OHIO WATER DEVELOPMENT AUTHORITY
FRANKLIN COUNTY
REGULAR AUDIT
FOR THE YEAR ENDED DECEMBER 31, 2022

OHIO AUDITOR OF STATE
KEITH FABER

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Governing Board
Ohio Water Development Authority
480 South High Street
Columbus, Ohio 43215

We have reviewed the *Independent Auditors' Report* of the Ohio Water Development Authority, Franklin County, prepared by Clark, Schaefer, Hackett & Co., for the audit period January 1, 2022 through December 31, 2022. Based upon this review, we have accepted these reports in lieu of the audit required by Section 117.11, Revised Code. The Auditor of State did not audit the accompanying financial statements and, accordingly, we are unable to express, and do not express an opinion on them.

Our review was made in reference to the applicable sections of legislative criteria, as reflected by the Ohio Constitution, and the Revised Code, policies, procedures and guidelines of the Auditor of State, regulations and grant requirements. The Ohio Water Development Authority is responsible for compliance with these laws and regulations.

Keith Faber
Auditor of State
Columbus, Ohio

May 01, 2023

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OHIO WATER DEVELOPMENT AUTHORITY

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CLARK SCHAEFER HACKETT
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INDEPENDENT AUDITORS' REPORT

Ohio Water Development Authority
480 S. High Street
Columbus, Ohio 43215

Report on the Audit of the Financial Statements

Opinions
We have audited the financial statements of the business-type activities, each major fund, and the aggregate remaining fund information of the Ohio Water Development Authority (the Authority), as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities, each major fund, and the aggregate remaining fund information of the Authority, as of December 31, 2022, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions
We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States (*Government Auditing Standards*). 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 the Authority 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 opinions.

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 Authority'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.

Auditors' 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 auditors' report that includes our opinions. 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 GAAS and *Government 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 GAAS and *Government 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 Authority'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 Authority'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.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the schedules of the proportionate share of net pension and OPEB amounts, and the schedules of pension and OPEB contributions (as listed in the table of contents) be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated March 30, 2023, on our consideration of the Authority'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 solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority'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 Authority's internal control over financial reporting and compliance.

Clark, Schaefer, Hackett & Co.

Springfield, Ohio
March 30, 2023

OHIO WATER DEVELOPMENT AUTHORITY

Management's Discussion and Analysis

For the Year Ended December 31, 2022

As management of the Ohio Water Development Authority (the Authority), a related organization of the State of Ohio, we offer readers of the Authority's financial statements this unaudited narrative overview and analysis of the financial activities of the Authority for the year ended December 31, 2022. We encourage readers to consider the information presented here in conjunction with the Authority's audited financial statements, which begin on page 8 of this report.

Financial Highlights:

- Bond and note issuance expense decreased by $2,666,218 or 32.88%.
- Investment income decreased by $22,743,395 or 807.61%.
- Administrative fees from projects increased by $3,386,897 or 70.47%.
- Interest on bonds and notes expense increased by $8,240,867 or 5.73%.
- Loan interest rate buy-down expense decreased by $1,169,387 or 15.27%.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the Authority's basic financial statements. The Authority's basic financial statements comprise two components: 1) combining financial statements and 2) notes to financial statements.

Combining financial statements. The Authority follows proprietary fund accounting, which means these statements are presented in a manner similar to a private-sector business. The *combining financial statements* are designed to provide readers with a broad overview of the Authority's finances by fund and in total. A *fund* is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The Authority, like other state and local governments, uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. These statements offer short and long-term financial information about its activities.

The *combining statement of net position* presents information on all of the Authority's non-fiduciary assets, deferred outflows of resources, liabilities, and deferred inflows of resources, including information about the nature and amounts of investments in resources (assets and deferred outflows of resources), the obligations (liabilities and deferred inflows of resources) of the Authority and the Authority's net position as of December 31, 2022. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating.

The *combining statement of revenues, expenses and changes in net position* presents information showing how the Authority's net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods (e.g., depreciation and earned but unused vacation leave).

The *combining statement of cash flows* provides information about the Authority's cash receipts and cash payments during the reporting period. This statement summarizes the net changes in cash resulting from operating, investing, and noncapital financing activities.

Each of the combining financial statements highlight programs of the Authority that are principally supported by loan and investment income, programs that are intended to recover all or a significant portion of their costs through program fees or investment earnings on contributed capital (business-type activities). The combining financial statements can be found on pages 8-13 of this report.

Fiduciary Funds. The Authority is the fiscal agent for The Nature Conservancy In Lieu Fee Mitigation Program and the Muskingum Watershed Conservancy District Interest Rate Subsidy Program, both of which are reported as custodial funds. Their financial information is excluded from the Authority's combining financial statements because the resources are not being utilized to finance Authority operations and/or programs. More information can be found on page 28 of this report.

Notes to financial statements. The notes provide additional information that is essential to a full understanding of the data provided in the combining financial statements. The notes to financial statements can be found on pages 16-67 of this report.

Financial Analysis of the Authority's Financial Position and Results of Operations

The tables below provide a summary of the Authority's financial position and operations for 2022 and 2021, respectively.

The following table summarizes changes in net position of the Authority between December 31, 2022 and December 31, 2021:

Condensed Statement of Net Position
(all amounts expressed in thousands of dollars)

	2022	2021	Dollar Change	Total Percent Change
Current assets	$ 47,653	$ 43,675	$ 3,978	9.11%
Noncurrent restricted assets	9,927,679	10,039,858	(112,179)	(1.12%)
Noncurrent unrestricted assets	274,832	253,084	21,748	8.59%
Capital assets	1,122	1,220	(98)	(8.03%)
Total assets	10,251,286	10,337,837	(86,551)	(0.84%)
Loss on refunding	11,163	15,350	(4,187)	(27.28%)
Advance of loan interest	97,267	84,403	12,864	15.24%
Pension and OPEB	391	359	32	8.91%
Total deferred outflows of resources	108,821	100,112	8,709	8.70%
Total assets and deferred outflows of resources	$ 10,360,107	$ 10,437,949	$ (77,842)	(0.75%)
Current liabilities	$ 481,191	$ 435,891	$ 45,300	10.39%
Noncurrent revenue bonds and notes payable	5,273,749	5,358,978	(85,229)	(1.59%)
Other noncurrent liabilities	1,438	1,519	(81)	(5.33%)
Total liabilities	5,756,378	5,796,388	(40,010)	(0.69%)
Deferred inflows of resources:				
Pension and OPEB	1,139	969	170	17.54%
Net position:				
Net investment in capital assets	1,122	1,220	(98)	(8.03%)
Restricted	4,312,640	4,355,175	(42,535)	(0.98%)
Unrestricted	288,828	284,197	4,631	1.63%
Total net position	4,602,590	4,640,592	(38,002)	(0.82%)
Total liabilities, deferred inflows of resources, and net position	$ 10,360,107	$ 10,437,949	$ (77,842)	(0.75%)

As noted earlier, net position may serve as a useful indicator of a government's financial position. In the case of the Authority, assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $4,602,590,422 as of December 31, 2022, $4,312,639,718 of which is restricted for debt and grant covenants. The largest portion of the Authority's net position is reflected in its loan receivables, cash and cash equivalents, and investments less any related debt still outstanding used to fund these loans to local government agencies.

The following table summarizes the changes in revenues and expenses for the Authority between 2022 and 2021:

Condensed Statement of Revenues, Expenses and Changes in Net Position
(all amounts expressed in thousands of dollars)

	2022	2021	Dollar Change	Total Percent Change
Operating revenues:				
Loan income	$ 161,473	$ 164,047	$ (2,574)	(1.57%)
Investment income	(25,560)	(2,816)	(22,744)	(807.67%)
Administrative fees from projects	8,193	4,806	3,387	70.47%
Total operating revenues	144,106	166,037	(21,931)	(13.21%)
Operating expenses:				
Payroll and benefits	2,051	1,206	845	70.07%
Interest on bonds and notes	152,102	143,862	8,240	5.73%
Bond and note issuance expense	5,442	8,108	(2,666)	(32.88%)
Loan principal forgiveness and grant expense	58,839	61,385	(2,546)	(4.15%)
State revolving fund administration	15,416	15,001	415	2.77%
Professional services	3,411	3,423	(12)	(0.35%)
Loan interest rate buy-down	6,490	7,660	(1,170)	(15.27%)
Other	412	406	6	1.48%
Total operating expenses	244,163	241,051	3,112	1.29%
Operating loss	(100,057)	(75,014)	25,043	33.38%
Nonoperating other revenues	31	32	(1)	(3.13%)
Contribution from U.S. EPA	43,900	104,646	(60,746)	(58.05%)
Federal subsidy income	8,673	8,835	(162)	(1.83%)
H2Ohio grant funding	9,451	9,492	(41)	(0.43%)
Change in net position	$ (38,002)	$ 47,991	$ (85,993)	(179.19%)

The two primary sources of operating revenue for the Authority are loan income and administrative fees from projects, while a significant operating expense is interest on bonds and notes. For the year ending December 31, 2022, the Authority had an operating loss of $100,057,087, compared to an operating loss of $75,014,053 in 2021. This increase of $25,043,034 in operating loss was primarily attributed to a $22,743,395 decrease in investment income and an $8,240,867 increase in interest on bonds and notes expense.

During 2022, the Authority's net position decreased by $38,002,049 or 0.82%. The majority of this decrease was due to the following:

- $100,057,087 in operating loss as noted earlier
- $43,900,168 in contribution from U.S. EPA (which was used to make loans to local governments) compared to $104,645,786 in 2021. The 2022 Base and Base Supplemental WPCLF Capitalization Grants totaling $165,333,000 were not received until March 2023 and will be reflected in 2023 Contribution from U.S. EPA. More information regarding the Infrastructure Investment and Jobs Act (IIJA) and its impact on the WPCLF and DWAF Capitalization Grants can be found on pages 23-26 of this report.
- $8,672,660 in Build America Bonds (BABs) subsidies (i.e., federal subsidy income) used to offset interest expense on bonds
- $9,451,350 in H2Ohio grant funding

Financial Analysis of Net Position by Fund
(all amounts expressed in thousands of dollars)

	2022	2021	Dollar Change	Total Percent Change
Operating	$ 5,632	$ 3,894	$ 1,738	44.63%
Other Projects	288,117	285,558	2,559	0.90%
Community Assistance	100,578	107,545	(6,967)	(6.48%)
Fresh Water	704,689	690,960	13,729	1.99%
Water Pollution Control Loan	2,867,547	2,921,957	(54,410)	(1.86%)
Drinking Water Assistance	636,027	630,678	5,349	0.85%
Total Net Position	$ 4,602,590	$ 4,640,592	$ (38,002)	(0.82%)

During 2022, net position by fund experienced the following significant changes:

- Operating Fund net position increased by $1,737,884 or 44.63%. This increase was due to an increase in administrative fees from projects from a high loan volume in 2022.
- Community Assistance Fund net position decreased by $6,966,835 or 6.48%. This decrease was caused by transfers from the Community Assistance Fund to the Fresh Water Fund in 2022.

Debt Administration

As of December 31, 2022, the Authority had revenue bonds and notes principal outstanding of $5,621,537,502. The Authority's debt represents bonds and notes secured solely by loan repayments of pledged loans. The table below summarizes the amount of debt outstanding for 2022 and 2021.

Outstanding Debt at December 31, 2022 and December 31, 2021
(net of premiums)
(all amounts expressed in thousands of dollars)

	2022	2021
Revenue Bonds	$ 5,445,938	$ 5,609,227
Revenue Notes	175,600	33,000
Total	$ 5,621,538	$ 5,642,227

During 2022, the Authority issued the following bonds and notes for the purpose of providing loan funding to local governments under its various loan programs:

1. Water Pollution Control Loan Fund Revenue Notes – WPCLF State Match Note – Series 2022
2. Drinking Water Assistance Fund Revenue Bonds – Series 2022A
3. Drinking Water Assistance Fund Revenue Notes – DWAF State Match Note – Series 2022

The Authority continues to maintain strong ratings from Moody's and Standard & Poor's. Although the Water Pollution Control Loan Fund State Match Notes and Drinking Water Assistance Fund State Match Notes were placed with the State of Ohio, and were therefore not rated, we include the WPCLF and DWAF long-term program ratings for them as well. All bonds issued in 2022 were rated AAA/Aaa by Standard & Poors and Moody's, respectively.

Additional information on the Authority's long-term debt can be found in the Notes to Financial Statements, pages 35-50 of this report.

Contacting the Authority's Financial Management

This financial report is designed to provide a general overview of the Authority's finances for all those with an interest. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Chief Financial Officer, Ohio Water Development Authority, 480 S. High Street, Columbus, Ohio 43215, or call (614) 466-5822 or toll-free (877) OWDA-123, or visit the Authority's website at www.owda.org.

OHIO WATER DEVELOPMENT AUTHORITY

Combining Statement of Net Position

December 31, 2022

		Custodied Funds		Trusteed Funds
Assets		Operating Fund	Other Projects Fund	Community Assistance Fund (Note 4)
Current assets:				
Cash and cash equivalents -- Note 2	$	622,840	10,073,262	-
Investments -- Note 2		2,087,904	26,313,698	-
Receivables:				
Loan and fee receivables		437,859	8,035,325	-
Other		81,729	-	-
Total current assets		3,230,332	44,422,285	-
Noncurrent assets:				
Restricted grant, loan, bond and note covenant assets:				
Cash and cash equivalents -- Note 2		-	319,543	4,678,009
Investments -- Note 2		-	5,766,949	18,558,945
Loan and fee receivables		-	-	113,447,868
Total noncurrent restricted assets		-	6,086,492	136,684,822
Investments -- Note 2		2,975,295	95,517,261	-
Loan receivables		-	145,646,102	-
Other receivables		-	-	500,000
Due from other funds -- Note 3		60,658	-	-
Net OPEB asset		282,308	-	-
Capital assets, at depreciated cost		1,121,762	-	-
Total noncurrent unrestricted assets		4,440,023	241,163,363	500,000
Total assets		7,670,355	291,672,140	137,184,822
Deferred Outflows of Resources				
Loss on refunding		-	-	842,569
Advance of loan interest		-	-	-
Pension and other postemployment benefits (OPEB)		391,390	-	-
Total deferred outflows of resources		391,390	-	842,569
Total assets and deferred outflows of resources	$	8,061,745	291,672,140	138,027,391
Liabilities				
Current liabilities:				
Accounts payable	$	174,031	3,235,330	-
Current liabilities payable from restricted assets:				
Due to other funds -- Note 3		-	-	-
Accounts payable		-	-	-
Accrued interest		-	-	129,500
Revenue bonds and notes payable, net of premiums		-	-	3,580,000
Total current liabilities payable from restricted assets		-	-	3,709,500
Noncurrent liabilities:				
Compensated absences		420,257	-	-
Borrower deposits		-	319,543	-
Net pension liability		697,605	-	-
Revenue bonds and notes payable, net of premiums		-	-	33,739,899
Total noncurrent liabilities		1,117,862	319,543	33,739,899
Total liabilities		1,291,893	3,554,873	37,449,399
Deferred Inflows of Resources				
Pension and OPEB		1,138,208	-	-
Net Position				
Net investment in capital assets		1,121,762	-	-
Restricted for debt and grant covenants		-	5,766,949	100,577,992
Unrestricted		4,509,882	282,350,318	-
Total net position		5,631,644	288,117,267	100,577,992
Total liabilities, deferred inflows of resources, and net position	$	8,061,745	291,672,140	138,027,391

See accompanying notes to financial statements.

