the June 30, 2017 actuarial valuation was determined using the following actuarial methods and assumptions, applied to all periods included in the measurement:

Valuation Date	June 30, 2016
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Pay
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
Payroll Growth Rate	4.00%
Inflation	3.25%
Salary Increase	4.00%, Average
Investment Rate of Return	7.50%
Healthcare Cost Trend Rates (Pre-65)	Initial trend starting at 7.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 5 years.
Healthcare Cost Trend Rates (Post-65)	Initial trend starting at 5.50% and gradually decreasing to an ultimate trend rate of 5.00% over a period of 2 years.

The mortality for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (male mortality rates are multiplied by 50% and female mortality rates are multiplied by 30%). The mortality table for healthy retired members and beneficiaries is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (female mortality rates are set back one year). The mortality table for disabled members is the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (male mortality rates are set back four years). There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

The long-term expected return on plan assets was determined by using a building-block method in which best-estimate ranges of expected future real returns are developed for each asset class. The ranges are combined by weighting the expected future real rate of return by the target asset allocation percentage.

NOTE 10 – OPEB PLAN (Continued)

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

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long Term Expected Real Rate of Return</u>
US Equity	17.50 %	5.97 %
International Equity	17.50	7.85
Global Bonds	4.00	2.63
Global Credit	2.00	3.63
High Yield	7.00	5.75
Emerging Market Debt	5.00	5.50
Private Equity	10.00	8.75
Real Estate	5.00	7.63
Absolute Return	10.00	5.63
Real Return	10.00	6.13
Private Equity	10.00	8.25
Cash	<u>2.00</u>	1.88
Total	<u>100.00 %</u>	

Discount rate: The discount rate used to measure the total OPEB liability was 5.84% for non-hazardous and 5.96% for hazardous. The single discount rate was based on the expected rate of return on the OPEB plan investments of 6.25% and a municipal bond rate of 3.56%, as reported in Fidelity Index’s “20-Year Municipal GO AA Index” as of June 30, 2017. Future contributions are projected in accordance with the Board’s current funding policy, which includes the requirement that each participating employer in the System contribute the actuarially determined contribution rate, which is determined using a closed funding period (26 years as of June 30, 2017) and the actuarial assumptions and methods adopted by the Board of Trustees. Current assets, future contributions, and investment earnings are projected to be sufficient to pay the projected benefit payments from the retirement system. However, the cost associated with the implicit employer subsidy is not currently being 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.

Sensitivity of the Districts proportionate share of the net OPEB liability to changes in the discount rate: The following present’s the District’s proportionate share of the net OPEB liability, as well as what the District’s proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (4.84% for non-hazardous and 4.96% for hazardous) or 1-percentage-point higher (6.84% for non-hazardous and 6.96% for hazardous) than the current rate:

	<u>1% Decrease</u>	<u>Current Discount</u>	<u>1% Increase</u>
Non-hazardous	\$ 8,200,849	\$ 6,444,956	\$ 4,983,777

NOTE 10 – OPEB PLAN (Continued)

Sensitivity of the District's proportionate share of the net OPEB liability to changes in the healthcare cost trend rates: The following presents the District's proportionate share of the net OPEB liability, 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 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates:

	<u>1% Decrease</u>	<u>Current Healthcare Cost Trend Rate</u>	<u>1% Increase</u>
Non-hazardous	\$ 4,943,613	\$ 6,444,956	\$ 8,396,613

Changes of assumptions: Subsequent to the actuarial valuation date, but prior to the measurement dates, the KRS Board of Trustees adopted updated actuarial assumptions which will be used in performing the actuarial valuation as of June 30, 2017. Specifically, total OPEB liability as of June 30, 2017 is determined using a 2.30% price inflation assumption and an assumed rate of return of 6.25%.

Payable to the OPEB Plan

At December 31, 2018 and 2017, the District reported a payable of \$33,351 and \$35,221 for the outstanding amount of contributions to the OPEB plan required for the years ended December 31, 2018 and 2017, respectively.

Pension plan fiduciary net position: Detailed information about the OPEB plan's fiduciary net position is available in the separately issued Kentucky Retirement Systems Comprehensive Annual Financial Report on the KRS website at www.kyret.ky.gov.

