POWELL'S VALLEY WATER DISTRICT
Clay City, Kentucky

Audited Financial Statements
For the year ended December 31, 2022

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Lane & Company LLC
Certified Public Accountants
219 Young Lane, Suite 2
Mount Sterling, Kentucky 40353
(859) 498-9915
www.TheLaneCPA.com

John T. Lane, CPA
Joel D. Lane, CPA

American Institute of CPAs
Kentucky Society of CPAs

INDEPENDENT AUDITOR'S REPORT

Board of Commissioners
Powell's Valley Water District
Clay City, Kentucky

We have audited the accompanying financial statements of the business-type activities of Powell's Valley Water District as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the Powell's Valley Water District's basic financial statements as listed in the table of contents.

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 Powell's Valley Water District, as of December 31, 2022, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Powell's Valley Water District, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Powell's Valley Water District's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 Powell's Valley Water District's internal control. Accordingly, no such opinion is expressed.

- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Powell's Valley Water District's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Matters

Required Supplementary Information
Management has omitted the Management's Discussion and Analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing 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 and historical context. Our opinion on the basic financial statements is not affected by this missing information.

The Schedule of Employer's Proportionate Share of Net Pension Liability, the Schedule of Employer's Contributions – Net Pension Liability, Schedule of Employer's Proportionate Share of Net OPEB Liability and the Schedule of Employer's Contributions – Net OPEB Liability are 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. 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 Powell's Valley Water District's basic financial statements. The Comparative Statement of Revenues and Expenses is presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Comparative Statement of Revenues and Expenses and the Statement of Revenues and Expenses – Water and Sewer is the responsibility of management and was 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 Comparative Statement of Revenues 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 May 31, 2023, on our consideration of the Powell's Valley Water District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Powell's Valley Water District's internal control over financial reporting and compliance.

Lane & Company LLC

Mount Sterling, Kentucky

May 31, 2023
This report contains 31 pages.

POWELL'S VALLEY WATER DISTRICT
Statement of Net Position
Proprietary Fund
December 31, 2022

ASSETS	
Current Assets	
Cash and cash equivalents - unrestricted	$ 200,747
Cash and cash equivalents - restricted (note 1)	352,824
Accounts receivable - net of allowance for doubtful accounts (note 1)	112,217
Inventory (note 1)	9,572
Total Current Assets	675,360
Noncurrent Assets	
Capital assets:	
Land	16,888
Plant, equipment and lines	10,447,176
Less accumulated depreciation	(5,149,979)
Total Noncurrent Assets	5,314,085
Deferred Outflows of Resources	284,321
Total Assets and Deferred Outflows of Resources	$ 6,273,766
LIABILITIES	
Current Liabilities	
Accrued expenses	$ 71,789
Bonds payable	85,500
Payable from restricted assets	151,230
Total Current Liabilities	308,519
Noncurrent Liabilities	
Net pension liability	720,443
Net OPEB liability	196,641
Bonds payable	1,758,200
Total Noncurrent Liabilities	2,675,284
Deferred Inflows of Resources	196,330
Total Liabilities and Deferred Inflows of Resources	3,180,133
NET POSITION	
Net investment in capital assets	3,470,385
Restricted	201,594
Unrestricted	(578,346)
Total Net Position	$ 3,093,633

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

POWELL'S VALLEY WATER DISTRICT
Statement of Revenues, Expenses and Changes in Fund Net Position
Proprietary Fund
for the year ended December 31, 2022

Operating Revenues	
User fees	$ 1,557,264
Other water revenue	45,226
Total Operating Revenues	1,602,490
Expenses	
Water purchased	408,141
Salaries	282,312
Office	25,248
Insurance	32,046
Taxes	15,211
Outside services	75,673
Employee benefits	270,600
Miscellaneous	2,789
Depreciation	289,590
Supplies	217,501
Utilities	135,064
Vehicle expense	35,579
Total Operating Expenses	1,789,754
Operating Income (Loss)	(187,264)
Nonoperating Revenues (Expenses)	
Grants	92,048
Miscellaneous income	952
Interest income	901
Interest expense	(70,964)
Net Nonoperating Revenues (Expenses)	22,937
Change in Net Position	(164,327)
Total Net Position - beginning	3,257,960
Total Net Position - ending	$ 3,093,633

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

POWELL'S VALLEY WATER DISTRICT
Statement of Cash Flows
Proprietary Fund
December 31, 2022

CASH FLOWS FROM OPERATING ACTIVITIES:	
Operating revenues	$ 1,599,450
Cash paid to employees	(282,312)
Cash paid for general and administrative expenses	(1,103,592)
Net Cash provided / (used) by operating activities	213,546
CASH FLOWS FROM INVESTING ACTIVITIES:	
Interest earned	901
Customer deposits	10,159
Net Cash provided / (used) by investing activities	11,060
CASH FLOWS FROM CAPITAL AND FINANCING ACTIVITIES:	
Grants	92,048
Miscellaneous revenue	952
Bond payments	(82,000)
Loan payments	(13,606)
Interest paid	(70,964)
Net Cash provided / (used) in capital and financing activities	(73,570)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	151,036
CASH AND CASH EQUIVALENTS - BEGINNING OF YEAR	402,535
CASH AND CASH EQUIVALENTS - END OF THE YEAR	$ 553,571
RECONCILIATION OF NET CASH PROVIDED BY OPERATING ACTIVITIES:	
Net Operating Income	$ (187,264)
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities:	
(increase) / decrease in prepaid	124,370
depreciation	289,590
increase / (decrease) in pension/OPEB expense due to GASB 68/75	24,280
(increase) / decrease in accounts receivable	(3,040)
increase / (decrease) in accounts payable	(34,390)
Net cash provided / (used) by operating activities	$ 213,546

Note 1 - Summary of Significant Accounting Policies

The Powell's Valley Water District is a water utility which services areas of Powell County. Its sales are primarily to residential customers. The District is a corporate body set forth in KRS 74.070 which was created November 1961. The District is subject to the regulatory Water District of The Kentucky Public Service Commission pursuant to KRS 278.040.

The accounting policies of the District conform to accounting principles generally accepted in the United States of America as applicable to governments. The following is a summary of the more significant policies.

The Reporting Entity

The District, for financial purposes, includes all of the funds relevant to the operations of the District. The financial statements presented herein do not include agencies which have been formed under applicable state laws or separate and distinct units of government apart from Powell's Valley Water District.

The financial statements of the District would include those of separately administered organizations that are controlled by or dependent on the District. Control or dependence is determined on the basis of financial interdependency, selection of governing Water District, designation of management, ability to significantly influence operations, accountability of fiscal matters, scope of public service, and financing relations.

Based on the foregoing criteria there are no other organizations included in these financial statements.

Depreciation Reserve Fund - Monthly transfers are required to be made into this fund. Only expenditures for capital improvements or extraordinary expenses are permitted to be paid from this fund. The required balance of the fund at year end was $16,692. The District had set aside $88,929 into this fund on December 31, 2022.