Trusteed Funds: Fresh Water Fund (Note 5)	Trusteed Funds: Water Pollution Control Loan Fund (Notes 6 & 7)	Trusteed Funds: Drinking Water Assistance Fund (Notes 8 & 9)	Total Combining 2022
-	-	-	10,696,102
-	-	-	28,401,602
-	-	-	8,473,184
-	-	-	81,729
-	-	-	47,652,617
62,080,009	77,720,180	41,060,950	185,858,691
153,367,274	921,289,523	305,681,924	1,404,664,615
1,696,673,964	5,430,165,662	1,096,868,774	8,337,156,268
1,912,121,247	6,429,175,365	1,443,611,648	9,927,679,574
-	-	-	98,492,556
-	-	-	145,646,102
3,990,777	536,951	25,322,648	30,350,376
-	-	-	60,658
-	-	-	282,308
-	-	-	1,121,762
3,990,777	536,951	25,322,648	275,953,762
1,916,112,024	6,429,712,316	1,468,934,296	10,251,285,953
5,021,646	4,179,243	1,119,655	11,163,113
-	97,266,521	-	97,266,521
-	-	-	391,390
5,021,646	101,445,764	1,119,655	108,821,024
1,921,133,670	6,531,158,080	1,470,053,951	10,360,106,977
-	-	-	3,409,361
-	-	60,658	60,658
12,595,289	71,992,005	24,503,169	109,090,463
4,565,229	13,279,068	2,869,161	20,842,958
46,347,067	234,676,813	63,184,151	347,788,031
63,507,585	319,947,886	90,617,139	477,782,110
-	-	-	420,257
-	-	-	319,543
-	-	-	697,605
1,152,937,062	3,343,663,097	743,409,413	5,273,749,471
1,152,937,062	3,343,663,097	743,409,413	5,275,186,876
1,216,444,647	3,663,610,983	834,026,552	5,756,378,347
-	-	-	1,138,208
-	-	-	1,121,762
702,720,281	2,867,547,097	636,027,399	4,312,639,718
1,968,742	-	-	288,828,942
704,689,023	2,867,547,097	636,027,399	4,602,590,422
1,921,133,670	6,531,158,080	1,470,053,951	10,360,106,977

OHIO WATER DEVELOPMENT AUTHORITY

Combining Statement of Revenues, Expenses and Changes in Net Position

Year ended December 31, 2022

		Custodied Funds		Trusteed Funds
		Operating Fund	Other Projects Fund	Community Assistance Fund (Note 4)
Operating revenues:				
Loan income	$	-	3,256,824	1,819,990
Investment income (loss)		(4,702)	(5,013,422)	(520,938)
Administrative fees from projects		4,497,336	-	-
Total operating revenues		4,492,634	(1,756,598)	1,299,052
Operating expenses:				
Payroll and benefits		2,050,710	-	-
Interest on bonds and notes		-	-	765,547
Bond and note issuance expense		-	-	-
Loan principal forgiveness and grant expense		-	11,187,795	-
State revolving fund administration		-	-	-
Professional services		293,010	945,290	-
Loan interest rate buy-down		-	-	-
Other		411,530	-	-
Total operating expenses		2,755,250	12,133,085	765,547
Operating income (loss)		1,737,384	(13,889,683)	533,505
Nonoperating other revenues		500	30,359	-
Income (loss) before contributions, federal subsidy income, H2Ohio, and transfers		1,737,884	(13,859,324)	533,505
Contribution from U.S. EPA		-	-	-
Federal subsidy income		-	-	-
H2Ohio grant funding		-	9,451,350	-
Transfers in (out), net -- Note 14		-	6,967,505	(7,500,340)
Change in net position		1,737,884	2,559,531	(6,966,835)
Net position at beginning of year		3,893,760	285,557,736	107,544,827
Net position at end of year	$	5,631,644	288,117,267	100,577,992

See accompanying notes to financial statements.

Fresh Water Fund (Note 5)	Trusteed Funds Water Pollution Control Loan Fund (Notes 6 & 7)	Drinking Water Assistance Fund (Notes 8 & 9)	Total Combining 2022
48,959,345	93,389,921	14,046,478	161,472,558
1,605,524	(19,583,779)	(2,042,215)	(25,559,532)
-	-	3,695,681	8,193,017
50,564,869	73,806,142	15,699,944	144,106,043
-	-	-	2,050,710
36,936,632	100,968,251	13,432,022	152,102,452
601,223	2,877,564	1,963,376	5,442,163
4,000	29,038,768	18,608,083	58,838,646
-	10,117,699	5,298,766	15,416,465
396,497	1,084,901	691,136	3,410,834
1,642,994	4,348,358	498,978	6,490,330
-	-	-	411,530
39,581,346	148,435,541	40,492,361	244,163,130
10,983,523	(74,629,399)	(24,792,417)	(100,057,087)
-	1	-	30,860
10,983,523	(74,629,398)	(24,792,417)	(100,026,227)
-	13,758,757	30,141,411	43,900,168
2,212,116	6,460,544	-	8,672,660
-	-	-	9,451,350
532,835	-	-	-
13,728,474	(54,410,097)	5,348,994	(38,002,049)
690,960,549	2,921,957,194	630,678,405	4,640,592,471
704,689,023	2,867,547,097	636,027,399	4,602,590,422

OHIO WATER DEVELOPMENT AUTHORITY

Combining Statement of Cash Flows

Year ended December 31, 2022

		Custodied Funds		Trusted Funds
		Operating Fund	Other Projects Fund	Community Assistance Fund (Note 4)
Operating activities:				
Administrative fees from projects	$	3,103,997	-	-
Payroll and benefits		(2,447,238)	-	-
Grant disbursements		-	(9,609,773)	-
State revolving fund administration		-	-	-
Professional services		(303,786)	(931,576)	-
Other		(1,192,113)	-	-
Net cash provided (used) by operating activities		(839,140)	(10,541,349)	-
Investing activities:				
Proceeds from maturity or sale of investments		1,665,000	75,240,195	16,658,113
Purchase of investments		(3,612,198)	(74,053,398)	(16,006,606)
Interest received on investments, net of purchased interest		38,207	610,128	250,857
Interest received on projects		-	3,155,715	1,901,948
Principal collected on projects		-	11,709,506	9,466,102
Payment for construction of projects		-	(22,032,524)	-
Net cash provided (used) by investing activities		(1,908,991)	(5,370,378)	12,270,414
Noncapital financing activities:				
Interest paid on bonds and notes, net of purchased interest		-	-	(1,636,900)
Proceeds of bonds and notes		-	-	-
Bond and note issuance expense		-	-	-
Redemption of bonds and notes		-	-	(2,125,000)
Contribution from U.S. EPA		-	-	-
Federal subsidy income		-	-	-
H2Ohio grant funding		-	9,451,350	-
Other		1,915,559	347,598	-
Transfers (to) from other funds -- Note 14		-	6,967,505	(7,500,340)
Net cash provided (used) by noncapital financing activities		1,915,559	16,766,453	(11,262,240)
Net increase (decrease) in cash and cash equivalents		(832,572)	854,726	1,008,174
Cash and cash equivalents at beginning of year		1,455,412	9,497,556	3,658,695
Cash and cash equivalents at end of year -- Note 2	$	622,840	10,352,282	4,666,869
Reconciliation of operating income (loss) to net cash provided (used) by operating activities:				
Operating income (loss)	$	1,737,384	(13,889,683)	533,505
Adjustments:				
Investment income (loss)		4,702	5,013,422	520,938
Principal forgiveness and other		(884,816)	1,578,022	-
Interest on bonds and notes		-	-	765,547
Loan and loan fee income		(1,393,339)	(3,256,824)	(1,819,990)
Bond and note issuance expense		-	-	-
Net change in other assets and other liabilities		(303,071)	13,714	-
Net cash provided (used) by operating activities	$	(839,140)	(10,541,349)	-

See accompanying notes to financial statements.

Trusteed Funds			
Fresh Water Fund (Note 5)	Water Pollution Control Loan Fund (Notes 6 & 7)	Drinking Water Assistance Fund (Notes 8 & 9)	Total Combining 2022
-	-	3,180,266	6,284,263
-	-	-	(2,447,238)
(4,000)	-	(1,088,927)	(10,702,700)
-	(10,117,699)	(5,298,766)	(15,416,465)
(386,167)	(1,098,154)	(692,160)	(3,411,843)
-	-	-	(1,192,113)
(390,167)	(11,215,853)	(3,899,587)	(26,886,096)
447,446,095	1,223,426,311	321,785,755	2,086,221,469
(446,039,894)	(961,397,482)	(366,098,544)	(1,867,208,122)
1,393,027	13,803,978	1,613,297	17,709,494
45,575,326	96,816,612	13,264,167	160,713,768
99,506,153	358,270,042	74,356,890	553,308,693
(162,490,023)	(593,545,293)	(192,463,375)	(970,531,215)
(14,609,316)	137,374,168	(147,541,810)	(19,785,913)
(52,725,299)	(148,558,500)	(26,376,219)	(229,296,918)
107,400,000	84,000,000	199,974,260	391,374,260
(832,031)	(3,366,605)	(1,723,296)	(5,921,932)
(106,995,000)	(188,530,000)	(31,575,000)	(329,225,000)
-	13,758,757	19,818,763	33,577,520
2,217,464	6,462,685	-	8,680,149
-	-	-	9,451,350
-	-	-	2,263,157
532,835	-	-	-
(50,402,031)	(236,233,663)	160,118,508	(119,097,414)
(65,401,514)	(110,075,348)	8,677,111	(165,769,423)
127,298,466	187,684,611	32,308,913	361,903,653
61,896,952	77,609,263	40,986,024	196,134,230
10,983,523	(74,629,399)	(24,792,417)	(100,057,087)
(1,605,524)	19,583,779	2,042,215	25,559,532
1,642,994	33,387,126	18,018,134	53,741,460
36,936,632	100,968,251	13,432,022	152,102,452
(48,959,345)	(93,389,921)	(14,046,478)	(162,865,897)
601,223	2,877,564	1,963,376	5,442,163
10,330	(13,253)	(516,439)	(808,719)
(390,167)	(11,215,853)	(3,899,587)	(26,886,096)

OHIO WATER DEVELOPMENT AUTHORITY

Statement of Fiduciary Net Position
Custodial Funds
December 31, 2022

		The Nature Conservancy In Lieu Fee Mitigation	Muskingum Watershed Conservancy District Interest Rate Subsidy	Total
Assets				
Cash and cash equivalents -- Note 2	$	12,170,171	5,085,451	17,255,622
Investments -- Note 2		30,285,643	-	30,285,643
Total assets	$	42,455,814	5,085,451	47,541,265
Liabilities				
Accounts payable	$	1,500	-	1,500
Net Position				
Restricted for other organizations		42,454,314	5,085,451	47,539,765
Total liabilities and net position	$	42,455,814	5,085,451	47,541,265

See accompanying notes to financial statements.

OHIO WATER DEVELOPMENT AUTHORITY

Statement of Changes in Fiduciary Net Position
Custodial Funds
Year ended December 31, 2022

		The Nature Conservancy In Lieu Fee Mitigation	Muskingum Watershed Conservancy District Interest Rate Subsidy	Total
Additions:				
Investment income	$	70,152	85,541	155,693
In Lieu Fee Mitigation receipts		5,681,469	-	5,681,469
Total additions		5,751,621	85,541	5,837,162
Deductions:				
Administrative expense		736,027	-	736,027
Custodian expense		1,500	1,000	2,500
In Lieu Fee Mitigation payments		965,884	-	965,884
Total deductions		1,703,411	1,000	1,704,411
Change in fiduciary net position		4,048,210	84,541	4,132,751
Fiduciary net position at beginning of year		38,406,104	5,000,910	43,407,014
Fiduciary net position at end of year	$	42,454,314	5,085,451	47,539,765

See accompanying notes to financial statements.

(1) AUTHORIZING LEGISLATION, REPORTING ENTITY, PROGRAM DESCRIPTIONS, FUND ACCOUNTING, CUSTODIAL FUND ACCOUNTING, AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Authorizing Legislation

The Ohio Water Development Authority (Authority) is a body corporate and politic in the State of Ohio created by an Act of the General Assembly of the State of Ohio effective March 7, 1968. It is authorized and empowered to acquire, construct, maintain, repair, and operate water development projects and solid waste projects, to issue water development and solid waste revenue bonds and notes, and to collect rentals and other charges to pay such bonds and notes and the interest thereon. The Authority was given jurisdiction over financing solid waste control by an Act of the General Assembly of the State of Ohio during 1970. Under provisions of the Act, such revenue bonds and notes shall not be deemed to constitute a debt or a pledge of faith and credit of the State nor any political subdivision thereof.

Reporting Entity

The accompanying financial statements comply with the provisions of Governmental Accounting Standards Board (GASB) Statement No. 14, *The Financial Reporting Entity,* as amended by GASB Statement No. 39, *Determining Whether Certain Organizations are Component Units,* and GASB Statement No. 61, *The Financial Reporting Entity: Omnibus*, which defines financial accountability. The criteria for determining financial accountability include the following circumstances:

- Appointment of a voting majority of an organization's governing authority and the ability of the primary government to either impose its will on that organization or the potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the primary government, or
- An organization is fiscally dependent on the primary government and there is a potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the primary government.

Officials of the State's primary government appoint a voting majority of the Authority's governing board. However, the primary government's accountability for the Authority does not extend beyond making those appointments. As such, the Authority is deemed a related organization of the State of Ohio. The Authority does not have any component units or related organizations of its own.