NOTE 11 – OPERATING LEASES

The District is obligated under certain non-cancelable leases for equipment. The leases expire at various dates through April, 2024. Lease expense for the years ended December 31, 2018 and 2017 were \$36,484 and \$16,835, respectively.

Minimum future rental payments under non-cancelable operating leases having remaining terms in excess of one year are:

<u>Years Ending December 31,</u>	
2019	\$ 23,800
2020	13,165
2021	13,165
2022	13,165
2023	13,165
Thereafter	<u>3,291</u>
	<u>\$ 79,751</u>

NOTE 12 – ECONOMIC DEPENDENCY

The District receives the majority of its operating revenues from customers in Kenton, Campbell, Boone, and Pendleton counties of Kentucky.

NOTE 13 – CHANGE IN ACCOUNTING PRINCIPLES

The District adopted Governmental Accounting Standards Board (GASB) Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. This Statement establishes standards for measuring and recognizing liabilities, deferred outflows for resources, deferred inflows of resources, and expenses/expenditures. For defined benefit other postemployment benefit plans, these Statements identify the methods and assumptions that should be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to period of employee service. This Statement also requires enhanced note disclosures and schedules of required supplementary information that will be presented by the plans that are within its scope.

The implementation of GASB Statement No. 75 had the following effects:

	<u>June 30, 2016</u>
Net Position, As Originally Reported	\$ 182,811,580
Recognition of Net OPEB Liability	<u>(5,055,231)</u>
Restated Net Position	<u>\$ 177,756,349</u>
<u>June 30, 2017</u>	
Net Position, As Originally Reported	\$ 193,276,189
Recognition of Net OPEB Liability	(6,444,956)
Recognition of Deferred Outflows Related to OPEB	1,402,382
Recognition of Deferred Inflows Related to OPEB	(337,441)
Recognition of Contributions after Measurement Date	<u>181,460</u>
Restated Net Position	<u>\$ 188,077,634</u>

NOTE 14 – CONTINGENT LIABILITIES

The District is a defendant in various lawsuits. Although the outcome of certain of these lawsuits is not presently determinable, in the opinion of the District's Management the resolution of these matters will not result in a material uninsured liability to the District.

NOTE 15 – SUBSEQUENT EVENTS

The District has evaluated subsequent events through June 27, 2019, which is the date the financial statements were available to be issued.

In January, 2019, the Commissioners passed a resolution authorizing up to \$18,000,000 in Water District Revenue Bond Anticipation Notes, Series 2019 for the purpose of refunding and renewing the Water District Revenue Bond Anticipation Notes, Series 2017 in anticipation of the later sale and delivery of up to \$28,000,000 Water District Revenue Bonds authorized by a Bond Resolution adopted on February 16, 2017.

In March, 2019, the Kentucky Public Service Commission, approved a rate increase of 11.6% with a two-year phase in, pursuant to KRS 278.180 and KRS 278.190.

REQUIRED SUPPLEMENTARY INFORMATION

**NORTHERN KENTUCKY WATER DISTRICT
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
BUDGET TO ACTUAL
YEAR ENDED DECEMBER 31, 2018**

	Original and Final Budget	Actual	Variance Favorable (Unfavorable)
Operating Revenues			
Water Sales	\$ 52,733,982	\$ 53,605,092	\$ 871,110
Forfeited Discounts	815,625	856,519	40,894
Rents From Property	491,000	389,526	(101,474)
Other Water Revenues	305,920	475,485	169,565
Total Operating Revenues	54,346,527	55,326,622	980,095
Operating Expenses			
Operation and Maintenance Expense	28,396,537	26,129,086	2,267,451
Depreciation Expense	-	12,089,960	(12,089,960)
Total Operating Expenses	28,396,537	38,219,046	(9,822,509)
Net Operating Income	25,949,990	17,107,576	(8,842,414)
Non-Operating Income (Expense)			
Investment Income	646,200	1,664,146	1,017,946
Miscellaneous Non-Operating Income	127,800	457,666	329,866
Loss on Abandonment of Mains	-	(454,332)	(454,332)
Interest on Long-Term Debt and Customer Deposits	(8,116,055)	(7,997,633)	118,422
Amortization of Debt Premium and Expense	-	1,050,606	1,050,606
Pension Expense	-	(1,489,278)	(1,489,278)
Other Post Employment Benefit Revenue	-	(214,646)	(214,646)
Arbitrage Expense	-	(133,418)	(133,418)
Gain on Sale of Capital Assets	-	800	800
Total Non-Operating Expense	(7,342,055)	(7,116,089)	225,966
Change in Net Position Before Capital Contributions	18,607,935	9,991,487	(8,616,448)
Capital Contributions	-	1,471,935	1,471,935
Change in Net Position	\$ 18,607,935	\$ 11,463,422	\$ (7,144,513)