Bond and Interest Sinking Fund - Monthly transfers are required to be made into this account in an amount equal to one-sixth (1/6) of the interest becoming due on the next succeeding interest due date for all outstanding bonds and one-twelfth (1/12) of the principal of all such bonds maturing on the next succeeding due date. The required balance of the fund on December 31, 2022 was $13,193. The District had set aside $155,634.

Short Lived Asset Account – This account is separate from the Depreciation Reserve account, and the amount of $900 should be deposited into the account each month in accordance with the Letter of Conditions for the USDA Rural Development loan number 91-21. In August of 2018, the Board approved a motion to make a $900 deposit into this account in the amount of $900 when cash flow allowed. The balance of the account at year end was $61.

Enterprise Funds

An enterprise fund distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the Water District's principal ongoing operations. The principal operating revenues of the Water District are operating grants and tenant rental revenue. Operating expenses of the Water District include the cost of producing the revenue 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.

Enterprise Funds are used to account for operations (a) that are financed and operated in a manner similar to private business enterprise where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes.

The accounting and financial reporting treatment applied to the District is determined by its measurement focus. The transactions of the District are accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operations are included on the balance sheet. Net position (i.e., total assets net of total liabilities) are segmented into net investment in capital assets, restricted and unrestricted components. When both restricted and unrestricted resources are available for use, it is the District's policy to use restricted resources first, and then unrestricted resources as they are needed.

Basis of Accounting

The records of the District are maintained, and the budgetary process is based on the accrual method of accounting.

Inventory

The cost of inventory is recorded as a disbursement at the time of payment for the purchase. Materials on hand are inventoried at year end and recorded at cost as an asset at that time.

Deposits

The District considers all highly liquid investments with a maturity date of twelve months or less from date of purchase to be cash equivalents. Certificates of deposit that are redeemable immediately with little or no penalty are considered cash equivalents. On December 31, 2022, the carrying amount of the District's deposits was $553,571 and the bank balance was $553,933. Of the bank balance 100% was covered by federal deposit insurance or collateralized with securities held by the pledging financial institution's trust department or agent in the entity's name.

Summary of Cash & Cash Equivalents

Description	Water	Sewer	Total
Deposit fund	$ 108,200	$ -	$ 108,200
Operating fund	78,801	73,504	152,305
Sinking fund	131,565	24,069	155,634
Depreciation reserve fund	70,148	18,781	88,929
Short-Lived Assets 91-21	61	-	61
Certificate of deposit	47,762		47,762
Cash on hand	680	-	680
Totals	$ 437,217	$ 116,354	$ 553,571

Capital Assets

Capital assets purchased are capitalized at the time of purchase. Such assets are recorded at cost. Donated assets are recorded at fair market value at the date of donation.

Depreciation of property and equipment is computed by the straight-line method based upon the estimated useful lives of the assets as follows:

Class	Life
Lines and tanks	50 years
Equipment	10 years

The District's capitalization policy is as follows: expenditures costing more than $1,000 with an estimated useful life greater than one year are capitalized: all others are expensed.

Accounts Receivable

The receivable reflected in the statements in the amount of $112,217 is net of allowance for doubtful accounts in the amount of $48,195.

Net Position

Net position represents the difference between assets and liabilities. Net investment in capital assets consists of capital assets, net of accumulated depreciation, reduced by the outstanding balance of any borrowing used for the acquisition, construction or improvement of those assets. Net position is recorded as restricted when there are limitations imposed on their use by external restrictions.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and reported amounts of revenues and expenditures during the reporting period. Actual results could differ from those estimates.

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.

Note 2 – Defined Benefit Pension Plan

General Information About the Pension Plan

Plan description - Regular, full-time, employees of the Water District are provided with pensions through the County Employees' Retirement System (CERS)—a cost-sharing multiple-employer defined benefit pension plan administered by the Kentucky Public Pensions Water District. The assets of CERS are pooled with two other retirement systems Kentucky Public Pensions Water District administers, KERS & SPRS. Although invested each system's assets are used only for the members of that plan. Kentucky Revised Statute (KRS) chapter 61 grants the Water District to establish and amend the benefit terms to the Kentucky Public Pensions Water District's Board of Trustees (Board). Kentucky Public Pensions Water District issues a publicly available financial report that can be obtained on their website.

Benefits provided - CERS provides retirement, insurance, disability, and death benefits. Retirement benefits are determined from an average of the five highest years of compensation for those whose participation began before September 01, 2008. For those who began participation on or after September 01, 2008 retirement benefits are determined as an average of the last complete five years. A percentage is then taken from those averages based on the employee's months of service. Employees are eligible for service-related disability benefits with at least 60 months of service. If the member is receiving monthly benefits based on at least four years of service, then a $5,000 death benefit is payable to the member's designated beneficiary. For those employees whose participation began prior to July 01, 2003, CERS will pay a portion of the monthly premium for single coverage based upon service credit accrued at retirement. For those employees whose participation began on or after July 01, 2003 and before September 01, 2008, employees are required to earn at least 10 years of service credit to be eligible for insurance benefits. Employees whose participation began on or after September 01, 2008 must earn at least 15 years of service credit to be eligible for insurance benefits.

Membership in the CERS Non-hazardous Pension Fund consisted of the following on June 30, 2019:

Membership Status	
Inactive plan members currently receiving benefits	67,206
Inactive plan members entitled to but not yet receiving benefits	100,738
Active plan members	77,367
Total plan members	245,311

Prior to July 1, 2009, cost of living adjustments (COLAs) were provided annually equal to the percentage increase in the annual average of the consumer price index (CPI) for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. After July 1, 2009, the COLAs were limited to 1.50%. No COLA has been granted since July 1, 2011.

Contributions

The Commonwealth is required to contribute at an actuarially determined rate for KERS and SPRS pensions. Participating employers are required to contribute at an actuarially determined rate for CERS pensions. Per Kentucky Revised Statute Sections KERS 61.565(3), CERS 78.545(33), and SPRS 16.645(18), normal contribution and past service contribution rates shall be determined by the Board on the basis of the last annual valuation preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget for KERS and SPRS.

For the fiscal years ended June 30, 2022, participating employers contributed a percentage of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal year is a percentage of each employee's creditable compensation. Administrative costs of KPPA are financed through employer contributions and investment earnings.

TIER 1:

Tier 1 plan members who began participating prior to September 1, 2008, are required to contribute 5% (Non-Hazardous) or 8% (Hazardous) of their annual creditable compensation. These members are classified in the Tier 1 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest.

TIER 2:

Tier 2 plan members, who began participating on, or after, September 1, 2008, and before January 1, 2014, are required to contribute 6% (Non-Hazardous) or 9% (Hazardous) of their annual creditable compensation. Further, 1% of these contributions are deposited to an account created for the payment of health insurance benefits under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation (KAR) 105 KAR 1:420 Employer's administrative duties). These members are classified in the Tier 2 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited.

TIER 3:

Tier 3 plan members, who began participating on, or after, January 1, 2014, are required to contribute to the Cash Balance Plan. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan. Members in the plan contribute a set percentage of their salary each month to their own account. Members contribute 5% (Non-Hazardous) or 8% (Hazardous) of their annual creditable compensation, and an additional 1% to the health insurance fund (401(h) account), which is not credited to the member's account and is not refundable. The employer contribution rate is set annually by the Board based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. A member's account is credited with a 4% (Non-Hazardous) or 7.5% (Hazardous) employer pay credit. The employer pay credit represents a portion of the employer contribution.