Programs

The Authority has established the following programs:

Local Communities

The Authority has established financing programs to provide loans to local communities in the State of Ohio for the construction of sewage and related water treatment facilities. These programs are accounted for in various funds, which are described in the following paragraphs.

These loans provide for the financing of project construction costs. Revenue from the underlying project is pledged toward repayment of the loan.

The Authority's initial funding of the program came from a $100,000,000 appropriation, all of which has been designated for use, from the State of Ohio. Subsequent funding of its programs has come from the issuance by the Authority of bonds and notes as well as federal capitalization grants.

Industrial

The Authority has established financing programs to assist private industry and certain municipalities participating in a manner similar to private industry, all located in the State of Ohio, in controlling water pollution and solid waste by constructing appropriate facilities. These programs are accounted for in various funds, which are described in Note 10. The Authority issues revenue bonds and notes to finance these programs. The Authority and the industrial companies and municipalities enter into agreements whereby the industrial companies and municipalities are required to make payments, as they become due, sufficient to pay the interest and principal on the bonds and notes issued to finance the projects.

These bonds and notes are principally secured by either revenues from the services, lease purchase agreements, mortgages, letters of credit, or a combination thereof and are not secured by assets of the Authority.

Basis of Presentation—Fund Accounting

The accounts of the Authority are organized on the basis of funds, each of which is considered to be an independent fiscal and accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, deferred outflows of resources, liabilities, deferred inflows of resources, net position, revenues, and expenses; and are segregated for the purpose of carrying on specific activities or attaining certain objectives in accordance with laws, regulations or other restrictions. The following is a description of the funds adopted by the Authority.

(a) Operating Fund

The Operating Fund was established to account for the administrative activities and transactions of the Authority, which are required to carry out the provisions of the aforementioned authorizing legislation.

Revenues for Authority operations are principally provided by an administrative fee charged as a percentage of the total cost of each project which the Authority assists by providing financing. Fee income is recognized at the time that the financing agreements are finalized since substantially all of the costs associated with the agreements have been incurred by that time. Operating expenses, which are primarily salaries, employee fringe benefits, and legal and professional fees include administrative expenses of the Authority and other expenses incurred in connection with the financing of projects.

(b) Other Projects Fund

The Other Projects Fund was established to account for its programs and commitments that are funded with funds other than proceeds of bonds or notes or other funds required by law or contract to be held in a fund separate and segregated from other funds of the Authority. The Other Projects Fund consists of the following programs and commitments:

- ***Other Projects Fund – Endowment Grant***

  The purpose of this program is to provide grants to local government agencies (LGAs) in Ohio to develop innovative projects in the areas of drinking water, wastewater, and solid waste management.

- ***Other Projects Fund – Solid Waste***

  The purpose of this program is to provide financing to local governments in Ohio for the construction of solid waste facilities including recycling projects, composting, waste-to-energy projects, and landfills. The balance of the construction costs are to be repaid by the solid waste facilities under terms of installment contracts over periods of 9.5 to 20 years with interest rates of 1.68% to 5.65%.

- ***Other Projects Fund – Local Economic Development***

  The purpose of this program is to provide financing to local governments in Ohio to construct projects which will provide economic development benefits. The interest rate for each loan is negotiated by the local government and the Ohio Development Services Agency. The loans are to be repaid under terms of installment contracts over periods of 13.5 to 30 years with interest rates of 0.98% to 3.00%.

- ***Other Projects Fund – Brownfield***

  The purpose of this program is to provide financing for the clean-up of contaminated brownfield sites under the state's voluntary action program. The loans are to be repaid under terms of installment contracts over periods of 10 to 15 years with interest rates of 1.50% to 3.61%.

- ***Other Projects Fund – Village Capital Improvements***

  The purpose of this program is to provide interest-free planning and design loans to qualifying villages in Ohio for water and wastewater facilities. These loans are to be repaid at a term not to exceed 10 years.

- ***Other Projects Fund – Emergency Relief***

  The purpose of this program is to provide financial assistance to Ohio communities or households that have sustained damage to their water or wastewater facilities as the result of a natural disaster or a mine subsidence event. To be eligible, communities or households must have an outstanding loan from the Authority and be in a federal or state designated disaster area, or be in an area of mine subsidence as declared by the state. The program can provide a community with up to two semi-annual loan payments to the Authority in an amount equivalent to the damage sustained by the water or wastewater systems during the disaster, or up to $25,000 per household for mine subsidence relocation costs.

- ***Other Projects Fund – Dam Safety***

  The purpose of this program is to help eligible Ohio dam owners receive below market interest rate loans to finance dam repairs and improvements that have been so ordered by the Ohio Department of Natural Resources. These loans are available through the Dam Safety Linked Deposit Program. In the program, Dam Safety funds are invested in local participating banks at below-market rates. The banks, in return, issue low interest rate loans to qualified participants. The amount invested in this program as of December 31, 2022 was $157,090.

- ***Other Projects Fund – Lake Erie Soil Erosion***

  The purpose of this program is to provide financing to the eight counties with Lake Erie shorelines containing coastal erosion areas. Any county receiving financing from the program will then provide financial assistance to property owners for the construction of erosion control structures in areas defined by statute as coastal erosion areas.

The loans to the counties are to be repaid under terms of installment contracts over 15 years with a 4.67% interest rate.

- ***Other Projects Fund – Security Assistance***

  The purpose of this program is to provide financing to local governments in Ohio to protect the communities' water and wastewater systems. Eligible items under the program include lighting, fencing, cameras, motion detectors, gating and security systems, and terrorism preparedness plans.

  The loans to the local government agencies are to be repaid under terms of installment contracts over periods of 20 to 30 years with interest rates of 2.00%.

- ***Other Projects Fund – Interest Rate Buy-Down***

  The purpose of this program is to provide a subsidy to the local governments in Ohio that obtained financing under the Authority's Fresh Water, Refunding and Safe Water Refunding (which were consolidated into the Fresh Water Fund in 2007), and Pure Water Refunding (which was also consolidated into the Fresh Water Fund in 2010) Programs whose loan interest rates exceed 4.00%.

- ***Other Projects Fund – Unsewered Area Planning Loan Program***

  The purpose of this program is to provide interest-free planning loans to unsewered areas where the LGA is considering the construction of a system of sewer facilities. These loans are to be repaid at a term not to exceed 10 years.

- ***Other Projects Fund – Unsewered Area Assistance Program***

  The purpose of this program is to provide principal forgiveness construction loans to unsewered areas for the purpose of construction of a system of sewer facilities.

- ***Other Projects Fund – Onsite Stormwater Loan Program***

  The purpose of this program is to provide loans to reduce storm water run-off and mitigate flooding. The loans to the LGAs are to be repaid under terms of installment contracts over periods of 10 to 30 years with interest rates of 1.00% to 2.55%.

- ***Other Projects – Rural Development Fund***

  The purpose of this program is to provide interim loans to local governments in Ohio to finance water development projects pending their receipt of loan or grant money from the United States of America, acting through Rural Utility Services. The loans to the LGAs are to be repaid under terms of cooperative agreements over 3 years with interest rates of 1.63% to 2.08%.

- ***Other Projects Fund – Unallocated Reserve***

  This reserve was established for potential collectability or cash flow problems that may arise in the future on any Authority project. The target balance of the reserve is 1% of the outstanding loan balance of the Other Projects, Community Assistance, and Fresh Water loan programs.

- ***Other Projects – H2Ohio Program***

  The purpose of this program is to provide funding for additional wetland efforts to help the Ohio Department of Natural Resources (ODNR) and Ohio Environmental Protection Agency (OEPA) reduce nutrient runoff and prevent algal blooms over the long term. The funds will also help extend H2Ohio's wetland monitoring program. Project funding for this program is received in advance for each project from OEPA and funds are restricted until disbursed.

- ***Other Projects – Controlled Account***

  The purpose of this account is to mitigate the Authority's lending risk by collecting two loan payments at the time of loan closure. These borrower deposits can be used to cure any repayment delinquencies and if no repayment delinquencies occur, deposits are held to make the final two payments. Funds in controlled account are restricted assets.

(c) Community Assistance Fund

The Community Assistance Fund (formerly known as the Hardship Fund) was established during 1983 by a resolution of the Authority and is administered by a Trustee. The purpose of the fund is to provide a financing program for local governments in Ohio that are unable to meet debt service requirements at normal market interest rates without undue hardship to users.

The balance of the construction costs is paid by the LGA under terms of installment contracts over periods of 10 to 30 years with interest rates of 0.50% to 3.11%. LGA payments of construction costs may be used for providing additional funding for qualifying projects.

Initial funding for the Community Assistance Fund was provided by a $15,000,000 transfer from the Pure Water Refunding Fund. Additional funding has been provided by monetary transfers from the Fresh Water Fund, Refunding Fund, Safe Water Refunding Fund, Pure Water Refunding Fund, and the issuance of the Community Assistance Water Development Revenue Bonds as detailed below:

Series	Par Amount	Type
1997	$42,940,000	New Money
2003	53,755,000	New Money
2005	37,355,000	Refunding
2007	24,550,000	New Money
2008A Notes	24,550,000	Refunding
2008B Notes	24,550,000	Refunding
2009	25,185,000	Refunding
2010A	630,000	New Money
2010B	28,885,000	New Money
2011	25,730,000	Refunding
2013	12,420,000	Refunding
2017	14,675,000	Refunding
2019	23,060,000	Refunding

All loan repayments for this fund are pledged on a parity basis against all debt outstanding within this fund.

(d) Fresh Water Fund

The Fresh Water Fund, which consists of various accounts, was established in 1992 by a resolution providing for the issuance of the Water Development Revenue Refunding Bonds—Pure Water Refunding and Improvement Series, and is administered by a Trustee. Initial funding was provided by a portion of the proceeds from these bonds and a transfer from the Pure Water Refunding Fund. Continued funding has been provided by the issuance of Water Development Revenue Bonds from various Fresh Water Series as detailed on the following table:

Series	Par Amount	Type
1995	$116,225,000	New Money
1998	120,535,000	New Money
2001A	25,345,000	New Money
2001B	53,005,000	Refunding
2002	102,145,000	New Money
2004	149,000,000	New Money
2005	105,220,000	Refunding
2006A	51,975,000	Refunding
2008D CP	65,000,000	New Money
2008E CP	40,000,000	New Money
2009A	122,205,000	Refunding
2009B	82,910,000	Refunding
2010A-B	50,000,000	New Money
2010A-1	6,035,000	New Money
2010A-2	149,290,000	New Money
2013	111,880,000	New Money
2016A	169,050,000	New Money
2016B	150,000,000	Refunding
2017B Notes	125,000,000	New Money
2018	166,405,000	Refunding
2019	150,000,000	New Money
2019 Notes	25,000,000	New Money
2021	150,000,000	New Money

All Fresh Water loan repayments for this fund are pledged on a parity basis against all debt outstanding within this fund.

The purpose of these funds is to provide moneys necessary to finance the LGA portion of costs for planning, designing, acquiring, or constructing wastewater treatment, sewage collection, and water supply and distribution facilities in Ohio, and financing other projects approved by the Authority.

The balance of Fresh Water construction costs is repaid by LGAs under terms of installment contracts over periods of 5 to 30 years with interest rates of 0.00% to 6.49%.

On December 1, 2010, the Pure Water Refunding Fund was closed and the outstanding loan receivables balances were transferred to the Fresh Water Fund. The loan repayments from this fund are deposited into the Cross-Collateralization account in the Fresh Water Fund and are not pledged toward outstanding Fresh Water debt. The balance of these loans is repaid by LGAs under terms of installment contracts over periods of 5 to 30 years with interest rates of 0.00% to 7.21%.

With the passage of House Bill 264 in January 2021, in addition to funding loans for construction of water and sewer projects, the Authority is now permitted to refinance outside water and sewer debt held by local governments. In January 2021, the Fresh Water Refinance Loan Program Guidelines were established by a motion of the Authority.

(e) Water Pollution Control Loan Fund

The Water Pollution Control Loan Fund (WPCLF) consists of various accounts, which were established by an Act of the General Assembly of the State of Ohio in 1989 and are administered by a Trustee. The purpose of this fund is to provide financial assistance for the construction of publicly owned wastewater treatment works in Ohio.

Construction costs are paid by LGAs under terms of installment contracts over periods of 4.5 to 45 years with interest rates of 0.00% to 4.64%. LGA repayments of project costs are restricted for the purpose of providing additional moneys for projects or for debt service.

In 2015, the Authority created the WPCLF Interest Rate Buy-Down Program. The purpose of this program is to provide a subsidy to the local governments in Ohio that obtained financing under the Authority's WPCLF Program whose loan interest rates exceed 3.00%.

The WPCLF was initially funded in 1989 by a U.S. Environmental Protection Agency (U.S. EPA) capitalization grant, which required a 20% matching contribution from OEPA. Grant funding has been awarded as detailed in the following table:

Year Awarded	Capitalization Grant	State Match
1989-1991	$ 237,758,731	47,551,746
1992-1996	484,740,873	96,948,175
1997-2001	275,565,092	55,116,583
2002-2006	412,074,921	82,414,986
*2007-2011	555,323,580	66,940,096
2012-2016	387,401,000	77,480,200
2017	74,638,000	14,927,600
2018	90,357,000	18,071,400
2019	89,448,000	17,889,600
2020	89,460,000	17,892,000
2021	89,448,000	17,889,600
^Total	$ 2,786,215,197	513,121,986

* The 2009 capitalization grant funding award included $220,623,100 in moneys from The American Recovery and Reinvestment Act (ARRA) with no state match required and $76,616,793 in capitalization grant moneys requiring a 20% state match.

^The Authority received the 2022 Base WPCLF Capitalization Grant for $65,138,000 in March 2023. The grant will require a 20% state match of $13,027,600.

In 2022, the Infrastructure Investment & Jobs Act (IIJA) also known as Bipartisan Infrastructure Law (BIL) was established to provide funding for infrastructure projects including water and wastewater infrastructure through the State Revolving Fund (SRF) programs. The funds are administered through OEPA from the U.S. EPA and will increase capitalizations to the SRF programs over the next five years from 2022-2026. In March 2023, the WPCLF Program received the 2022 Base Supplemental Grant of $100,195,000, which will require a 10% state match of $10,019,500, and is required to provide 49% of the grant total as principal forgiveness funding. The WPCLF Program also received the 2022 Emerging Contaminants Grant of $650,000, which requires no state match and is required to provide 100% of the grant total as principal forgiveness funding.