**NORTHERN KENTUCKY WATER DISTRICT
SCHEDULE OF THE DISTRICT'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY
DECEMBER 31, 2018**

**County Employees Retirement System
Last 10 Calendar Years***

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
District's Proportion of the Net Pension Liability (Asset) - Non-hazardous	0.312275%	0.320590%	0.335200%	0.344120%	0.333600%
Total District's Proportionate Share of the Net Pension Liability (Asset)	\$ <u>19,018,499</u>	\$ <u>18,765,118</u>	\$ <u>16,504,154</u>	\$ <u>14,819,690</u>	\$ <u>11,002,199</u>
District's Covered - Employee Payroll	\$ <u>7,779,594</u>	\$ <u>7,880,340</u>	\$ <u>7,925,067</u>	\$ <u>7,972,340</u>	\$ <u>7,931,952</u>
District's Proportionate Share of the Net Pension Liability (Asset) as a Percentage of Its Covered-Employee Payroll	244.47%	238.13%	208.25%	185.89%	138.71%
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability - Non Hazardous	53.54%	53.32%	55.50%	59.97%	66.80%

* Only five years of information available. Additional years' information will be displayed as it becomes available.

**NORTHERN KENTUCKY WATER DISTRICT
SCHEDULE OF THE DISTRICT'S PENSION CONTRIBUTIONS
DECEMBER 31, 2018**

**County Employees Retirement System
Last 10 Calendar Years***

<u>Non-hazardous</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Contractually Required Contribution	\$ 1,230,042	\$ 1,099,103	\$ 1,045,628	\$ 1,429,517	\$ 1,483,609
Contributions in Relation to the Contractually Required Contribution	<u>(1,230,042)</u>	<u>(1,099,103)</u>	<u>(1,045,628)</u>	<u>(1,429,517)</u>	<u>(1,483,609)</u>
Contribution Deficiency (Excess)	<u>\$ -</u>				
District's Covered-Employee Payroll	\$ 8,040,890	\$ 7,732,260	\$ 7,925,067	\$ 7,972,340	\$ 7,931,952
Contributions as a Percentage of Covered-Employee Payroll	15.30%	14.21%	13.19%	17.93%	18.70%

* Only five years of information available. Additional years' information will be displayed as it becomes available.

**NORTHERN KENTUCKY WATER DISTRICT
SCHEDULE OF THE DISTRICT'S PROPORTIONATE SHARE OF THE NET OPEB LIABILITY
DECEMBER 31, 2018**

**County Employees Retirement System
Last 10 Calendar Years***

	<u>2018</u>	<u>2017</u>	<u>2016</u>
District's Proportion of the Net Pension Liability (Asset) - Non-hazardous	0.312275%	0.320590%	0.335200%
Total District's Proportionate Share of the Net Pension Liability (Asset)	\$ <u>5,544,345</u>	\$ <u>6,444,956</u>	\$ <u>5,055,231</u>
District's Covered - Employee Payroll	\$ <u>7,779,594</u>	\$ <u>7,880,340</u>	\$ <u>7,925,067</u>
District's Proportionate Share of the Net Pension Liability (Asset) as a Percentage of Its Covered-Employee Payroll	71.27%	81.79%	63.79%
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability - Non-hazardous	57.62%	52.39%	55.24%

** Only three years of information available. Additional years' information will be displayed as it becomes available.*

**NORTHERN KENTUCKY WATER DISTRICT
SCHEDULE OF THE DISTRICT'S OPEB CONTRIBUTIONS
DECEMBER 31, 2018**

**County Employees Retirement System
Last 10 Calendar Years***

<u>Non-hazardous</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Contractually Required Contribution	\$ 399,058	\$ 364,575	\$ 371,330
Contributions in Relation to the Contractually Required Contribution	<u>(399,058)</u>	<u>(364,575)</u>	<u>(371,330)</u>
Contribution Deficiency (Excess)	\$ <u> -</u>	\$ <u> -</u>	\$ <u> -</u>
District's Covered-Employee Payroll	\$ 8,040,890	\$ 7,732,260	\$ 7,925,067
Contributions as a Percentage of Covered-Employee Payroll	4.96%	4.71%	4.69%