Contribution Rates and Amounts for CERS Non-Hazardous

				Employer		
Period	Pension	Insurance	Total	Pension	Insurance	Employee
01/01/2022-06/30/2022	19.30%	4.76%	24.06%	$ 25,813	$ 6,366	$ 6,687
07/01/2022-12/31/2022	21.17%	5.78%	26.95%	32,251	4,817	7,105
Totals				$59,064	$11,183	$13,792

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

At December 31, 2022, the Water District reported a liability of $720,443 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2021, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Water District's portion of the net pension liability was based on the Water District's proportionate share of retirement contributions for the fiscal year ended June 30, 2021. On June 30, 2021, the Water District's proportionate share was 0.009966%.

Since certain expense items are amortized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts serve to reduce pension expense, they are labeled deferred inflows. If they will increase pension expense, they are labeled deferred outflows. The amortization of these amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions, if any, are amortized over the average remaining service life of the active and inactive System members at the beginning of the fiscal year. Investment gains and losses are amortized over a fixed five-year period. For the year ended December 31, 2022, the Water District recognized pension expense of $68,319. On December 31, 2022, the Water District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual Liability Experience	$ 770	$ 6,416
Changes in assumptions	-0-	-0-
Differences between expected and actual Investment Experience	98,031	79,561
Changes in proportion and differences between employer contributions and proportionate share of contributions	40,147	5,232
Contributions subsequent to the measurement date	33,251	-0-
Total	$ 172,199	$ 105,121

$33,251 reported as deferred outflows of resources related to pensions resulting from the Water District's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2022. The remaining amount of $(39,700) reported as the net effect of deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ended December 31,	Amount
2023	$14,945
2024	18,381

2025	(6,054)
2026	20,467
2027	-0-
Thereafter	-0-
Total	$ 47,739

Actuarial methods & assumptions: For financial reporting, the actuarial valuation as of June 30, 2021, was performed by Gabriel Roeder Smith (GRS). The total pension liability, net pension liability, and sensitivity information as of June 30, 2021 were based on an actuarial valuation date of June 30, 2020. The total pension liability was rolled-forward from the valuation date (June 30, 2020) to the plan's fiscal year ending June 30, 2021, using generally accepted actuarial principles.

The actuarial assumptions are:

Inflation	2.30% for all plans
Payroll Growth Rate	2.0% for CERS non-hazardous
Salary Increases	3.30% to 10.30% varies by service for CERS non-hazardous
Investment Rate of Return	6.25% for CERS Non-hazardous

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

House Bill 1 passed during the 2019 Special Legislative Session allows certain employers in the KERS Nonhazardous plan to elect to cease participating in the System as of June 30, 2021 under different provisions than were previously established. Senate Bill 249 passed during the 2020 legislative session which delayed the effective date of cessation for these provisions to June 30, 2021. Since each employer's elections are unknown at this time, no adjustment to the Total Pension Liability was made to reflect this legislation.

Senate Bill 249 passed during the 2020 legislative session and changed the funding period for the amortization of the unfunded liability to 30 years as of June 30, 2019. Gains and losses incurring in future years will be amortized over separate 20-year amortization bases. This change does not impact the calculation of the Total Pension Liability and only impacts the calculation of the contribution rates that would be payable starting July 1, 2020. There were no other material plan provision changes.

The following actuarial methods and assumptions were used to determine the actuarially determined contributions effective for fiscal year ending June 30, 2022:

Valuation Date	June 30, 2020
Experience Study	July 1, 2013 - June 30, 2018
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level percent of pay
Amortization Period	30-year closed period at June 30, 2019. Gains/losses incurring after 2019 will be amortized over separate closed 20-year amortization bases
Payroll Growth Rate	2.00% for CERS non-hazardous
Asset Valuation Method	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized
Inflation	2.30%
Salary Increase	3.30%-10.30%, Varies by Service for CERS non-hazardous
Investment Return	6.25% for CERS Non-hazardous
Mortality	System-specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from MP-2014 mortality improvement scale using a base year of 2019

Phase-in Provision	Board certified rate is phased into the actuarially determined rate in accordance with HB 362 enacted in 2018.

The long-term expected rates of return were determined by using a building block method in which best estimated ranges of expected future real rates of return were developed for each asset class. The ranges were combined by weighting the expected future real rate of return by the target asset allocation percentage. The target allocation and best estimates of arithmetic real rate of return for each major asset class are summarized in the tables below. The current long-term inflation assumption is 2.30% per annum for both the non-hazardous and hazardous plan.

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Equity	**60.00%**	
Public Equity	50.00%	4.45%
Private Equity	10.00%	10.15%
Fixed Income	**20.00%**	
Core Bonds	10.00%	0.28%
Specialty Credit/High Yield	10.00%	2.28%
Cash	0.00%	(.91)%
Inflation Protected	**20.00%**	
Real Estate	7.00%	3.67%
Real Return	13.00%	4.07%
Expected Real Return	**100.00%**	**4.28%**
Long Term Inflation Assumption		**2.30%**
Expected Nominal Return for Portfolio		**6.58%**

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a single discount rate that reflects (1) a long-term expected rate of return on pension plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the plan's projected fiduciary net position is not sufficient to pay benefits).

A single discount rate of 6.25% was used to measure the total pension liability for the non-hazardous fund and the hazardous fund for the fiscal year ending June 30, 2022. The single discount rate determined for each fund is based on the expected rate of return on pension plan investments for each fund. Based on the stated assumptions and the projection of cash flows as of each fiscal year ending, the non-hazardous and hazardous pension funds' fiduciary net position and future contributions were separately projected and were each sufficient to finance all the future benefit payments of the current fund members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of the projected benefit payments to determine the total pension liability for each plan.

The projection of cash flows used to determine the single discount rate for each fund must include an assumption regarding actual employer contributions made each future year. Except where noted below, future contributions are projected assuming that each participating employer in each pension fund contributes the actuarially determined employer contribution each future year calculated in accordance with the current funding policy, as most recently revised by House Bill 8, passed during the 2018 legislative session. The assumed future employer contributions reflect the provisions of House Bill 362 (passed during the 2018 legislative session) which limit the increases to the employer contribution rates to 12% over the prior fiscal year through June 30, 2028.

Methodology for Proportionate Shares

The proportionate share of the Collective Pension Amounts for employers that participate in this cost-sharing multiple employer plan is provided in Appendix A and Appendix B of this report and was determined using the employers' actual contributions for the fiscal year ending June 30, 2022. The method is expected to be reflective of the employers' long-term contributions effort as well as be transparent to individual employers and their external auditors.

Non-Employer Contributions

Non-employer contributions will be allocated according to each employer's proportionate share, as described previously. There were no non-employer contributions during fiscal year ending June 30, 2022 for either the non-hazardous or hazardous funds.