The WPCLF received additional funding from the proceeds of Water Pollution Control Loan Fund Revenue Bonds and Notes. The WPCLF Water Quality, State Match, and WPCLF Bonds and Notes were established by resolutions providing for the issuance of these bonds and notes and are administered by Trustees. Issuances of Water Quality (WQ), State Match (SM), and WPCLF Bonds, Notes, and floating rate notes (FRN) are detailed on the following table:

Series	Par Amount	Type
1991-1995 SM	$182,820,000	New Money
1995-1997 WQ	423,705,000	New Money
2000 SM	78,250,000	New Money
2001 WQ	83,400,000	New Money
2001 SM	53,590,000	Refunding
2002 WQ	200,115,000	New Money
2003 WQ	161,430,000	Refunding
2004A WQ	509,700,000	New Money
2004B WQ	65,005,000	Refunding
2005 SM	18,670,000	Refunding
2005 WQ	219,580,000	Refunding
2005B WQ	491,740,000	New Money
2008 SM	40,000,000	New Money
2009 WQ	229,120,000	Refunding
2010 SM	40,000,000	New Money
2010A WQ	366,290,000	New Money
2010B WQ	459,160,000	New Money
2010C WQ	73,200,000	Refunding
2011A WQ	101,210,000	Refunding
2011B WQ	142,435,000	Refunding
2012A WQ	62,555,000	Refunding
2013 SM	35,000,000	New Money
2013A FRN	50,000,000	New Money
2014 WPCLF	333,815,000	New Money
2014B WPCLF	137,990,000	Refunding
2015A WPCLF	240,000,000	New Money
2015B WPCLF	104,870,000	Refunding
2015 SM Note	30,000,000	New Money
2016 WPCLF	200,000,000	New Money
2017A WPCLF	400,000,000	New Money
2017B Note	250,000,000	New Money
2017-20B Note	20,000,000	New Money
2017-20C Note	50,000,000	New Money
2019A WPCLF	450,000,000	New Money
2019B WPCLF	300,000,000	Refunding
2019 SM Note	33,000,000	New Money
2020A WPCLF	450,000,000	New Money
2020B WPCLF	250,000,000	New Money
2021 WPCLF	250,000,000	New Money
2021 SM Note	36,000,000	New Money
2022 SM Note	84,000,000	New Money

The WPCLF Bonds and Notes are special obligations of the Authority, issued to fund the State Match, Water Quality, and WPCLF Bond accounts for use in making loans to LGAs provided by OEPA and the Authority. All interest earned on moneys and/or investments in the WPCLF remain within the fund. All loan repayments of principal and interest on loans made prior to May 1, 2014 are primarily pledged on a parity basis to all WPCLF Water Quality Bonds outstanding and subordinately pledged on a parity basis to all WPCLF Bonds outstanding. All loan repayments of interest for loans made after May 1, 2014 are pledged first to all WPCLF State Match Bonds outstanding, second to WPCLF Water Quality Bonds, and third to WPCLF Bonds. As of December 31, 2022, all WPCLF State Match Bonds are retired. Any future WPCLF State Match issuances will be governed by the WPCLF Bonds Trust Indenture.

In 1994, the Authority established the Linked Deposit Program. This program is aimed at helping Ohio farmers receive low-interest loans to reduce non-point source pollution from agricultural run-off. In the program, WPCLF funds are invested in local participating banks at below-market rates. The banks, in return, issue low-interest rate loans to qualified participants. The amount invested in this program as of December 31, 2022 was $375,510.

(f) Drinking Water Assistance Fund

The Drinking Water Assistance Fund (DWAF) was established by legislation enacted by the General Assembly of the State of Ohio in 1997 and is administered by a Trustee. The purpose of this fund is to assist public water systems to finance the costs of infrastructure needed to achieve or maintain compliance with the Safe Drinking Water Act requirements and to protect public health.

Construction costs are paid under terms of installment contracts over periods of 4.5 to 40 years with interest rates of 0.00% to 4.14%. Repayments of project costs are restricted for the purpose of providing additional moneys for projects.

In 2015, the Authority created the DWAF Interest Rate Buy-Down Program. The purpose of this program is to provide a subsidy to the local governments in Ohio that obtained financing under the Authority's DWAF Program whose loan interest rates exceed 3.00%.

In 2022, the Infrastructure Investment & Jobs Act (IIJA) also known as Bipartisan Infrastructure Law (BIL) was established to provide funding for infrastructure projects including water and wastewater infrastructure through the SRF. The funds are administered through OEPA from the U.S. EPA and will increase capitalizations to the SRF programs over the next five years from 2022-2026. As of December 31, 2022, the DWAF Program received a Base Supplemental Grant of $45,251,000, which requires a 10% state match of $4,525,100, and is required to provide 49% of the grant total as principal forgiveness funding. The DWAF Program also received a Lead Service Line Replacement Grant of $71,300,000, which requires no state match and is required to provide 49% of the grant total as principal forgiveness funding. In March 2023, the DWAF Program received the 2022 Emerging Contaminants Grant of $23,615,000, which requires no state match and is required to provide 100% of the grant total as principal forgiveness funding.

The DWAF was initially funded in 1998 by a U.S. EPA capitalization grant, with a required 20% state match contribution from the Ohio EPA. Grant funding has been awarded as detailed in the following table:

Year Awarded	Capitalization Grant	State Match
1998-2002	$ 164,117,000	32,823,400
2003-2007	124,311,400	24,862,280
*2008-2012	211,030,000	30,514,000
2013-2017	122,085,000	24,417,000
2018	27,935,000	5,587,000
2019	27,674,000	5,534,800
2020	27,692,000	5,538,400
2021	27,666,000	5,533,200
2022	17,624,000	3,524,800
Total	$ 750,134,400	138,334,880

* The 2009 capitalization grant funding award included $58,460,000 in moneys from ARRA with no state match required, and $24,421,000 in capitalization grant moneys requiring a 20% state match.

The DWAF received additional funding from the proceeds of the Drinking Water Assistance Fund Leverage (Lev), State Match (SM), and DWAF Revenue Bonds and Notes as detailed below:

Series	Par Amount	Type
2001-2005 SM	$78,345,000	New Money
2002-2005B Lev	187,280,000	New Money
2005 Lev	36,825,000	Refunding
2006 Lev	70,000,000	New Money
2008 Lev	71,915,000	Refunding
2010A Lev	6,205,000	New Money
2010A SM	19,255,000	New Money
2010B Lev	44,530,000	New Money
2010B SM	15,850,000	Refunding
2010C Lev	100,560,000	Refunding
2014 Lev	37,730,000	Refunding
2014 SM Note	11,000,000	New Money
2016	135,000,000	New Money
2017 SM Note	5,000,000	New Money
2018 SM Note	5,000,000	New Money
2019A	250,000,000	New Money
2019B	37,410,000	Refunding
2019 SM Note	12,000,000	New Money
2021A	125,000,000	New Money
2021 SM Note	12,000,000	New Money
2022A	150,000,000	New Money
2022 SM Note	31,000,000	New Money

The DWAF Bonds and Notes are special obligations of the Authority, issued to fund the State Match, Leverage, and DWAF Bond accounts for use in making loans to LGAs provided by the Ohio EPA and the Authority. All interest earned on moneys and/or investments in the DWAF remain within the fund. All loan repayments of principal and interest on loans made prior to August 3, 2016 are primarily pledged on a parity basis to all DWAF Leverage Bonds outstanding and subordinately pledged on a parity basis to all DWAF Bonds outstanding. All loan repayments of interest for loans made after August 3, 2016 are pledged first to all DWAF State Match Bonds outstanding, second to DWAF Leverage Bonds, and third to DWAF Bonds. As of December 31, 2022, all DWAF State Match Bonds are retired. Any future DWAF State Match issuances will be governed by the DWAF Bonds Trust Indenture.

Basis of Presentation—Custodial Fund Accounting

The custodial accounts of the Authority are organized on a fund basis, considered to be an independent fiscal and accounting entity. The operations of each custodial fund are accounted for with a separate set of self-balancing accounts that comprise its assets, liabilities, net position, additions, and deductions; and are segregated for the purpose of carrying on specific activities or attaining certain objectives in accordance with laws, regulations or other restrictions. The following is a description of the custodial funds of the Authority.

In Lieu Fee Mitigation Fund

The In Lieu Fee (ILF) Mitigation Fund was established during 2014 by a resolution of the Authority. The Authority is responsible for fund management in support of The Nature Conservancy's administration of the program. All funds in the ILF Mitigation Fund belong to The Nature Conservancy.

The purpose of the ILF Mitigation Fund is to provide an option for public and private entities that are impacting Ohio's wetlands or streams where direct mitigation of those impacts is not feasible. These entities pay into the ILF Mitigation Fund, providing a source of funds that is then used to implement comparable projects elsewhere in the state that compensate for the originally impacted wetlands by public and private entities or carry out comparable projects to negate any negative impact on wetlands or streams.

Muskingum Watershed Conservancy District Interest Rate Subsidy Program

The Muskingum Watershed Conservancy District (MWCD) Interest Rate Subsidy Program was established during 2021 by a motion of the Authority. The Authority is responsible for fund management of the Program in support of the MWCD's administration of the Program.

The purpose of the MWCD Interest Rate Subsidy Program is to provide financial assistance in the form of interest payments on a Fresh Water loan for construction of wastewater projects to borrowers located within the jurisdictional boundary of the MWCD.

MWCD has provided $5,000,000 in financial assistance to the Program and these funds belong to MWCD until they are assigned to a specific loan. In 2022, no loans were assigned to the MWCD Interest Rate Subsidy Program.

Summary of Significant Accounting Policies

(a) Basis of Accounting

The basis of accounting determines when transactions and economic events are reflected in financial statements. The Authority has prepared the financial statements, including the fiduciary fund statements, on the full accrual basis of accounting. Accordingly, revenues are recognized as earned and expenses are recognized as incurred, including interest expense on bonds and notes outstanding.

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets, deferred outflows of resources, liabilities, and deferred inflows of resources at the date of the financial statements and the reported amounts of revenues and expenses during the reported period. Actual results could differ from those estimates.

(b) Cash and Cash Equivalents

Cash and cash equivalents include amounts on deposit with Trustees and petty cash, as defined in GASB Statement No. 9 for the purpose of the statement of cash flows, in addition to money market investments and holdings in the State Treasury Asset Reserve of Ohio (STAR Ohio) investment pool. STAR Ohio is an investment pool managed by the State Treasurer's Office, which allows governments within the State to pool their funds for investment purposes. STAR Ohio is not registered with the Securities and Exchange Commission as an investment company, but has adopted GASB Statement No. 79 for the purpose of measuring the value of shares in STAR Ohio. The Authority measures their investment in STAR Ohio at the net asset value (NAV) per share provided by STAR Ohio. The NAV per share is calculated on an amortized cost basis that provides a NAV per share that approximates fair value.

For 2022, there were no limitations or restrictions on any participant withdrawals. However, notice must be given 24 hours in advance for all deposits or withdrawals of $100 million or greater. STAR Ohio reserves the right to limit the transaction to $250 million per day, requiring the excess amount to be transacted the following business day(s), but only to the $250 million limit. All accounts of the participants will be combined for these purposes.

For the purpose of the statement of cash flows, the Authority considers cash deposits with a maturity of three months or less when purchased to be cash equivalents. Additionally, the Authority does not consider its loans to be program loans, and as a result, reports its loan cash flows within the investing activities section of the statement of cash flows.

(c) Investments

With the exception of nonnegotiable certificates of deposit, investments are carried at fair value, which includes accrued interest receivable. Accordingly, the Authority reports participating nonnegotiable certificates of deposit at amortized cost plus accrued interest receivable.

(d) Due to and Due from Other Funds

Interfund receivables and payables, otherwise referred to as due to and due from other funds, arise from interfund transactions and are recorded by all funds affected in the period in which transactions are executed. All interfund balances at December 31, 2022 resulted from the time lag between the dates that transactions are recorded in the accounting system and the dates that payments between funds are made. The Authority expects that all interfund balances will be repaid within one year.

(e) Loan Income as Defined by the Contracts

Loan income consists primarily of interest charged to LGAs, as defined by the contracts with LGAs, on the amounts estimated to be paid under the loan agreements. Interest charged during the construction period is capitalized by the Authority and is reflected as part of loan receivables.

(f) Amortization of Premium and Discount of Bonds and Notes

Premium and discount are amortized over the life of the bonds and notes, following the effective interest method.

(g) Interfund Transfers/Net Position

The Authority reports interfund transactions when incurred, as follows:

- Transfers in (out), net: Transfers to a receiving fund from a disbursing fund required to meet routine operating requirements, such as debt service repayments and loan disbursements, in addition to transfers between funds for initial and/or additional funding needs.

Interfund transfers have not been eliminated in the combining column of the financial statements.

Net position in excess of those amounts required by the various trust agreements may, upon Board authorization, be used for any lawful purpose.

(h) Capital Assets and Facilities

Capital assets of the Authority include an office building with attached garage, two parking lots, office furniture, and equipment. Capital assets are defined by the Authority as assets with an initial, individual cost of $1,000 or more and an estimated useful life in excess of two years. Such assets are recorded at historical cost. Depreciation is computed on the building, capital improvements, and other capital assets only, using the straight-line method with no salvage value. Current year depreciation expense is detailed below as 'Additions' to accumulated depreciation.

Capital asset activity for the year ended December 31, 2022 was as follows:

	Beginning Balance	Additions	Deletions	Ending Balance
Land (non-depreciable)	$ 538,676	–	–	538,676
Building (useful life: 20-45 years)	887,524	–	–	887,524
Capital improvements (useful life: 20 years)	628,314	–	–	628,314
Other (useful life: 3-10 years)	1,961,582	48,480	(246,785)	1,763,277
Total capital assets	$ 4,016,096	48,480	(246,785)	3,817,791
Less: accumulated depreciation-building	(708,273)	(32,234)	–	(740,507)
Less: accumulated depreciation-cap. impr.	(557,280)	(31,416)	–	(588,696)
Less: accumulated depreciation-other	(1,530,771)	(82,840)	246,785	(1,366,826)
Capital assets, at depreciated cost	$ 1,219,772	(98,010)	–	1,121,762

(i) Statement of Net Position Classifications

The Authority is required to classify its statement of net position, detailing current and noncurrent assets, deferred outflows of resources, current and noncurrent liabilities, deferred inflows of resources, and restricted and unrestricted net position, as follows:

- Current: Due within one year from December 31, 2022
- Noncurrent: Due after December 31, 2023
- Restricted: Restricted for usage by bond and note covenants and grant restrictions
- Unrestricted: Not restricted for usage

Within the Other Projects Fund, there exist both restricted and unrestricted net positions. Restricted net position consists of funds advanced to the Authority for specific projects in the H2Ohio Program. The unrestricted net position may, upon Board authorization, be used by the Authority for any lawful purpose.