** Only three years of information available. Additional years' information will be displayed as it becomes available.*

OTHER SUPPLEMENTARY INFORMATION

**NORTHERN KENTUCKY WATER DISTRICT
STATEMENTS OF WATER OPERATING REVENUE**

	Years Ended December 31,	
	2018	2017
Operating Revenues		
Metered Sales		
Sales to Residential Customers	\$ 32,997,415	\$ 32,144,608
Sales to Commercial Customers	7,450,952	7,468,981
Sales to Industrial Customers	4,084,359	4,013,168
Sales to Public Authorities	2,570,607	2,347,033
Sales to Multiple Family Dwellings	4,825,434	4,718,024
Sales Through Bulk Loading Stations	<u>56,293</u>	<u>62,273</u>
Total Metered Sales	51,985,060	50,754,087
Fire Protection Revenue	57,227	52,125
Sales For Resale	<u>1,562,805</u>	<u>1,653,004</u>
Total Sales of Water	53,605,092	52,459,216
Other Revenue	<u>1,721,530</u>	<u>1,625,998</u>
Total Operating Revenues	\$ <u>55,326,622</u>	\$ <u>54,085,214</u>

**NORTHERN KENTUCKY WATER DISTRICT
STATEMENTS OF COMBINED OPERATION AND MAINTENANCE EXPENSES**

	Years Ended December 31,	
	2018	2017
Operating and Maintenance Expenses		
Salaries and Wages	\$ 8,021,941	\$ 7,710,935
Employee Pensions and Benefits	4,880,886	4,582,126
Taxes Other Than Income Taxes	589,987	580,024
Purchased Power	2,565,536	2,384,132
Chemicals	2,237,457	2,361,135
Materials and Supplies	2,131,234	1,866,605
Contractual Services	3,884,861	3,233,211
Transportation Expenses	570,758	478,853
Insurance	564,492	553,326
Bad Debt Expense	372,140	341,682
Miscellaneous Expense	180,111	244,464
Regulatory Commission Assessment	129,683	124,663
	<hr/>	<hr/>
Total Operating and Maintenance Expenses	\$ 26,129,086	\$ 24,461,156
	<hr/> <hr/>	<hr/> <hr/>

**NORTHERN KENTUCKY WATER DISTRICT
SCHEDULE OF INSURANCE COVERAGES
December 31, 2018**

<u>Company</u>	<u>Policy Number</u>	<u>Description of Coverage</u>	<u>Amount of Coverage</u>	<u>Effective Period</u>	
				<u>From</u>	<u>To</u>
Travelers Insurance	ZLP14T8065317	General Liability	\$ 1,000,000	1/1/2018	1/1/2019
	ZUP14T8066517	Umbrella	19,000,000		
	ZLP14T8065317	Public Officials	1,000,000		
	H8102721X112COF17	Automobile Liability	1,000,000		
	H6302721X112TIL17	Property - Including Equipment Equipment Breakdown	264,360,523		
	H6302721X112TIL17 ZPL14P0759917	Employee Dishonesty Cyber Liability	500,000 2,000,000		
Kentucky Employers Mutual Insurance	WC 338786	Worker's Compensation	1,000,000	7/1/2017	7/1/2018
	WC 338786	Worker's Compensation	1,000,000	7/1/2018	7/1/2019
Cincinnati Insurance	8877071	Fidelity Bond	Per Application	8/20/2017	12/31/2018
Great American Insurance	PEL1093742	Pollution Liability	15,000,000	1/1/2016	1/1/2019

**NORTHERN KENTUCKY WATER DISTRICT
SCHEDULE OF RATES, RULES AND REGULATIONS
DECEMBER 31, 2018**

RETAIL WATER RATES

1. Monthly Service Rate

First	1,500 Cubic Feet	\$4.53 per 100 Cubic Feet
Next	163,500 Cubic Feet	\$3.94 per 100 Cubic Feet
Over	165,000 Cubic Feet	\$2.88 per 100 Cubic Feet