Sensitivity of the employer's proportionate share of the net pension liability to changes in the discount rate - The following presents the net pension liability of the System, calculated using the discount rate of 6.25%, as well as what the System's 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 for non-hazardous:

	1% Decrease 5.25%	Current Discount Rate 6.25%	1% Increase 7.25%
Proportionate share of the net pension liability	$ 900,465	$ 720,443	$ 571,551

Pension plan fiduciary net position - Detailed information about the pension plan's fiduciary net position is available in the separately issued CERS financial report.

Note 3 - Other Postemployment Benefits Plan (OPEB)

Under the provisions of Kentucky Revised Statute 61.645, the Board of Trustees of Kentucky Public Pensions Water District's administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) is a participating employer of the CERS. The plan issues publicly available financial statements which may be downloaded from the Kentucky Public Pensions Water District's website.

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

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

Timing of the Valuation

For the employer's financial reporting purposes, the net pension liability and pension expense should be measured as of the employer's "measurement date" which may not be earlier than the employer's prior fiscal year-end date. The total pension liability, net pension liability, and sensitivity information show in this report are based on an actuarial valuation date of June 30, 2021. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending June 30, 2022, using generally accepted actuarial principles. This information was determined separately for the non-hazardous pension fund and the hazardous pension fund.

The discount rate used to calculate the total OPEB liability increased from 5.20% to 5.70% for the CERS non-hazardous insurance plan. There were no other material assumption changes, and it is our opinion that these procedures are reasonable and appropriate, and comply with applicable requirements under GASB Statement No. 75.

Senate Bill 209 passed during the 2022 legislative session and increased the insurance dollar contribution for members hired on or after July 1, 2003 by $5 for each year of service a member attains over certain thresholds, depending on a member's retirement eligibility requirement. This increase in the insurance dollar contribution does not increase by 1.5% annually and is only payable for non-Medicare retirees. Additionally, it is only payable when the member's applicable insurance fund is at least 90% funded. The increase is first payable January 1, 2023.

To model the financial impact of the requirement for the funds to be 90% funded, we have assumed the increase in the insurance dollar contribution is payable in all calendar years. The CERS insurance plans are approaching 90% funded as of the June 30, 2021 Actuarial Valuation, and it is likely they could be 90% funded within a year or two given the inherent volatility in the valuation of OPEB plans.

Senate Bill 209 also allows members receiving the insurance dollar contribution to participate in a medical insurance reimbursement plan that would provide the reimbursement of premiums for health plans other than those administered by KPPA. In general, allowing members to receive reimbursement to participate in health plans other than those administered by KPPA would increase the utilization of the dollar benefit. The current election assumption for future members receiving the dollar insurance benefit is 100%, so there is no immediate change in the total OPEB liability for active members due to this benefit change. For current retirees and beneficiaries eligible for the dollar insurance benefit who have not yet elected coverage, we have assumed 50% would elect coverage under this benefit change. The total OPEB liability as of June 30, 2022, is determined using these updated benefit provisions. There were no other material plan provision changes, and it is our opinion that these procedures are reasonable and appropriate, and comply with applicable requirements under GASB Statement No. 75.

Employer Contributions after the Measurement Date and before the Employer's Fiscal Year End
GASB No. 75 indicates that employer contributions made subsequent to the measurement date of the Net OPEB Liability and prior to the end of the employer's reporting period should be reported by the employer as a deferred outflow of resources. The information contained in this report does not incorporate any contributions made to the plan subsequent to June 30, 2022.

Actuarial methods & Assumptions

For financial reporting, the actuarial valuation as of June 30, 2022, was performed by Gabriel Roeder Smith (GRS). The total pension liability, net pension liability, net OPEB liability and sensitivity information as of June 30, 2022 were based on an actuarial valuation date of June 30, 2020. The total pension liability was rolled-forward from the valuation date (June 30, 2020) to the plan's fiscal year ending June 30, 2021, using generally accepted actuarial principles.

Long-Term Expected Rate of Return

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

Asset Class	Target Allocation	Real Rate of Return
Growth	**68.50%**	
US Equity	21.75%	5.70%
Non-US Equity	21.75%	6.35%
Private Equity	10.00%	9.70%
Specialty Credit/High Yield	15.00%	2.80%
Liquidity	**11.50%**	
Core Bonds	10.00%	0.00%
Cash	1.50%	(.60)%
Diversifying Strategies	**20.00%**	
Real Estate	10.00%	5.40%
Opportunistic	0.00%	n/a
Real Return	10.00%	4.55%
Expected Real Return	**100.00%**	**5.00%**
Long Term Inflation Assumption		2.30%
Expected Nominal Return for Portfolio		7.30%

Single Discount Rate

Single discount rates of 5.70% for the CERS non-hazardous insurance plan and 5.61% for the CERS hazardous insurance plan were used to measure the total OPEB liability as of June 30, 2022. The single discount rates are based on the expected rate of return on OPEB plan investments of 6.25% and a municipal bond rate of 3.69%, as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2022. Based on the stated assumptions and the projection of cash flows as of each fiscal year ending, each plan's fiduciary net position and future contributions were projected separately and were sufficient to finance the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on insurance plan investments was applied to all periods of the projected benefit payments paid from the plan. However, the cost associated with the implicit employer subsidy is not currently being included in the calculation of the plan's actuarially determined contributions, and it is our understanding that any cost associated with the implicit subsidy will not be paid out of the plan's trust. Therefore, the municipal bond rate was applied to future expected benefit payments associated with the implicit subsidy.

The projection of cash flows used to determine the single discount rate must include an assumption regarding actual employer contributions made each future year. Future contributions are projected assuming that each participating employer in each insurance plan contributes the actuarially determined employer contribution each future year calculated in accordance with the current funding policy.

Methodology for Proportionate Shares

The proportionate share(s) of the Collective OPEB Amounts for employers that participate in these cost-sharing multiple employer plans is provided in Appendix A and Appendix B of this report and were determined using the employers' actual contributions for the fiscal year ending June 30, 2022. This method is expected to be reflective of the employers' long-term contribution effort as well as be transparent to individual employers and their external auditors.

Non-Employer Contributions

Non-employer contributions will be allocated according to each employer's proportionate share, as described previously. There were no non-employer contributions during fiscal year ending June 30, 2022 for either the non-hazardous or hazardous funds.

Use of Estimates in the Preparation of the Schedules

The preparation of the schedules in conformity with U.S. generally accepted accounting principles requires management to make significant estimates and assumptions that affect the reported amounts of additions and deductions during the reporting period. Actual results could differ from those estimates.