Within the Fresh Water Fund, there exist both restricted and unrestricted net positions. Restricted net position would be used to cover eligible expenses before unrestricted net position would be used. The unrestricted net position may, upon Board authorization, be used by the Authority for any lawful purpose.

(j) Revenue and Expense Classifications

The Authority's policy for revenue and expense classification is as follows:

- Operating revenues consist of loan income, investment income, and administrative fees from projects
- Operating expenses consist of payroll and benefits, interest on bonds and notes, bond and note issuance expense, loan principal forgiveness and grant expense, state revolving fund administration, professional services, loan interest rate buy-down, and other operating expenses
- Nonoperating other revenues
- Contribution from U.S. EPA
- Federal subsidy income
- H2Ohio grant funding

(k) Risk Management

It is the policy of the Authority to eliminate or transfer risk. The Authority does not self-insure any risk resulting from acts of God, injury to employees, or breach of contract.

The Authority carries commercial property insurance on property and equipment in the aggregate sum of approximately \$2,559,129. The Authority carries commercial liability insurance coverage in the amount of approximately \$55,475,000. The Authority also carries premium-based medical, dental, and vision coverage for all employees.

During 2022, there were no claims by the Authority that exceed the insurance coverage, nor has there been a reduction in insurance coverage in the past three years.

(l) Pensions/Other Postemployment Benefits (OPEB)

For purposes of measuring the net pension/OPEB asset and liability, information about the fiduciary net position of the pension/OPEB plans and additions to/deductions from their fiduciary net position have been determined on the same basis as they are reported by the pension/OPEB plans. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. The pension/OPEB plans report investments at fair value.

(2) CASH AND INVESTMENTS

As of December 31, 2022, the Authority's carrying amount of deposits was $14,037,626 and bank balance of deposits was $14,042,811. Of this amount, $250,000 was covered by federal depository insurance, and $13,792,811 was collateralized with securities held by the bank's agent but not in the Authority's name. The Authority's carrying amount of long-term nonnegotiable certificates of deposit as of December 31, 2022 was $533,391. These deposits were collateralized with securities held by the Treasurer of State (as per the Ohio Pooled Collateral System) but not in the Authority's name.

The Authority's investment policy and relevant trust indentures, which are in compliance with the Ohio Revised Code, authorizes investments in obligations of the U.S. Treasury, U.S. Agencies, obligations of the State of Ohio or any political subdivision, obligations of any State of the United States, repurchase agreements from financial institutions with a Moody's or Standard & Poor's rating of "A", investment agreements from financial institutions rated in the highest short-term categories or one of the top three long-term categories by Moody's and/or Standard & Poor's, money market mutual funds whose portfolio consists of authorized investments, the State Treasurer's investment pool and any debt or fixed income security, the issuer of which is rated in the highest short-term or in the top three long-term categories. All investments must mature within five years of settlement unless the investment is matched to a specific obligation or debt of the Authority. Securities are purchased with the expectation that they may be held to maturity.

As of December 31, 2022, the Authority had investment balances with the following issuers, which are greater than or equal to 5% of the respective fund's investment balance:

Fund	Issuer	Percent of Fund's Investments
Other Projects	Federal National Mortgage Association	26.0%
	Federal Home Loan Mortgage Corporation	19.0%
Community Assistance	Federal Home Loan Mortgage Corporation	9.0%
Fresh Water	Federal Home Loan Bank	18.0%
	Federal Farm Credit Bank	10.0%
In Lieu Fee Custodial Fund	Federal Farm Credit Bank	9.0%

The Authority manages its concentration risk by limiting investments to U.S. treasuries, U.S. agencies, or to issuers with the highest short-term ratings from Moody's or Standard & Poor's or one of the three highest long-term ratings from Moody's or Standard & Poor's.

As of December 31, 2022, the Authority had the following investments and maturities:

			Investment Maturity (in Years)		
Fund - Investment Type		Fair Value	Less than 1	1-5	6-10
Operating:					
U.S. Treasuries	$	5,063,199	2,087,904	2,975,295	-
Other Projects:					
U.S. Treasuries	$	41,640,662	84,251	41,556,411	-
U.S. Agencies		66,458,794	19,937,684	46,521,110	-
Municipal Bonds		19,340,891	6,291,292	13,049,599	-
Money Market		9,627,718	9,627,718	-	-
	$	137,068,065	35,940,945	101,127,120	-
Community Assistance:					
U.S. Treasuries	$	16,429,483	2,960,063	13,469,420	-
U.S. Agencies		2,129,462	2,129,462	-	-
Money Market		4,695,071	4,695,071	-	-
	$	23,254,016	9,784,596	13,469,420	-
Fresh Water:					
U.S. Treasuries	$	93,050,711	62,240,905	30,809,806	-
U.S. Agencies		60,316,563	60,316,563	-	-
STAR Ohio		27,160,842	27,160,842	-	-
Money Market		30,664,993	30,664,993	-	-
	$	211,193,109	180,383,303	30,809,806	-
Water Pollution Control Loan:					
U.S. Treasuries	$	755,319,052	319,601,669	435,717,383	-
U.S. Agencies		69,741,786	28,601,143	41,140,643	-
Municipal Bonds		95,852,855	21,896,060	54,846,153	19,110,642
STAR Ohio		19,867,392	19,867,392	-	-
Money Market		53,079,849	53,079,849	-	-
	$	993,860,934	443,046,113	531,704,179	19,110,642
Drinking Water Assistance:					
U.S. Treasuries	$	295,370,013	94,100,326	201,269,687	-
U.S. Agencies		738,035	738,035	-	-
Municipal Bonds		9,573,876	75,041	-	9,498,835
STAR Ohio		12,999,077	12,999,077	-	-
Money Market		24,422,225	24,422,225	-	-
	$	343,103,226	132,334,704	201,269,687	9,498,835
In Lieu Fee Custodial Fund:					
U.S. Treasuries	$	26,440,376	14,036,225	12,404,151	-
U.S. Agencies		3,845,267	3,845,267	-	-
STAR Ohio		9,248,681	9,248,681	-	-
Money Market		2,921,490	2,921,490	-	-
	$	42,455,814	30,051,663	12,404,151	-

			Investment Maturity (in Years)		
Fund - Investment Type		Fair Value	Less than 1	1-5	6-10
MWCD Custodial Fund:					
STAR Ohio	$	5,085,451	5,085,451	-	-

The Authority's U.S. treasuries, U.S. agencies, and municipal bonds are uninsured and unregistered investments for which the securities are held by the Authority's agent but not in the Authority's name. As of December 31, 2022, the Authority's investments in U.S. treasuries were backed by the full faith and credit of the U.S. Government. The investments in U.S. agencies were rated AA+ by Standard & Poor's and Aaa by Moody's. The Authority's investments in municipal bonds were rated within the top three long-term categories by Moody's and/or Standard & Poor's. The Authority's investments in STAR Ohio (a statewide external investment pool created pursuant to Ohio statutes and administered by the Treasurer of the State of Ohio) were rated AAAm by Standard & Poor's. The Authority's money market investments were rated AAAm by Standard & Poor's and Aaa-mf by Moody's. As of December 31, 2022, 95.62% of the Authority's rated investments were rated in the highest short-term or long-term rating category by Moody's.

As of December 31, 2022, the Authority categorizes fair value measurements of its negotiable investments within the fair value hierarchy as follows:

Investment Type	Level 1*	Level 2*	Level 3*
U.S. Treasuries	$ 1,232,480,963	-	-
U.S. Agencies	-	203,229,907	-
Municipal Bonds	-	124,767,622	-

* Fair value hierarchy is based on valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets. Level 2 inputs are significant other observable inputs such as quoted prices for similar assets in active markets. The Authority obtains prices for our Level 1 and Level 2 publicly traded assets from our trustees who use various pricing services. Level 3 inputs are significant unobservable inputs. Excluded from the fair value hierarchy above are certain non-negotiable State and Local Government Securities (SLGS) which are held in an irrevocable escrow account and are carried at cost.

As of December 31, 2022, the Authority had cash and cash equivalents balances of $196,554,793, which includes accrued interest receivable on money market balances. Below is a reconciliation of the statement of net position and the statement of cash flows cash and cash equivalents balances:

Fund		Statement of Net Position Cash and Cash Equivalents Balance	Cash and Cash Equivalents Accrued Interest Receivable	Statement of Cash Flows Cash and Cash Equivalents Balance
Operating	$	622,840	-	622,840
Other Projects		10,392,805	(40,523)	10,352,282
Community Assistance		4,678,009	(11,140)	4,666,869
Fresh Water		62,080,009	(183,057)	61,896,952
Water Pollution Control Loan		77,720,180	(110,917)	77,609,263
Drinking Water Assistance		41,060,950	(74,926)	40,986,024
	$	196,554,793	(420,563)	196,134,230

(3) INTERFUND RECEIVABLES AND PAYABLES

On December 31, 2022, interfund balances consisted of $60,658 owed to the Operating Fund by the Drinking Water Assistance Fund caused by the timing of pending loan fee repayment allocations.

(4) WATER DEVELOPMENT REVENUE AND REFUNDING BONDS—COMMUNITY ASSISTANCE SERIES

As of December 31, 2022, there was $33,325,000 of Community Assistance Water Development Revenue and Refunding Bonds outstanding, broken down by series as follows:

Series	Type	Interest Rate	Maturity		Current	Long-Term	Total
2017	Serial	4.00%	2023-2030	$	1,220,000	10,005,000	11,225,000
2019	Serial	5.00%	2023-2030		2,360,000	19,740,000	22,100,000
Community Assistance Series Totals					3,580,000	29,745,000	33,325,000
		Add: unamortized premiums			-	3,994,899	3,994,899
				$	3,580,000	33,739,899	37,319,899

The Community Assistance Series debt service requirements to maturity are as follows:

		Principal	Interest	Total
2023	$	3,580,000	1,513,525	5,093,525
2024		3,760,000	1,344,725	5,104,725
2025		3,915,000	1,167,400	5,082,400
2026		4,095,000	982,725	5,077,725
2027		4,275,000	789,425	5,064,425
2028-2030		13,700,000	1,136,125	14,836,125
	$	33,325,000	6,933,925	40,258,925

The Community Assistance Series bonds are subject to mandatory and optional redemption, by series, as follows:

a) Community Assistance Refunding Series 2017 – The Series 2017 Bonds are not subject to redemption prior to their stated maturity.
b) Community Assistance Refunding Series 2019 – The Series 2019 Bonds are not subject to redemption prior to their stated maturity.

LGA reimbursements of Community Assistance project costs, including interest, are pledged as security for the bonds. In the event that LGA reimbursements of Community Assistance project costs are insufficient to cover Community Assistance debt service requirements, unencumbered assets of the Community Assistance Fund Debt Service Reserve, Surplus, and Construction accounts are also pledged as security for the bonds. For 2022, the amount received from reimbursements of Community Assistance project costs was $11,368,050, compared to the required bond debt service payments of $3,761,900.

The bond resolutions provide for six separate accounts designated as the Community Assistance Fund Construction account, Revenue account, Debt Service account, Debt Service Reserve account, Surplus account, and Rebate account. As of December 1, 2022, there is no accrued rebate liability for these bonds.

Amounts received from the LGAs as reimbursements of project or construction costs, including capitalized interest, are deposited in the Revenue account. The trustee then allocates or pays out moneys in the Revenue account as follows:

a) To the trustee for the payment of its fees on the first day of each May and November.

b) To the Debt Service account on the first day of each May and November, commencing on the first May or November preceding the first bond maturity date (1) a sum which, when added to any available balance then on deposit in the Debt Service account, will be equal to the interest due on that day on all bonds outstanding; (2) a sum which will be equal to the next ensuing mandatory redemption for term bonds; and (3) a sum which will be equal to the next ensuing principal maturity on all outstanding bonds.

c) To the Debt Service Reserve account on the first day of each May and November, a sum as necessary to maintain in the Debt Service Reserve account investments or cash having an aggregate value at least equal to the maximum annual bond service charges required to be paid in that year or any succeeding year.

d) To the Surplus account, on the first day of June and December of each year, remaining moneys (after making up any deficiencies) in the Revenue account (excluding amounts received for the next ensuing LGA repayment date).

After the Debt Service Reserve account has reached the required reserve fund balance, interest earned on that balance will be transferred to the Debt Service account on the first day of November of each year, prior to making allocations or payments of moneys on hand in the Revenue account.

Any deficiency in the amounts required to be deposited in the Debt Service account or the Debt Service Reserve account is to be made up by moneys available in the Surplus account.

(5) WATER DEVELOPMENT REVENUE AND REFUNDING BONDS AND NOTES—FRESH WATER SERIES

As of December 31, 2022, there was $1,059,240,000 of Fresh Water Development Revenue and Refunding Bonds and Notes outstanding, broken down by series as follows:

Series	Type	Interest Rate	Maturity		Current	Long-Term	Total
2005	Serial	5.50%	2023-2025	$	2,340,000	2,230,000	4,570,000
2006	Term	5.25%	2023-2034		7,035,000	41,030,000	48,065,000
2009B	Term	3.13% to 5.25%	2023-2027		4,570,000	11,725,000	16,295,000
2010A-2	Term	3.99% to 4.92%	2023-2042		6,450,000	131,980,000	138,430,000
2013	Serial	5.00%	2023		11,825,000	-	11,825,000
2016A	Serial	4.00% to 5.00%	2028-2036		-	49,050,000	49,050,000
	Term	5.00%	2030-2035		-	120,000,000	120,000,000
2016B	Serial	5.00%	2023-2037		10,000,000	95,500,000	105,500,000
	Term	5.00%	2030-2036		-	44,500,000	44,500,000
2018	Serial	5.00%	2023-2028		4,000,000	156,405,000	160,405,000
2019	Serial	2.00% to 5.00%	2029-2032		-	18,000,000	18,000,000
	Term	5.00%	2033-2044		-	132,000,000	132,000,000
2021	Serial	5.00%	2028-2032		-	65,000,000	65,000,000
	Term	4.00% to 5.00%	2033-2046		-	85,000,000	85,000,000
2022-24	Notes	Variable	2024			60,600,000	60,600,000
Fresh Water Series Totals					46,220,000	1,013,020,000	1,059,240,000
		Add: unamortized premiums			127,067	139,917,062	140,044,129
				$	46,347,067	1,152,937,062	1,199,284,129

The Fresh Water Series debt service requirements to maturity are as follows:

		Principal	Interest*	Total
2023	$	46,220,000	51,734,290	97,954,290
2024		105,155,000	49,266,738	154,421,738
2025		43,550,000	44,488,224	88,038,224
2026		42,135,000	42,375,698	84,510,698
2027		40,455,000	40,298,740	80,753,740
2028-2032		411,955,000	133,249,587	545,204,587
2033-2037		220,750,000	64,678,705	285,428,705
2038-2042		101,120,000	24,315,372	125,435,372
2043-2046		47,900,000	4,465,000	52,365,000
	$	1,059,240,000	454,872,354	1,154,112,354

* In 2010, the Authority sold Federally Taxable Build America Bonds (BABs), which receive a cash subsidy payment from the United States Treasury equaling 35% of interest paid. In 2022, the subsidy continued to be reduced by 5.7%, resulting in an effective subsidy equaling 33% of interest paid. The interest reported in this table is the gross interest due on the bonds. The total interest due, net of the BABs subsidy, over the remaining life of the bonds will be $435,649,829.