Sub District B shall be assessed a monthly surcharge in the amount of	\$	12.69
Sub District C shall be assessed a monthly surcharge in the amount of	\$	11.54
Sub District D shall be assessed a monthly surcharge in the amount of	\$	29.81
Sub District E shall be assessed a monthly surcharge in the amount of	\$	30.00
Sub District F shall be assessed a monthly surcharge in the amount of	\$	17.97
Sub District G shall be assessed a monthly surcharge in the amount of	\$	23.47
Sub District H shall be assessed a monthly surcharge in the amount of	\$	30.00
Sub District I shall be assessed a monthly surcharge in the amount of	\$	30.00
Sub District K shall be assessed a monthly surcharge in the amount of	\$	7.03
Sub District M shall be assessed a monthly surcharge in the amount of	\$	30.00
Sub District R shall be assessed a monthly surcharge in the amount of	\$	19.18
Sub District RF shall be assessed a monthly surcharge in the amount of	\$	23.77
Sub District RL shall be assessed a monthly surcharge in the amount of	\$	24.56

2. Quarterly Rates

First	4,500 Cubic Feet	\$4.53 per 100 Cubic Feet
Next	490,500 Cubic Feet	\$3.94 per 100 Cubic Feet
Next	495,000 Cubic Feet	\$2.88 per 100 Cubic Feet

3. Fixed Service Charge

<u>Meter Size</u>	<u>Monthly</u>	<u>Quarterly</u>
5/8"	\$ 16.40	\$ 32.80
3/4"	\$ 16.85	\$ 34.40
1"	\$ 18.45	\$ 39.50
1½"	\$ 20.75	\$ 46.70
2"	\$ 26.20	\$ 65.50
3"	\$ 63.20	\$ 203.90
4"	\$ 79.30	\$ 255.50
6"	\$ 117.40	\$ 377.60
8"	\$ 158.50	\$ 516.00
10" and Larger	\$ 210.80	\$ 673.70

**NORTHERN KENTUCKY WATER DISTRICT
SCHEDULE OF RATES, RULES AND REGULATIONS
DECEMBER 31, 2018
(CONTINUED)**

WHOLESALE WATER RATES

Bullock Pen Water District	\$3.57 per 1,000 Gallons (or) \$2.67 per 100 Cubic Feet
City of Walton	\$3.57 per 1,000 Gallons (or) \$2.67 per 100 Cubic Feet
Pendleton County	\$3.57 per 1,000 Gallons (or) \$2.67 per 100 Cubic Feet

MISCELLANEOUS SERVICE FEES

Service Area Non-Recurring Charges

Returned Check Charge	\$ 20.00
Water Hauling Station	\$ 6.06 / per 1,000 Gallons
Reconnection Fee	\$ 25.00
Overtime Charge	\$ 60.00

**NORTHERN KENTUCKY WATER DISTRICT
MEMBERS OF THE COMMISSION AND ADMINISTRATIVE STAFF
DECEMBER 31, 2018**

<u>COMMISSIONERS</u>	<u>TITLE</u>	<u>TERM EXPIRES</u>
Clyde Cunningham	Chair	August 28, 2019
Douglas C Wagner, CDT	Vice-Chair	August 26, 2021
Joseph J. Koester	Treasurer	July 31, 2020
Dr. Patricia Sommercamp	Secretary	August 28, 2021
David M. Spaulding, Esq.		August 28, 2019
Fred A. Macke, Jr.		August 26, 2020

<u>ADMINISTRATIVE STAFF</u>	<u>TITLE</u>
C. Ronald Lovan, PE	President/CEO
Lindsey Rehtin, CPA	Vice President of Finance and Support Services
Amy Kramer, PE	Vice President of Engineering, Production, and Distribution

**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**

Board of Commissioners
Northern Kentucky Water District
Erlanger, Kentucky

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the business-type activities of the Northern Kentucky Water District (the District) as of and for the year ended December 31, 2018 and the related notes to the financial statements, which collectively comprise the Northern Kentucky Water District's basic financial statements, and have issued our report thereon dated June 27, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the 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 opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the 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 in financial reporting that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the 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 that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the District'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 District's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

VonLehman & Company Inc.

Fort Wright, Kentucky
June 27, 2019