The following actuarial methods and assumptions, for actuarially determined contributions effective for the fiscal year ending June 30, 2022:

Determined by the Actuarial Valuation as of:	June 30, 2020
Actuarial Cost Method:	Entry Age Normal
Asset Valuation Method:	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized
Amortization Method:	Level Percent of Pay
Amortization Period:	30-year closed period at June 30, 2019 *Gains/losses incurring after 2019 will be amortized over separate closed 20-year amortization bases*
Payroll Growth Rate	2.00%
Investment Return:	6.25%
Inflation:	2.30%
Salary Increases:	3.30% to 10.30% for CERS non-hazardous members, varies by service
Mortality:	System-specific mortality table based on mortality experience from 2013- 2018, projected with the ultimate rates from MP-2014 mortality improvement scale using a base year of 2019
Healthcare Trend Rates: Pre-65	Initial trend starting at 6.40% at January 1, 2022 and gradually decreasing to an ultimate trend rate of 4.05% over a period of 14 years. The 2021 premiums were known at the time of the valuation and were incorporated into the liability measurement.
Healthcare Trend Rates: Post-65	Initial trend starting at 6.30% at January 1, 2023 and gradually decreasing to an ultimate trend rate of 4.05% over a period of 13 years. The 2021 premiums were known at the time of the valuation and were incorporated into the liability measurement. Additionally, Humana provided “Not to Exceed” 2022 Medicare premiums, which were incorporated and resulted in an assumed 2.90% increase in Medicare premiums at January 1, 2022

Implicit Subsidy

KPPA pays fully insured premiums for the Kentucky Health Plan. The premiums are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit employer subsidy for the non-Medicare eligible retirees. GASB 74 requires that the liability associated with this implicit subsidy be included in the calculation of the total OPEB liability. The Water District's implicit subsidy for the year ended December 31, 2022 was $7,090.

Contributions

The Commonwealth is required to contribute at an actuarially determined rate for KERS and SPRS pensions. Participating employers are required to contribute at an actuarially determined rate for CERS pensions. Per Kentucky Revised Statute Sections KERS 61.565(3), CERS 78.545(33), and SPRS 16.645(18), normal contribution and past service contribution rates shall be determined by the Board on the basis of the last annual valuation preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget for KERS and SPRS.

For the fiscal years ended June 30, 2022, participating employers contributed a percentage of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal year is a percentage of each employee's creditable compensation. Administrative costs of KPPA are financed through employer contributions and investment earnings.

Contribution Rates and Amounts for CERS Non-Hazardous

				Employer		
Period	Pension	Insurance	Total	Pension	Insurance	Employee
01/01/2022-06/30/2022	19.30%	4.76%	24.06%	$ 25,813	$ 6,366	$ 6,687
07/01/2022-12/31/2022	21.17%	5.78%	26.95%	32,251	4,817	7,105
Totals				$59,064	$11,183	$13,792

Contributions including implicit subsidy $0

For additional information regarding contributions, please refer to the Defined Benefit Pension Plan footnote.

TIER 1:

Tier 1 plan members who began participating prior to September 1, 2008, are required to contribute 5% (Non-Hazardous) or 8% (Hazardous) of their annual creditable compensation. These members are classified in the Tier 1 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest.

TIER 2:

Tier 2 plan members, who began participating on, or after, September 1, 2008, and before January 1, 2014, are required to contribute 6% (Non-Hazardous) or 9% (Hazardous) of their annual creditable compensation. Further, 1% of these contributions are deposited to an account created for the payment of health insurance benefits under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation (KAR) 105 KAR 1:420 Employer's administrative duties). These members are classified in the Tier 2 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited.

TIER 3:

Tier 3 plan members, who began participating on, or after, January 1, 2014, are required to contribute to the Cash Balance Plan. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan. Members in the plan contribute a set percentage of their salary each month to their own account. Members contribute 5% (Non-Hazardous) or 8% (Hazardous) of their annual creditable compensation, and an additional 1% to the health insurance fund (401(h) account), which is not credited to the member's account and is not refundable. The employer contribution rate is set annually by the Board based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. A member's account is credited with a 4% (Non-Hazardous) or 7.5% (Hazardous) employer pay credit. The employer pay credit represents a portion of the employer contribution.

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

On December 31, 2022, the Water District reported a liability of $196,641 for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of June 30, 2021, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of June 30, 2020, rolled-forward to June 30, 2021 using generally accepted actuarial principles. The Water District's proportion of the net OPEB liability was determined using the Water District's actual contributions for the year ended June 30, 2021. This method is expected to be reflective of the Water District's long-term contribution effort. For the year ended December 31, 2022, the Water District's proportion was 0.009964% which is equal to its proportion measured as of June 30, 2021.

For the year ended December 31, 2022, the Water District recognized OPEB expense of $18,847. On December 31, 2022, the Water District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual liability experience	$ 19,794	$ 45,094
Effects of changes in assumptions	31,100	25,626
Differences between projected and actual earnings on plan investments	36,617	28,635
Changes in proportion and differences between employer contributions and proportionate share of contributions	12,704	5,766
Contributions subsequent to the measurement date + implicit subsidy	11,907	-0-
Total	$ 112,122	$ 105,121

$11,907 reported of deferred outflows of resources resulting from the Water District's contributions subsequent to the measurement date will be recognized as a reduction of the net OPEB liability in the year ending December 31, 2022. Other amounts reported as the net effect of deferred outflows of resources and deferred inflows of resources will be recognized in OPEB expense as follows:

Year Ended December 31,	Amount
2023	$ 623
2024	625
2025	(9,717)
2026	(3,563)
2027	-0-
Thereafter	-0-
Total	$ (4,906)

Sensitivity of the Proportionate Share of the Net OPEB Liability to Changes in the Discount Rate
The following presents the proportionate share of the net OPEB liability calculated using the single discount rate of 5.70%, as well as what the Water District's proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is 1% lower (4.70%) or 1% higher (6.70%) than the current rate:

	Discount Rate	Proportionate Share of Net OPEB Liability
1% decrease	4.70%	$ 262,878
Current discount rate	5.70%	$ 196,641
1% increase	6.70%	$ 141,885

Sensitivity of the Water District's Proportionate Share of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate

The following presents the proportionate share of the net OPEB liability calculated using the current healthcare cost trend rates (see details in Actuarial Assumptions above), as well as what the proportionate share of the net OPEB liability would be if it were calculated using healthcare cost trend rates that were 1% lower or 1% higher than the current rates:

	Proportionate Share of Net OPEB Liability
1% decrease	$ 146,198
Current healthcare cost trend rate	$ 196,641
1% increase	$ 257,213

Note 4 – Bonds & Notes Payable

Bonds Payable

The amount shown in the accompanying financial statements as bonds payable represents the District's future obligation to make payments from future revenues. On December 31, 2022, seven separate bonds had outstanding balances. Details of each of these bonds are summarized as follows:

Note A
Lender – Rural Development
Original loan amount - $238,000
Balance of loan - $61,500
Rate - 5%
Principal due January 1
Interest due January and July 1
Prepayment provision - subject to payment prior to its stated maturity without penalty or premium, at any time upon ten (10) days notice.

Maturities			
	Principal	Interest	Total Payment
2023	$ 11,000	$ 2,800	$ 13,800
2024	11,500	2,238	13,738
2025	12,500	1,638	14,138
2026	13,000	1,000	14,000
2027	13,500	338	13,838
Total	$ 61,500	$ 8,014	$ 69,514

Note B
Lender – Rural Development
Original loan amount - $194,000
Balance of loan - $76,000
Rate – 5%
Principal due January 1
Interest due January 1 and July 1
Prepayment provision - subject to payment prior to its stated maturity without penalty or premium, at any time upon ten (10) days notice.