The Fresh Water Series 2022-24 Notes are taxable and have an adjustable rate that is reset monthly at a rate of 1-month SOFR plus 0.86%. The Notes interest payments to maturity are based on the rate for these notes at December 31, 2022, which was 4.68%.

The Fresh Water Notes are a direct placement with PNC Bank for a commitment amount up to $150 million expiring on November 1, 2024. The Authority has drawn $60.6 million from this commitment. In the event the Authority adds a new bank commitment product, renews this product, or draws additional funds from this product, an event filing will be made with the Municipal Securities Rulemaking Board ("MSRB") through its Electronic Municipal Market Access ("EMMA") system within ten business days. Events of default include:

a) Payment default
b) Nonpayment of commitment or other fees
c) Covenant default
d) Breach of representations
e) Cross defaults to senior, parity, or subordinate debt
f) Cross acceleration of any senior, parity, or subordinate debt
g) Unappealable judgments for $10 million of pledged revenues for a period of 60 days
h) Ratings downgrades below Baa2 (Moody's) or BBB (Standard and Poors)
i) Bankruptcy, insolvency, or declaration of a moratorium
j) Any occurrence of an event of default under any other Credit Facility Documents
k) Any representation or warranty contained in Anti-Terrorism Laws

The Fresh Water Series Bonds and Notes are subject to mandatory and optional redemption, by series, as follows:

a) Fresh Water Refunding Series 2005 – The Series 2005 Bonds are not subject to redemption prior to maturity.
b) Fresh Water Refunding Series 2006 – 1) The Series 2006 Bonds are not subject to optional redemption prior to their stated maturity. 2) The term bonds are subject to mandatory redemption beginning December 1, 2022.
c) Fresh Water Refunding Series 2009B – 1) The Series 2009B Bonds are not subject to optional redemption prior to their stated maturity. 2) The term bonds are subject to mandatory redemption beginning December 1, 2020.
d) Fresh Water BABs Series 2010A-2 – 1) The BABs are subject to mandatory redemption beginning June 1, 2020. 2) The BABs shall be subject to an optional redemption prior to maturity, at the option of the Authority, in whole or in part, on any business day, at the make-whole redemption price. 3) The BABs are subject to extraordinary optional redemption if Section 54AA or 6431 of The Internal Revenue Code of 1986 is modified, amended, or interpreted in a manner pursuant to which the Authority's 35% cash subsidy payment from the United States Treasury is reduced or eliminated.
e) Fresh Water Series 2013 – The Series 2013 Bonds are not subject to redemption prior to maturity.
f) Fresh Water Series 2016A – The Series 2016A Bonds are subject to prior redemption at the sole option of the Authority, in whole or in part, on or after June 1, 2026, at par plus accrued interest.
g) Fresh Water Series 2016B – The Series 2016B Bonds are subject to prior redemption at the sole option of the Authority, in whole or in part, on or after December 1, 2026, at par plus accrued interest.

h) Fresh Water Series 2018 – The Series 2018 Bonds are subject to prior redemption at the sole option of the Authority, in whole or in part, on or after March 1, 2028, at par plus accrued interest to the redemption date.
i) Fresh Water Series 2019 – 1) The Series 2019 Bonds are subject to prior redemption at the sole option of the Authority, in whole or in part, on or after December 1, 2029, at par plus accrued interest to the redemption date. 2) Due to the Tax Increase Prevention and Reconciliation Act of 2005 (TIPRA) requirement to lend more than 95% of proceeds within three years, the bonds are subject to extraordinary mandatory redemption by the Authority at any time during the ninety-day period following November 19, 2022, in whole or in part, at a redemption price set forth in the Official Statement. This lending requirement was met on May 26, 2020. The Authority gave notice with a voluntary MSRB filing through its EMMA system.
j) Fresh Water Series 2021 – 1) The Series 2021 Bonds are subject to prior redemption by and at the sole option of the Authority, in whole or in part, on or after December 1, 2031, at par plus accrued interest to the redemption date. 2) Due to the TIPRA requirement to lend more than 95% of proceeds within three years, the bonds are subject to extraordinary mandatory redemption by the Authority at any time during the ninety-day period following November 1, 2024, in whole or in part, at a redemption price set forth in the Official Statement. This lending requirement was met on January 25, 2022. The Authority gave notice with a voluntary MSRB filing through its EMMA system.
k) Fresh Water 2022-24 Notes – These notes are subject to optional redemption, in whole or in part, 30 days after the date of issuance, at par plus accrued interest.

LGA reimbursements of Fresh Water project costs, including interest, are pledged as security on a senior basis for the bonds and subordinate basis for the notes. In the event that LGA reimbursements of Fresh Water project costs are insufficient to cover Fresh Water debt service payments, unencumbered assets of the Fresh Water Fund Debt Service Reserve, Surplus, and Construction accounts are also pledged as security for the bonds and notes. For 2022, the amount received from reimbursements of Fresh Water project costs was $145,081,479, compared to the required bond and note debt service payments of $99,920,299.

The bond and note resolutions provide for six separate accounts designated as the Fresh Water Construction account, Revenue account, Debt Service account, Debt Service Reserve account, Surplus account, and Rebate account. As of December 1, 2022, there is no accrued rebate liability for these bonds and notes.

Amounts received from the LGAs as reimbursements of project or construction costs, including capitalized interest, are deposited in the Revenue account. The trustee then allocates or pays out moneys in the Revenue account as follows:

a) To the trustee for the payment of its fees on the first day of each May and November.

b) To the Debt Service account on the first day of each May and November (1) a sum which, when added to any available balance then on deposit in the Debt Service account, will be equal to the interest due on that day on all bonds and notes outstanding; (2) a sum which will be equal to the next ensuing mandatory redemption for term bonds; and (3) a sum which will be equal to the next ensuing principal maturity on all outstanding bonds and notes.

c) To the Debt Service Reserve account, a semiannual sum as necessary to maintain in the Debt Service Reserve account investments or cash having an aggregate value at least equal to 50% of the maximum annual bond and note service charges required to be paid in that year or any succeeding year.

After the Debt Service Reserve account has reached the required reserve fund balance, interest earned on that balance will be transferred to the Debt Service account on the first day of November of each year, prior to making allocations or payments of moneys on hand in the Revenue account.

On the first day of June and December of each year, all remaining moneys (after making up any deficiencies) in the Revenue account (excluding amounts received for the next ensuing LGA repayment date) are allocated to the Surplus account.

Any deficiency in the amounts required to be deposited in the Debt Service account or the Debt Service Reserve account is to be made up by moneys available in the Surplus account.

(6) WATER POLLUTION CONTROL LOAN FUND REVENUE AND REFUNDING BONDS—WATER QUALITY SERIES

As of December 31, 2022, there was $406,850,000 of Water Pollution Control Loan Fund (WPCLF) Revenue and Refunding Bonds—Water Quality Series outstanding, broken down by series as follows:

Series	Type	Interest Rate	Maturity		Current	Long-Term	Total
2005	Serial	5.50%	2023	$	4,310,000	-	4,310,000
2010B-2	Serial	4.192%	2024		-	11,390,000	11,390,000
	Term	4.042% to 4.879%	2023-2034		4,675,000	386,475,000	391,150,000
WPCLF Water Quality Series Totals					8,985,000	397,865,000	406,850,000
		Add: unamortized premiums			41,813	-	41,813
				$	9,026,813	397,865,000	406,891,813

The WPCLF – Water Quality Series debt service requirements to maturity are as follows:

		Principal	Interest *	Total
2023	$	8,985,000	19,653,145	28,638,145
2024		56,525,000	18,687,331	75,212,331
2025		55,685,000	15,977,749	71,662,749
2026		60,645,000	13,194,158	73,839,158
2027		54,580,000	10,309,449	64,889,449
2028-2032		141,475,000	24,270,342	165,745,342
2033-2034		28,955,000	1,664,471	30,619,471
	$	406,850,000	103,756,645	510,606,645

* In 2010, the Authority sold Federally Taxable BABs, which receive a cash subsidy payment from the United States Treasury equaling 35% of interest paid. In 2022, the subsidy continued to be reduced by 5.7%, resulting in an effective subsidy equaling 33% of interest paid. The interest reported in this table is the gross interest due on the bonds. The total interest due, net of the BABs subsidy over the remaining life of the bonds, will be $69,381,100.

Prior redemption of WPCLF—Water Quality Series Bonds, by series, is as follows:

a) Water Quality Refunding Series 2005 – These bonds are not subject to redemption prior to stated maturity.
b) Water Quality Series 2010B-2 – 1) The BABs are subject to mandatory redemption beginning June 1, 2019. 2) The BABs shall be subject to an optional redemption prior to maturity, at the option of the Authority, in whole or in part, on any business day, at the make-whole redemption price. 3) The BABs are subject to extraordinary optional redemption if Section 54AA or 6431 of The Internal Revenue Code of 1986 is modified, amended, or interpreted in a manner pursuant to which the Authority's 35% cash subsidy payment from the United States Treasury is reduced or eliminated.

LGA reimbursements of WPCLF project costs of principal and interest (from loans made prior to May 1, 2014), pursuant to the WPCLF loan agreements, are primarily pledged as security for the WPCLF Water Quality Bonds, next to the WPCLF Water Quality Debt Service Reserve (DSR) for any shortages from the required DSR balance, and subordinately pledged as security for the WPCLF Bonds. LGA reimbursements of WPCLF project costs of interest from loans made after May 1, 2014, pursuant to WPCLF loan agreements are pledged first to any WPCLF State Match Bonds outstanding, second to WPCLF Water Quality Bonds, and third to WPCLF Bonds outstanding. In the event that LGA reimbursements of WPCLF principal and interest project costs are insufficient to cover WPCLF Water Quality debt service payments, unencumbered assets of the WPCLF Water Quality Debt Service Reserve, Surplus, and Other Projects accounts are also pledged as security for the bonds. For 2022, the amount received from reimbursements of WPCLF principal and interest project costs were $445,086,654, compared to the required bond debt service payments of $38,632,128.

The bond resolutions provide for five separate accounts designated as Net Bond Proceeds account, Debt Service account, Debt Service Reserve account, Cost of Issuance account, and Rebate account. As of December 31, 2022, there is no accrued rebate liability for these bonds.

Amounts received as principal and the interest (from loans made prior to May 1, 2014) from the LGAs as reimbursement of project or construction costs are deposited in the Repayment account. The trustee then allocates or pays out moneys in the Repayment account as follows:

a) To the Debt Service account, (1) all revenues as soon as received until the balance in the Debt Service account equals an amount which, when added to any balance then on deposit in the Debt Service account and available for such purpose, will be equal to the sum of (a) the interest on all outstanding WPCLF Water Quality Bonds due on the next interest payment date, (b) the principal of all outstanding WPCLF Water Quality Bonds due on the next interest payment date, and (c) the mandatory sinking fund requirement for all outstanding WPCLF Water Quality Bonds due on the next interest payment date and (2) on the last day of May and November, the amount contained in a direction from the Authority to be used to purchase WPCLF Water Quality Bonds received by the trustee pursuant to any invitation to the holders to tender such WPCLF Water Quality Bonds in accordance with the provisions of the applicable Series resolution.
b) To the trustee for the payment of its fees on the last day of each May and November.
c) To the Debt Service Reserve account, a semiannual sum on June 1 and December 1 as may be necessary to maintain in the Debt Service Reserve account investments or cash having a value

at least equal to the lesser of 50% of the maximum annual bond service charges required to be paid on all Water Quality Bonds outstanding.

d) To the Rebate Fund, as necessary to make any payment required under section 148(f) of the Internal Revenue Code.

e) To the WPCLF Bonds to cover principal and interest due on the next payment date.

After the Debt Service Reserve account has reached the required reserve fund balance, interest earned on that balance will be transferred to the Debt Service account on the last day of May or November of each year.

(7) WATER POLLUTION CONTROL LOAN FUND REVENUE AND REFUNDING BONDS AND NOTES SERIES

As of December 31, 2022, there was $2,761,570,000 of Water Pollution Control Loan Fund Revenue and Refunding Bonds and Notes Series outstanding, broken down by series as follows:

Series	Type	Interest Rate	Maturity	Current	Long-Term	Total
2014	Serial	5.00%	2023-2024	$ 79,350,000	30,350,000	109,700,000
2015A	Serial	5.00%	2023-2026	50,000,000	145,000,000	195,000,000
2015B	Serial	5.00%	2025-2030	-	92,300,000	92,300,000
	Term	5.00%	2029	-	12,570,000	12,570,000
2016A	Serial	Variable	2031-2036	-	200,000,000	200,000,000
2017A	Serial	5.00%	2026-2030	-	330,000,000	330,000,000
	Term	5.00%	2031	-	70,000,000	70,000,000
2019A	Serial	5.00%	2025-2029	-	450,000,000	450,000,000
2019B	Serial	5.00%	2032	-	14,070,000	14,070,000
	Term	3.00% to 5.00%	2033-2046	-	285,930,000	285,930,000
2020A	Serial	5.00%	2029-2033	-	166,000,000	166,000,000
	Term	5.00%	2034-2050	-	284,000,000	284,000,000
2020B	Serial	5.00% to 5.25%	2023-2033	12,300,000	135,395,000	147,695,000
	Term	4.00% to 5.25%	2034-2038	-	70,305,000	70,305,000
2021	Serial	4.00% to 5.00%	2026-2034	-	44,000,000	44,000,000
	Term	4.00% to 5.00%	2035-2046	-	206,000,000	206,000,000
2022	Note	3.07%	2023	84,000,000	-	84,000,000
WPCLF Bonds and Notes Series Totals				225,650,000	2,535,920,000	2,761,570,000
		Add: unamortized premiums		-	409,878,097	409,878,097
				$ 225,650,000	2,945,798,097	3,171,448,097

The WPCLF State Match Note Series 2022 was issued on August 1, 2022 to provide match requirements for the capitalization grants received. The note matures on July 31, 2023 and is not callable prior to this date. The note is a direct placement with the State of Ohio. Events of default or termination include failure to make payment of principal or interest on the maturity date as well as failure to perform or observe any other covenant of the agreement.