Maturities			
	Principal	Interest	Total Payment
2023	$ 8,000	$ 3,600	$ 11,600
2024	7,000	3,225	10,225
2025	8,000	2,850	10,850
2026	8,000	2,450	10,450
2027	8,000	2,050	10,050
2028-2031	37,000	3,725	40,725
Total	$ 76,000	$ 17,900	$ 93,900

Note C
Lender – Rural Development
Original loan amount - $631,000
Balance of loan - $310,000
Rate – 4.5%
Principal due – January 1
Interest due – January 1 and July 1
Prepayment provision – subject to payment prior to its stated maturity without penalty or premium, at any time upon ten (10) days notice.

Maturities			
	Principal	Interest	Total Payment
2023	$ 22,000	$ 13,455	$ 35,455
2024	23,000	12,443	35,443
2025	24,000	11,385	35,385
2026	25,500	10,271	35,771
2027	26,500	9,101	35,601
2028-2032	155,000	25,763	180,763
2033	34,000	765	34,765
Total	$ 310,000	$ 83,183	$ 393,183

Note D
Lender – Rural Development
Original loan amount - $460,000
Balance of loan - $218,500
Rate – 4.5%
Principal due – January 1
Interest due – January 1 and July 1
Prepayment provision – subject to payment prior to its stated maturity without penalty or premium, at any time upon ten (10) days notice

Maturities			
	Principal	Interest	Total Payment
2023	$ 15,500	$ 9,484	$ 24,984
2024	16,500	8,764	25,264
2025	17,000	8,010	25,010
2026	18,000	7,223	25,223
2027	18,500	6,401	24,901
2028-2032	106,500	18,349	124,849
2033	26,500	596	27,096
Total	$ 218,500	$ 58,827	$ 277,327

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Note E
Lender – Rural Development
Original loan amount - $600,000
Balance of loan - $445,000
Rate – 4.5%
Principal due January 1
Interest due January 1 and July 1
Prepayment provision - subject to payment prior to its stated maturity without penalty or premium, at any time upon ten (10) days notice.

Maturities			
	Principal	Interest	Total Payment
2023	$ 13,000	$ 19,733	$ 32,733
2024	14,000	19,125	33,125
2025	14,000	18,495	32,495
2026	15,000	17,843	32,843
2027	16,000	17,145	33,145
2028-2032	90,000	74,250	164,250
2033-2037	111,000	51,548	162,548
2038-2042	140,000	23,400	163,400
2043	32,000	720	32,720
Total	$ 445,000	$ 242,259	$ 687,259

Note F
Lender – Rural Development
Original loan amount - $520,000
Balance of loan - $498,500
Rate – 2.75%
Principal due January 1
Interest due January 1 and July 1
Prepayment provision - subject to payment prior to its stated maturity without penalty or premium, at any time upon ten (10) days notice.

Maturities			
	Principal	Interest	Total Payment
2023	$ 8,500	$ 13,509	$ 22,009
2024	9,000	13,269	22,269
2025	9,000	13,021	22,021
2026	9,500	12,767	22,267
2027	9,500	12,506	22,006
2028-2032	52,000	58,369	110,369
2033-2037	59,500	50,703	110,203
2038-2042	68,500	41,931	110,431
2043-2047	78,000	31,873	109,873
2048-2052	90,000	20,350	110,350
2053-2057	102,000	7,123	109,123
Total	$ 495,500	$ 275,421	$ 770,921

Note G
Lender – Rural Development
Original loan amount - $300,000
Balance of loan - $216,000
Rate – 4.5%
Principle due – January 1
Interest due – January 1 and July 1
Prepayment provision – subject to payment prior to its state maturity without penalty or premium, at any time upon ten (10) days notice.

Maturities			
	Principal	Interest	Total Payment
2023	$ 7,000	$ 9,563	$ 16,563
2024	7,000	9,248	16,248
2025	7,500	8,921	16,421
2026	8,000	8,573	16,573
2027	8,000	8,213	16,213
2028-2032	47,500	35,044	82,544
2033-2037	58,000	23,220	81,220
2038-2042	73,000	8,483	81,483
Total	$ 216,000	$ 111,265	$ 327,265

Note H
Lender – Rural Development
Original loan amount - $27,000
Balance of loan - $21,200
Rate – 4.375%
Principal due January 1
Interest due January 1 and July 1
Prepayment provision - subject to payment prior to its stated maturity without penalty or premium, at any time upon ten (10) days notice.

Maturities			
	Principal	Interest	Total Payment
2023	$ 500	$ 917	$ 1,417
2024	600	893	1,493
2025	600	866	1,466
2026	600	840	1,440
2027	600	814	1,414
2028-2032	3,700	3,612	7,312
2033-2037	4,600	2,713	7,313
2038-2042	5,600	1,597	7,197
2043-2045	4,400	306	4,706
Total	$ 21,200	$ 12,558	$ 33,758

Notes Payable
Note I
On October 11, 2019, the District obtained a loan from Whitaker Bank. $25,499 was financed and used to purchase a 2019 Chevrolet Silverado. Interest rate is 3.25% and the term of the loan is 24 months. Loan number is 4500639350. Balance at year end was $0.

Note J
October 11, 2019, the District obtained a loan from Whitaker Bank. $25,499 was financed and used to purchase a 2019 Chevrolet Silverado. Interest rate is 3.25% and the term of the loan is 24 months. Loan number is 4500639351. Balance at year end was $0.

Note K
On October 11, 2019, the District obtained a loan from Whitaker Bank. $25,799 was financed and used to purchase a 2019 Chevrolet Silverado. Interest rate is 3.25% and the term of the loan is 24 months. Loan number is 4500639352. Balance at year end was $0.

Bonds and Notes Payable
A summary of all bonds and notes outstanding follows:

	Outstanding 1/1/2022	Issued	Retired	Outstanding 12/31/2022	Due Within One Year
Bonds Payable					
Rural Development	$ 1,925,700	$ -	$ 82,000	$ 1,843,700	$ 85,500
Notes Payable					
Whitaker Bank 4500639350	4,505	-	4,505	-	-
Whitaker Bank 4500639351	4,505	-	4,505	-	-
Whitaker Bank 4500639352	4,596	-	4,596	-	-
Total bonds payable	1,925,700	-	82,000	1,843,700	85,500
Total notes payable	13,606	-	13,606	-	-
Total bonds/notes payable	$ 1,939,306	$ -	$ 95,606	$ 1,843,700	$ 85,500

Note 5 - Leave Policies
Annual and Sick Leave
The District no longer requires that sick and annual leave be paid annually. No additional accrued leave days are permitted. District employees accrue sick leave at the rate of one day per month. They accrue annual leave at the rate of five days per year for less than three years employment and ten days for employment exceeding three years and fifteen days for employment exceeding ten years. No leave may be collected on termination.

Note 6 – Risk Management
The District is exposed to various risks of losses related to torts; theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The District carries commercial insurance coverage for the risks to the extent deemed prudent by District management.