The WPCLF Bonds and Notes Series debt service requirements to maturity are as follows:

		Principal	Interest	Total
*2023	$	225,650,000	123,293,913	348,943,913
2024		110,350,000	114,116,438	224,466,438
2025		134,985,000	108,398,813	243,383,813
2026		144,530,000	101,476,813	246,006,813
2027		141,765,000	94,300,063	236,065,063
2028-2032		942,055,000	319,113,188	1,261,168,188
2033-2037		551,885,000	177,124,713	729,009,713
2038-2042		280,380,000	82,489,750	362,869,750
2043-2047		163,970,000	36,504,325	200,474,325
2048-2050		66,000,000	5,475,000	71,475,000
	$	2,761,570,000	1,162,293,016	3,923,863,016

*The 2023 bonds and notes includes the maturity of $84 million of WPCLF State Match Note Series 2022 that will be redeemed on July 31, 2023 using excess interest on prior loan repayments.

The WPCLF 2016A Bonds have a variable rate that is reset weekly by a remarketing agent. The Bonds interest payments to maturity are based on the weighted average interest rate of 0.93% for these bonds from the issuance date of January 1, 2018 to December 31, 2022.

The Authority has four undrawn bank funding commitments in the WPCLF Program totaling $1 billion. Specific information for these four bank funding commitments in WPCLF is detailed below:

Bank	Type		Commitment Amount ^	Commitment Expiration Date
Bank of America	Direct placement	$	400,000,000	4/10/2023
Huntington Investment Company	Direct borrowing		100,000,000	7/30/2023
*PNC	Direct placement		200,000,000	10/17/2024
RBC Capital Markets	Direct placement		300,000,000	1/15/2025
		$	1,000,000,000	

^ In the event the Authority adds any new bank commitment product, renews any of these products, or draws funds from any of these products, an event filing will be made with the MSRB through its EMMA system within ten business days.

*PNC facility of $300 million can be allocated to both WPCLF and DWAF, or can be used solely for either program as long as total capacity does not exceed $300 million. As of December 31, 2022, $200 million and $100 million are allocated to WPCLF and DWAF, respectively.

Prior redemption of WPCLF Bonds and Notes, by series, is as follows:

a) WPCLF Series 2014 – These bonds are not subject to redemption prior to their stated maturity.
b) WPCLF Series 2015A – These bonds are not subject to redemption prior to their stated maturity.
c) WPCLF Refunding Series 2015B – The bonds maturing on or after June 1, 2026 are callable for redemption prior to maturity at the option of the Authority, in whole or in part, on or after December 1, 2025, at par plus accrued interest.
d) WPCLF Series 2016A – These bonds are subject to redemption to maturity on the first business day of any month, at the option and direction of the Authority, in whole or in part, at a redemption price of par plus accrued interest.
e) WPCLF Series 2017A – The bonds maturing on or after June 1, 2027 are callable for redemption prior to maturity at the option of the Authority, in whole or in part, on or after June 1, 2027, at par plus accrued interest.
f) WPCLF Series 2019A – These bonds are subject to prior redemption at the sole option of the Authority, in whole or in part, on or after March 1, 2029, at par plus accrued interest to the redemption date.
g) WPCLF Series 2019B – These bonds are subject to prior redemption at the sole option of the Authority, in whole or in part, on or after December 1, 2029, at par plus accrued interest to the redemption date.
h) WPCLF Series 2020A – These bonds are subject to prior redemption at the sole option of the Authority, in whole or in part, on or after June 1, 2030, at par plus accrued interest to the redemption date.
i) WPCLF Series 2020B – These bonds are subject to prior redemption at the sole option of the Authority, in whole or in part, on or after December 1, 2030, at par plus accrued interest to the redemption date.
j) WPCLF Series 2021 – These bonds are subject to prior redemption at the sole option of the Authority, in whole or in part, on or after December 1, 2031, at par plus accrued interest to the redemption date.
k) WPCLF State Match Note Series 2022– The note is not subject to redemption prior to maturity. The principal is payable when due on July 31, 2023.

LGA reimbursements of WPCLF project costs of principal and interest (from loans made prior to May 1, 2014), pursuant to WPCLF loan agreements, are pledged as security for the WPCLF Bonds and Notes on a subordinate basis to the WPCLF Water Quality Bonds. LGA reimbursements of WPCLF project costs of interest from loans made after May 1, 2014, pursuant to WPCLF loan agreements are pledged first to any WPCLF State Match Bonds outstanding, second to WPCLF Water Quality Bonds, and third to WPCLF Bonds and Notes outstanding. WPCLF Bond and Note debt service is funded after all WPCLF Water Quality debt service due on the next debt service payment date is funded and, if necessary, any shortages of the WPCLF Water Quality DSR required balance is funded. In the event that LGA reimbursements of WPCLF project costs of principal and interest are insufficient to cover WPCLF Water Quality and/or WPCLF Bond and Note debt service payments, any unencumbered assets of the WPCLF Water Quality Debt Service Reserve, Surplus, and Other Projects accounts are also pledged as security for the bonds and notes. For 2022, the amount received from reimbursements of WPCLF principal and interest project costs after funding of WPCLF Water Quality Debt Service was $416,454,526, compared to the required bond and note debt service payments of $278,456,372.

The bond and note resolutions provide for five separate accounts designated as Net Bond Proceeds account, Debt Service account, Debt Service Reserve account, Cost of Issuance account, and Rebate account. As of December 31, 2022, there is no accrued rebate liability for these bonds and notes.

Amounts received as principal and interest from the LGAs as reimbursement of project or construction costs are deposited in the Repayment account. After all WPCLF Water Quality debt service and DSR funding needs are met, the trustee then allocates or pays out moneys in the Repayment account to WPCLF Bonds and Notes as follows:

a) To the Debt Service account, (1) all revenues as soon as received until the balance in the Debt Service account equals an amount which, when added to any balance then on deposit in the Debt Service account and available for such purpose, will be equal to the sum of (a) the interest on all outstanding WPCLF Bonds and Notes due on the next interest payment date, (b) the principal of all outstanding WPCLF Bonds and Notes due on the next interest payment date, and (c) the mandatory sinking fund requirement for all outstanding WPCLF Bonds and Notes due on the next interest payment date, and (2) on the last day of May and November, the amount contained in a direction from the Authority to be used to purchase WPCLF Bonds and Notes received by the trustee pursuant to any invitation to the holders to tender such WPCLF Bonds and Notes in accordance with the provisions of the applicable Series resolution.

b) To the trustee for the payment of its fees on the last day of each May and November.

c) If applicable, to the Debt Service Reserve account, a semiannual sum on June 1 and December 1 as may be necessary to maintain in the Debt Service Reserve account investments or cash having a value at least equal to the required reserve fund balance.

d) To the Rebate Fund, as necessary to make any payment required under section 148(f) of the Internal Revenue Code.

After the Debt Service Reserve account has reached the required reserve fund balance, interest earned on that balance will be transferred to the Debt Service account on the last day of May or November of each year.

(8) DRINKING WATER ASSISTANCE FUND REVENUE AND REFUNDING BONDS—LEVERAGE SERIES

As of December 31, 2022, there was $2,135,000 of Drinking Water Assistance Fund (DWAF) Revenue and Refunding Bonds—Leverage Series outstanding, broken down by series as follows:

Series	Type	Interest Rate	Maturity		Current	Long-Term	Total
2005	Serial	5.25%	2023	$	750,000	-	750,000
2014	Serial	4.00% to 5.00%	2023-2024		695,000	690,000	1,385,000
DWAF Leverage Series Totals					1,445,000	690,000	2,135,000
		Add: unamortized premiums			4,151	38,995	43,146
				$	1,449,151	728,995	2,178,146

The DWAF Leverage Series debt service requirements to maturity are as follows:

		Principal	Interest	Total
2023	$	1,445,000	81,988	1,526,988
2024		690,000	17,250	707,250
	$	2,135,000	99,238	2,234,238

Prior redemption of DWAF—Leverage Series Bonds, by series, is as follows:

a) Leverage Refunding Series 2005 – These bonds are not subject to redemption prior to their stated maturity.
b) Leverage Refunding Series 2014 – These bonds are not subject to redemption prior to their stated maturity.

LGA reimbursements of DWAF project costs of principal and interest (from loans made prior to August 3, 2016), pursuant to DWAF loan agreements, are primarily pledged as security for the DWAF Leverage bonds, next to the DWAF Leverage DSR for any shortages from the required DSR balance, and subordinately as security for DWAF Bonds. LGA reimbursements of DWAF project costs of interest from loans made after August 3, 2016, pursuant to DWAF loan agreements, are pledged first to any DWAF State Match Bonds outstanding, second to DWAF Leverage Bonds, and third to DWAF Bonds outstanding. In the event that LGA reimbursements of DWAF principal project costs are insufficient to cover DWAF Leverage debt service payments, unencumbered assets of the DWAF Leverage Debt Service Reserve and Other Projects accounts are also pledged as security for the bonds. For 2022, the amount received from reimbursements of DWAF principal and interest project costs were $87,621,057, compared to the required bond debt service payments of $10,509,844.

The bond resolutions provide for five separate accounts designated as Net Bond Proceeds account, Debt Service account, Debt Service Reserve account, Cost of Issuance account, and Rebate account. As of December 31, 2022, there is no accrued rebate liability for these bonds.

Amounts received as principal and interest from the LGAs as reimbursement of project or construction costs are deposited in the Principal and Additional Pledged Loan Interest Repayment accounts. The trustee then allocates or pays out moneys in the Principal Repayment account first and Additional Pledged Loan Interest Repayment account (after all moneys of the Principal Repayment account are used for debt service) as follows:

a) To the Debt Service account, (1) all revenues as soon as received until the balance in the Debt Service account equals an amount which, when added to any balance then on deposit in the Debt Service account and available for such purpose, will be equal to the sum of (a) the interest on all outstanding DWAF Leverage Bonds due on the next interest payment date, (b) the principal of all outstanding DWAF Leverage Bonds due on the next interest payment date, and (c) the mandatory sinking fund requirement for all outstanding DWAF Leverage Bonds due on the next interest payment date, and (2) on the last day of May, the amount contained in a direction from the Authority to be used to purchase DWAF Leverage Bonds received by the trustee pursuant to any invitation to the holders to tender such DWAF Leverage Bonds in accordance with the provisions of the applicable Series resolution.
b) To the trustee for the payment of its fees on the last day of each May and November.

c) To the Debt Service Reserve account, a semiannual sum on June 1 and December 1 as may be necessary to maintain in the Debt Service Reserve account investments or cash having a value at least equal to the lesser of 50% of the maximum annual bond service charges required to be paid on all DWAF Leverage Bonds issued and outstanding, or 10% of the principal amount of DWAF Leverage Bonds issued and outstanding computed in accordance with the Trust Agreement.

d) To the Rebate Fund, as necessary to make any payment required under section 148(f) of the Internal Revenue Code.

After the Debt Service Reserve account has reached the required reserve fund balance, interest earned on that balance will be transferred to the Debt Service account on the last day of May or November of each year.

(9) DRINKING WATER ASSISTANCE FUND REVENUE BONDS AND NOTES SERIES

As of December 31, 2022, there was $690,355,000 of Drinking Water Assistance Fund Revenue Bonds and Notes outstanding, broken down by series as follows:

Series	Type	Interest Rate	Maturity	Current	Long-Term	Total
2016	Serial	4.00% to 5.00%	2023-2029	$ 13,000,000	61,500,000	74,500,000
	Term	4.00% to 5.00%	2030-2037	-	48,000,000	48,000,000
2019A	Serial	2.00% to 5.00%	2023-2029	14,000,000	214,000,000	228,000,000
2019B	Serial	5.00%	2023-2030	3,735,000	30,120,000	33,855,000
2021	Serial	5.00%	2030-2034	-	50,000,000	50,000,000
	Term	5.00%	2035-2039	-	75,000,000	75,000,000
2022	Serial	5.00%	2025-2035	-	82,000,000	82,000,000
	Term	5.00%	2036-2042	-	68,000,000	68,000,000
2022	Note	3.07%	2023	31,000,000	-	31,000,000
DWAF Bonds Series Totals				61,735,000	628,620,000	690,355,000
		Add: unamortized premiums		-	114,060,418	114,060,418
				$ 61,735,000	742,680,418	804,415,418

The DWAF State Match Note Series 2022 was issued on August 1, 2022 to provide match requirements for the capitalization grants received. The note matures on July 31, 2023 and is not callable prior to this date. The note is a direct placement with the State of Ohio. Events of default or termination include failure to make payment of principal or interest on the maturity date as well as failure to perform or observe any other covenant of the agreement.

The DWAF Bonds and Notes Series debt service requirements to maturity are as follows:

		Principal	Interest	Total
*2023	$	61,735,000	32,894,025	94,629,025
2024		30,915,000	30,654,875	61,569,875
2025		34,105,000	29,119,250	63,224,250
2026		37,310,000	27,349,000	64,659,000
2027		36,525,000	25,493,375	62,018,375
2028-2032		274,765,000	83,834,375	358,599,375
2033-2037		130,000,000	39,142,500	169,142,500
2038-2042		85,000,000	10,725,000	95,725,000
	$	690,355,000	279,212,400	969,567,400

*The 2023 bonds and notes includes the maturity of $31 million of DWAF State Match Note Series 2022 that will be redeemed on July 31, 2023 using excess interest on prior loan repayments.

The Authority has three undrawn bank funding commitments in the DWAF Program totaling $400 million. Specific information for these three bank funding commitments in DWAF is detailed below:

Bank	Type		Commitment Amount ^	Commitment Expiration Date
Bank of America	Direct placement	$	150,000,000	5/31/2024
Huntington Investment Company	Direct borrowing		150,000,000	11/01/2024
*PNC	Direct placement		100,000,000	10/17/2024
		$	400,000,000	

^ In the event the Authority adds any new bank commitment product, renews any of these products, or draws funds from any of these products, an event filing will be made with the MSRB through its EMMA system within ten business days.