Note 7 - Changes in Capital Assets

The following is a summary of changes in the capital assets for the year:

	Balance 1/1/2022	Transfers/ Additions	Deletions	Balance 12/31/2022
Land, non-depreciable	$ 16,888			$ 16,888
Plant, equipment & lines	10,447,176	-		10,447,176
Total	$ 10,464,064	$ -	$ -	$ 10,464,064
Accumulated depreciation	$ 4,860,389	$ 289,590	$ -	$ 5,149,979
Capital assets, net of accumulated depreciation	$ 5,603,675	$ (289,590)	$ -	$ 5,314,085

Note 8 - Revenue Bonds

Water and Revenue Bonds constitute special obligations of the District solely secured by a lien on and pledge of the net revenues of the water system. The revenue bonds are collateralized by the revenue of the water system and the various special funds established by the bond ordinances. The ordinances provide that the revenue of the system is to be used first to pay operating and maintenance expenses of the system and second to establish and maintain the revenue bond funds. Any remaining revenues may then be used for any lawful purpose. The ordinances also contain certain provisions, which require the District to maintain pledged revenues. The District must transfer monthly 1/6 of the next succeeding interest payment and 1/12 of the next succeeding principal payment from the operations and maintenance account into the bond and interest sinking account. The District also must transfer $456 per month into a depreciation fund.

Note 9 - Restricted Cash

Restricted cash is composed of the following:

Deposit account	$ 108,200
Depreciation reserve fund	88,929
Debt reserve fund	155,634
Short-lived Assets	61
	$ 352,824

Note 10 – Contingencies

The District is subject to possible examinations made by Federal and State authorities who determine compliance with terms, conditions, laws, and regulations governing other grants given to the District in the current and prior years. There were no examinations for the year ended December 31, 2022. Areas of noncompliance, if any, as a result of examinations would be included as a part of the “Findings and Questioned Costs” section of this report.

Note 11 – Risk Management

The District is exposed to various risks of losses related to torts; theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The District carries commercial insurance coverage for the risks to the extent deemed prudent by District management.

Note 12 – Subsequent Events

The District has evaluated subsequent events through May 31, 2023, and that is the date that the financial statements were available to be issued.

Note 13 - Noncurrent Liabilities

Description	Balance, 01/01/2022	Additions	Subtractions	Balance, 12/31/2022	Current Portion	Noncurrent Portion
Bonds payable	$ 1,925,700	$ -	$ 82,000	$ 1,843,700	$ 85,500	$ 1,758,200
Notes payable	13,606	-	13,606	-	-	-
Net pension liability	583,193	137,250	-	720,443	-	720,443
Net OPEB liability	175,076	21,565	-	196,641	-	196,641
	$ 2,697,575	$ 158,815	$ 95,606	$ 2,760,784	$ 85,500	$ 2,675,284

REQUIRED SUPPLEMENTARY INFORMATION

POWELL'S VALLEY WATER DISTRICT
Schedule of Employer's Proportionate Share of Net Pension Liability
December 31, 2022

	Measurement Date				
	6/30/2018	6/30/2019	6/30/2020	6/30/2021	6/30/2022
Proportion of the net pension liability (asset)	0.009722%	0.009490%	0.009279%	0.009147%	0.009966%
Proportionate share of the net pension liability (asset)	$ 569,059	$ 577,970	$ 652,596	$ 583,183	$ 720,443
Covered employee payroll	$ 236,700	$ 235,201	$ 234,052	$ 279,565	$ 388,096
Proportionate share of the net pension liability (asset) as a percentage of covered employee payroll	240.41%	245.73%	278.83%	208.60%	185.64%
Plan fiduciary net position as a percentage of the total pension liability	53.32%	53.54%	50.45%	57.33%	52.42%

	Measurement Date	
	6/30/2016	6/30/2017
Proportion of the net pension liability (asset)	0.009773%	0.009680%
Proportionate share of the net pension liability (asset)	$ 420,202	$ 476,826
Covered employee payroll	$ 227,616	$ 236,955
Proportionate share of the net pension liability (asset) as a percentage of covered employee payroll	184.61%	201.23%
Plan fiduciary net position as a percentage of the total pension liability	59.97%	55.50%

POWELL'S VALLEY WATER DISTRICT
Schedule of Employer's Contributions - Net Pension Liability
December 31, 2022

	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
Contractually required contribution	$ 33,054	$ 36,188	$ 42,161	$ 52,887	$ 59,064
Contributions in relation to the contractually required contribution	33,054	36,188	42,161	52,887	59,064
Contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -
Covered employee payroll	$ 232,462	$ 235,662	$ 236,871	$ 260,286	$ 275,843
Contributions as a percentage of covered employee payroll	14.22%	15.36%	17.80%	20.32%	21.41%

	12/31/2016	12/31/2017
Contractually required contribution	$ 28,886	$ 31,303
Contributions in relation to the contractually required contribution	28,886	31,303
Contribution deficiency (excess)	$ -	$ -
Covered employee payroll	$ 229,569	$ 236,955
Contributions as a percentage of covered employee payroll	12.58%	13.21%

POWELL'S VALLEY WATER DISTRICT
Schedule of Employer's Proportionate Share of Net OPEB Liability
December 31, 2022

	Measurement Date				
	6/30/2018	6/30/2019	6/30/2020	6/30/2021	6/30/2022
Proportion of net OPEB liability (asset)	0.009722%	0.009490%	0.009279%	0.009145%	0.009964%
Proportionate share of net OPEB liability (asset)	$ 195,445	$ 168,475	$ 156,018	$ 175,076	$ 196,641
Covered employee payroll	$ 236,700	$ 235,201	$ 234,052	$ 279,565	$ 388,096
Proportionate share of net OPEB liability (asset) as a percentage of covered employee payroll	82.57%	71.63%	66.66%	62.62%	50.67%
Plan fiduciary net position as a percentage of the total OPEB liability	52.39%	57.62%	52.39%	62.91%	60.95%

POWELL'S VALLEY WATER DISTRICT
Schedule of Employer's Contributions - Net OPEB Liability
December 31, 2022

	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
Statutorily required contribution	$ 10,961	$ 11,740	$ 11,852	$ 13,837	$ 11,183
Contributions in relation to the statutorily required contribution	10,961	11,740	11,852	13,837	11,183
Contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -
Covered employee payroll	$ 232,462	$ 235,662	$ 236,871	$ 260,286	$ 275,843
Contributions as a percentage of covered-employee payroll	4.72%	4.98%	5.00%	5.32%	4.05%

County Employee Retirement System – Pension & Insurance Funds

Changes of Benefit Terms

During the **2021** legislative session, Senate Bill 169 passed during the 2021 legislative session and increased the disability benefits for certain qualifying members who become "totally and permanently disabled" in the line of duty or as a result of a duty-related disability. The total OPEB liability as of June 30, 2021 is determined using these updated benefit provisions. There were no other material plan provision changes, and it is our opinion that these procedures are reasonable and appropriate and comply with applicable requirements under GASB Statement No. 75.

During the **2020** legislative session, Senate Bill 249 passed and changed the funding period for the amortization of the unfunded liability to 30 years as of June 30, 2019. Gains and losses incurring in future years will be amortized over separate 20-year amortization bases. This change does not impact the calculation of the Total Pension Liability and only impacts the calculation of the contribution rates that would be payable starting July 1, 2020.

During the **2019** Special Legislative Session, House Bill 1 passed allowing certain employers in the KERS Nonhazardous plan to elect to cease participating in the System as of June 30, 2021 under different provisions than were previously established. Senate Bill 249 passed during the 2020 legislative session which delayed the effective date of cessation for these provisions to June 30, 2021. Since each employer's elections are unknown at this time, no adjustment to the Total Pension Liability was made to reflect this legislation.

During the **2019** legislative session, House Bill 484 was enacted, which updated the benefit provisions for active members who die in the line of duty.

- Pension – Benefits paid to the spouses of deceased members have been increased from 25% of the member's final rate of pay to 75% of the member's average pay. If the member does not have a surviving spouse, benefits paid to surviving dependent children have been increased from 10% of the member's final pay rate to 50% of average pay for one child, 65% of average pay for two children, or 75% of average pay for three children.

- Insurance – The system shall now pay 100% of the insurance premium for spouses and children of all active members who die in the line of duty.

Changes in Assumptions

The following changes were adopted by the Board of Trustees and reflected in the valuation performed as of **June 30, 2021:**

- The rate of inflation, payroll growth rate, and investment return assumptions remain the same as those adopted for the June 30, 2019 valuation.
- The salary increase assumption was increased from a range of 3.30%-11.55% to a range of 3.30% - 10.30%.
- The healthcare trend rates used were updated to the following:

  Pre-65 – Initial trend starting at 6.25% at January 01, 2021, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 13 years.

  Post-65 – Initial trend starting at 5.50% at January 01, 2021, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 14 years.
- The mortality tables used were updated to the following:

  System-specific mortality table based on morality experience from 2013-2018, projected with the ultimate rates from MP-2014 morality improvement scale using a base year of 2019.

The following changes were adopted by the Board of Trustees and reflected in the valuation performed as of **June 30, 2020:**

- The rate of inflation, payroll growth rate, investment rate of return, healthcare trend rate assumptions and mortality tables remain the same as those previously adopted.

The following changes were adopted by the Board of Trustees and reflected in the valuation performed as of **June 30, 2019:**

- The rate of inflation, payroll growth rate, salary increases, and investment rate of return assumptions remain the same as those adopted for the June 30, 2017 valuation.
- The salary increase assumption was increased from an average of 3.05% to a range that varies by service of 3.30% - 10.30%.

- The healthcare trend rates used were updated to the following:

  Pre-65 – Initial trend starting at 7.00% at January 01, 2020, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 12 years.

  Post-65 – Initial trend starting at 5.00% at January 01, 2020, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 10 years.

- The mortality tables used were updated to the following:

  Active members – PUB 2010 General Mortality table, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2010.

  Healthy retired members – System specific mortality table based on mortality experience form 2013-2018, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2019.

  Disabled retire members – PUB 2010 Disabled Mortality table, with a 4-year set-forward for both male and female rates, projected with the ultimate rates from the MP-2014 mortality scale using a base year of 2010.

The following changes were adopted by the Board of Trustees and reflected in the valuation performed as of **June 30, 2017:**

- The assumed investment rate of return was decreased from 7.50% to 6.25%.
- The assumed rate of inflation was reduced from 3.25% to 2.30%.
- The payroll growth rate was reduced from 4.00% to 2.00%.
- The salary increase assumption was reduced from 4.00% average to 3.05% average.

The following changes were adopted by the Board of Trustees and reflected in the valuation performed as of **June 30, 2015:**

- The assumed investment rate of return was decreased from 7.75% to 7.50%.
- The assumed rate of inflation was reduced from 3.50% to 3.25%.
- The assumed rate of wage inflation was reduced from 4.50% to 4.00%.
- The payroll growth assumption was reduced from 4.50% to 4.00%.
- The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB 2013 (multiplied by 50% for males and 30% for females)
- For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set-back one year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set-back four years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.
- Assumed rates of retirement, withdrawal, and disability were updated to more accurately reflect experience.

SUPPLEMENTARY INFORMATION

Lane & Company LLC
Certified Public Accountants
219 Young Lane, Suite 2
Mount Sterling, Kentucky 40353
(859) 498-9915
www.TheLaneCPA.com

John T. Lane, CPA
Joel D. Lane, CPA

American Institute of CPAs
Kentucky Society of CPAs

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Board of Commissioners
Powell's Valley Water District
Clay City, 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 Powell's Valley Water District, as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the Powell's Valley Water District's basic financial statements, and have issued our report thereon dated May 31, 2023.

Report on Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered Powell's Valley Water District's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Powell's Valley Water District's internal control. Accordingly, we do not express an opinion on the effectiveness of the Powell's Valley Water District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements, on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether Powell's Valley Water District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Lane & Company LLC

Mount Sterling, Kentucky

May 31, 2023

POWELL'S VALLEY WATER DISTRICT
Comparative Statement of Revenues and Expenses
for the years ended December 31, 2021 and 2022

	2021	2022
Revenues		
User fees	$ 1,432,765	$ 1,557,264
Other water revenue	42,846	45,226
Total Revenues	1,475,611	1,602,490
Expenses		
Water purchased	446,229	408,141
Salaries	280,985	282,312
Office	23,829	25,248
Insurance	33,381	32,046
Taxes	26,899	15,211
Outside services	68,432	75,673
Employee benefits	203,411	270,600
Miscellaneous	3,633	2,789
Depreciation	293,246	289,590
Supplies	166,394	217,501
Utilities	83,610	135,064
Vehicle expense	24,295	35,579
Total Operating Expenses	1,654,344	1,789,754
Operating Income (Loss)	(178,733)	(187,264)
Nonoperating Revenues (Expenses)		
Grants	-	92,048
Miscellaneous income	(1,621)	952
Interest income	936	901
Interest expense	(78,593)	(70,964)
Net Nonoperating Revenues (Expenses)	(79,278)	22,937
Change in Net Position	$ (258,011)	$ (164,327)

POWELL'S VALLEY WATER DISTRICT
Statement of Revenues and Expenses
Water and Sewer
for the year ended December 31, 2022

	Water	Sewer	Total
Revenues			
User fees	$ 1,370,018	$ 187,246	$ 1,557,264
Other water revenue	45,226	-	45,226
Total Revenues	1,415,244	187,246	1,602,490
Expenses			
Water purchased	408,141	-	408,141
Salaries	282,312	-	282,312
Office	24,928	320	25,248
Insurance	32,046	-	32,046
Taxes	15,211	-	15,211
Outside services	69,473	6,200	75,673
Employee benefits	270,600	-	270,600
Miscellaneous	2,789	-	2,789
Depreciation	269,980	19,610	289,590
Supplies	141,082	76,419	217,501
Utilities	112,561	22,503	135,064
Vehicle expense	35,579	-	35,579
Total Operating Expenses	1,664,702	125,052	1,789,754
Operating Income (Loss)	(249,458)	62,194	(187,264)
Nonoperating Revenues (Expenses)			
Grants	92,048	-	92,048
Miscellaneous income	528	424	952
Interest income	853	48	901
Interest expense	(60,297)	(10,667)	(70,964)
Net Nonoperating Revenues (Expenses)	33,132	(10,195)	22,937
Change in Net Position	$ (216,326)	$ 51,999	$ (164,327)