*PNC facility of $300 million can be allocated to both WPCLF and DWAF, or can be used solely for either program as long as total capacity does not exceed $300 million. As of December 31, 2022, $200 million and $100 million are allocated to WPCLF and DWAF, respectively.

Prior redemption of DWAF Bonds and Notes, by series, is as follows:

a) DWAF Series 2016 – The bonds maturing on or after June 1, 2027 are subject to prior redemption by and at the sole option of the Authority in whole multiples of $5,000, either in whole or in part on any date on or after December 1, 2026, at a redemption price of par plus accrued interest.
b) DWAF Series 2019A – 1) The bonds are subject to prior redemption at the sole option of the Authority, in whole or in part, on or after September 1, 2029, at par plus accrued interest to the redemption date. 2) Due to the TIPRA requirement to lend more than 95% of proceeds within

three years, the bonds maturing on and after December 1, 2022 are subject to extraordinary mandatory redemption, in whole or in part, at a redemption price of 102% of the principal part redeemed plus accrued interest to the redemption date. Such redemption is to be made on October 1, 2022 in an amount equal to the excess of 95% of net proceeds over the amount of proceeds used to make loans. This lending requirement was met on October 9, 2020. The Authority gave notice with a voluntary MSRB filing through its EMMA system.

c) DWAF Refunding Series 2019B – These bonds are not subject to redemption prior to their stated maturity.
d) DWAF Series 2021 – 1) The bonds are subject to prior redemption at the sole option of the Authority, in whole or in part, on or after June 1, 2031, at par plus accrued interest to the redemption date. 2) Due to the TIPRA requirement to lend more than 95% of proceeds within three years, the bonds are subject to extraordinary mandatory redemption, in whole or in part, at a redemption price of 102% of the principal part redeemed plus accrued interest to the redemption date. Such redemption to be made on March 1, 2024 in an amount equal to the excess of 95% of net proceeds over the amount of proceeds used to make loans. This lending requirement was met on January 13, 2022. The Authority gave notice with a voluntary MSRB filing through its EMMA system.
e) DWAF Series 2022 – 1) The bonds maturing on or after June 1, 2033, are subject to prior redemption by and at the sole option of the Authority in whole multiples of $5,000, either in whole or in part on any date on or after December 1, 2032, at a redemption price of par plus accrued interest.
f) DWAF State Match Note Series 2022 - The note is not subject to redemption prior to maturity. The principal is payable when due on July 31, 2023.

LGA reimbursements of DWAF project costs of principal and interest (from loans made prior to August 3, 2016), pursuant to DWAF loan agreements, are pledged as security for the DWAF Bonds on a subordinate basis to the DWAF Leverage Bonds. LGA reimbursements of DWAF project costs of interest from loans made after August 3, 2016, pursuant to DWAF loan agreements are pledged first to any DWAF State Match Bonds outstanding, then to DWAF Leverage Bonds, and third to DWAF Bonds outstanding. DWAF Bond debt service is funded after all DWAF Leverage debt service due on the next debt service payment date is funded and, if necessary, any shortages of the DWAF Leverage DSR required balance is funded. In the event that LGA reimbursements of DWAF project costs of principal and interest are insufficient to cover DWAF Leverage and/or DWAF Bond debt service payments, any unencumbered assets of the DWAF Leverage Debt Service Reserve, Surplus, and Other Projects accounts are also pledged as security for the bonds. For 2022, the amount received from reimbursements of DWAF principal and interest project costs after funding of DWAF Leverage debt service was $77,111,213, compared to the required bond debt service payments of $47,441,375.

The bond resolutions provide for five separate accounts designated as Net Bond Proceeds account, Debt Service account, Debt Service Reserve account, Cost of Issuance account, and Rebate account. As of December 31, 2022, there is no accrued rebate liability for these bonds.

Amounts received as principal and interest from the LGAs as reimbursement of project or construction costs are deposited in the Principal and Additional Pledged Loan Interest Repayment accounts. After all DWAF Leverage debt service and DSR funding needs are met, the trustee then allocates or pays out moneys in the Principal Repayment account first and Additional Pledged Loan Interest Repayment account (after all moneys of the Principal Repayment account are used for debt service) as follows:

a) To the Debt Service account, (1) all revenues as soon as received until the balance in the Debt Service account equals an amount which, when added to any balance then on deposit in the Debt Service account and available for such purpose, will be equal to the sum of (a) the interest on all outstanding DWAF Bonds due on the next interest payment date, (b) the principal of all outstanding DWAF Bonds due on the next interest payment date, and (c) the mandatory sinking fund requirement for all outstanding DWAF Bonds due on the next interest payment date, and (2) on the last day of May and November, the amount contained in a direction from the Authority to be used to purchase DWAF Bonds received by the trustee pursuant to any invitation to the holders to tender such DWAF Bonds in accordance with the provisions of the applicable Series resolution.

b) To the trustee for the payment of its fees on the last day of each May and November.

c) If applicable, to the Debt Service Reserve account, a semiannual sum on June 1 and December 1 as may be necessary to maintain in the Debt Service Reserve account investments or cash having a value at least equal to the required reserve fund balance.

d) To the Rebate Fund, as necessary to make any payment required under section 148(f) of the Internal Revenue Code.

After the Debt Service Reserve account has reached the required reserve fund balance, interest earned on that balance will be transferred to the Debt Service account on the last day of May or November of each year.

(10) WATER DEVELOPMENT REVENUE BONDS AND NOTES—INDUSTRIAL SERIES

The Authority established the industrial program for the expressed purpose of making available to private industries and certain municipalities lower cost sources of capital financing for the construction of water and solid waste pollution control facilities. Fees are assessed to recover related processing and application costs incurred. The Authority's debt instruments represent a limited obligation payable solely from payments made by the borrowing entities. Under the financing agreements, industrial companies and municipalities are required to make payments for a period of up to 35 years, sufficient to pay, as they become due, interest and principal on the bonds and notes issued to finance the projects.

This debt listed below is not deemed to constitute debt of the Authority or a pledge of faith and credit of the Authority. Accordingly, these bonds are not a liability of the Authority and therefore are not reflected in the accompanying financial statements. Below are the three conduit debt obligations outstanding as of December 31, 2022:

1.) The Consumers Ohio Water Company Project bonds were issued by the Authority to provide funds to finance or refinance water management facilities for Consumers Ohio Water Company. These bonds are not general obligations of the State of Ohio or any political subdivision and are not payable from any tax source; therefore, the rights of the holders of the bonds for payment of amounts due are limited solely to the revenues and funds pledged. The bonds represent conduit debt and are not reflected in the accompanying financial statements. Payment of the principal and interest on the bonds when due are insured by a financial guaranty insurance policy.

2.) The Duke Energy Ohio, Inc. Project bonds were issued by the Authority to provide funds to refinance a portion of the costs of the acquisition, construction, and installation of portions of certain waste water and solid waste facilities, and certain air quality facilities at various generating stations for Duke Energy Ohio, Inc. These bonds are not general obligations of the State of Ohio or any political subdivision and are not payable from any tax source; therefore, the rights of the holders of the bonds for payment of amounts due are limited solely to the pledged receipts deposited into the Bond Fund created by the Trustee. The bonds represent conduit debt and are not reflected in the accompanying financial statements. Payment of the principal and interest on each issue of the bonds when due will be insured by separate bond insurance policies.

3.) The Republic Services, Inc. Project bonds were issued by the Authority for the purpose of refunding certain bonds previously issued by the Authority to finance solid waste disposal facilities. These bonds are not general obligations of the State of Ohio or any political subdivision and are not payable from any tax source; therefore, the rights of the holders of the bonds for payment of amounts due are limited solely from and secured by the pledge of the revenues. The bonds represent conduit debt and are not reflected in the accompanying financial statements. There is no initial or planned guaranty or third-party credit or liquidity facility supporting the purchase or payment of principal and interest on the bonds.

As of December 31, 2022, revenue refunding bonds that represent conduit debt for the Authority were as follows:

		Outstanding Amount
Consumers Ohio Water Company Project	$	10,880,000
Duke Energy Ohio, Inc. Project		21,400,000
Republic Services, Inc. Project		30,000,000
	$	62,280,000

(11) DEFINED BENEFIT PENSION PLAN

The net pension liability reported on the statement of net position represents a liability to employees for pensions. Pensions are a component of exchange transactions–between an employer and its employees–of salaries and benefits for employee services. Pensions are provided to an employee–on a deferred-payment basis–as part of a total compensation package offered by an employer for employee services each financial period. The obligation to sacrifice resources for pensions is a present obligation because it was created as a result of employment exchanges that already have occurred.

The net pension liability represents the Authority's proportionate share of the Ohio Public Employees Retirement System (OPERS) Pension Plan's collective actuarial present value of projected benefit payments attributable to past periods of service, net of its fiduciary net position. The net pension liability calculation is dependent on critical long-term variables, including estimated average life expectancies, earnings on investments, cost-of-living adjustments, and others. While these estimates use the best information available, unknowable future events require adjusting this estimate annually.

The Ohio Revised Code (ORC) limits the Authority's obligation for this liability to annually required payments. The Authority cannot control benefit terms or the manner in which pensions are financed; however, the Authority does receive the benefit of employees' services in exchange for compensation including pension.

GASB Statement No. 68 assumes the liability is solely the obligation of the employer, because (1) they benefit from the employee services; and (2) State statute requires all funding to come from these employers. All contributions to date have come solely from these employers (which also includes costs paid in the form of withholdings from employees). State statute requires the OPERS to amortize unfunded liabilities within 30 years. If the amortization period exceeds 30 years, the OPERS Board of Trustees (OPERS Board) must propose corrective action to the State legislature. Any resulting legislation change to benefits or funding could significantly affect the net pension liability. Resulting adjustments to the net pension liability would be effective when the changes are legally enforceable.

Plan Description

Organization – OPERS is a cost-sharing, multiple-employer public employee retirement system comprised of three separate pension plans: The Traditional Pension Plan, a defined benefit plan; the Combined Plan, a combination defined benefit/contribution plan; and the Member-Directed Plan, a defined contribution plan. All state and local governmental employees in Ohio, except those covered by one of the other state or local retirement systems in Ohio, are members of OPERS. New public employees (those who establish membership in OPERS on or after January 1, 2003) have 180 days from the commencement of employment to select membership in one of the three pension plans. Contributions to OPERS are effective with the first day of the member's employment. Contributions made prior to the member's plan selection are maintained in the Traditional Pension Plan and later transferred to the plan elected by the member, as appropriate.

All state and local governmental employees, except those covered by another state retirement system in Ohio or the Cincinnati Retirement System, are required to become contributing members of OPERS when they begin public employment unless they are exempted or excluded as defined by the ORC. For actuarial purposes, employees who have earned sufficient service credit (five years) are entitled to a future retirement benefit from OPERS. Employer, employee, and retiree data as of December 31, 2021 can be found in the annual report.

Pension Benefits – All benefits of the System, and any benefit increases, are established by the legislature pursuant to ORC Chapter 145.

<u>Age-and-Service Defined Benefits</u> – Effective January 7, 2013, Senate Bill (SB) 343 modified components of the Traditional Pension and Combined Plans. Members were impacted by the changes to varying degrees based on their transition group. Three transition groups (A, B, and C) were designed to ease the transition of key components of the pension plan changes. Members who were eligible to retire under law in effect prior to SB 343, or were eligible to retire no later than five years after January 7, 2013, comprise transition Group A. Members who had at least 20 years of service credit prior to January 7, 2013, or will be eligible to retire no later than 10 years after January 7, 2013, are included in transition Group B. Group C included those members who are not in either of the other groups and members who were hired on or after January 7, 2013. Please see the Plan Statement in the annual report for additional details.

Benefits in the Traditional Pension Plan for State and Local members are calculated on the basis of age, final average salary (FAS), and service credit. State and Local members in transition Groups A and B are eligible for retirement benefits at age 60 with five years of service credit or at age 55 with 25 or more years of service credit. Group C for State and Local is eligible for retirement benefits at age 57 with 25 years of service or at age 62 with five years of service. For Groups A and B, the annual benefit is based on 2.2% of FAS multiplied by the actual years of service for the first 30 years of service credit and 2.5% for years of service in excess of 30 years. For Group C, the annual benefit applies a factor of 2.2% for the first 35 years and a factor of 2.5% for the years of service in excess of 35. FAS represents the average of the three highest years of earnings over a member's career for Groups A and B. Group C is based on the average of the five highest years of earnings over a member's career. Refer to the age-and-service tables located in the annual report, Plan Statement, for additional information regarding the requirements for reduced and unreduced benefits. Members who retire before meeting the age-and-years of service credit requirement for unreduced benefit receive a percentage reduction in the benefit amount. The initial amount of a member's pension benefit is vested in upon receipt of the initial benefit payment for calculation of an annual cost-of-living adjustment.

Prior to 2000, payments to OPERS benefit recipients were limited under Section 415(b) of the Internal Revenue Code (IRC). OPERS entered into a Qualified Excess Benefit Arrangement (QEBA) with the Internal Revenue Service (IRS) to allow OPERS benefit recipients to receive their full statutory benefit even when the benefit exceeds IRC 415(b) limitations. Monthly QEBA payments start when the total amount of benefits received by the recipients exceeds the IRC limit each year. The portion of the benefit in excess of the IRC 415(b) limit is paid out of the QEBA and taxed as employee payroll in accordance with IRS regulations.

Benefits in the Combined Plan consist of both an age-and-service formula benefit (defined benefit) and a defined contribution element. The defined benefit element is calculated on the basis of age, FAS, and years of service. Eligibility regarding age-and-years of service in the Combined Plan is the same as the Traditional Pension Plan. The benefit formula for the defined benefit component of the plan for State and Local members in transition Groups A and B applies a factor of 1.0% to the member's FAS for the first 30 years of service. A factor of 1.25% is applied to years of service in excess of 30. The benefit formula for transition Group C applies a factor of 1.0% to the member's FAS for the first 35 years of service and a factor of 1.25% is applied to years in excess of 35. Persons retiring before age 65 with less than 30 years of service credit receive a percentage reduction in benefit.

Defined Contribution Benefits – Defined contribution plan benefits are established in the plan documents, which may be amended by the OPERS Board. Member-Directed Plan and Combined Plan members who have met the retirement eligibility requirements may apply for retirement benefits. The amount available for defined contribution benefits in the Combined Plan consists of the member's contributions plus or minus the investment gains or losses resulting from the member's investment selections. Combined Plan members wishing to receive benefits must meet the requirements for both the defined benefit and defined contribution plans. Member-Directed participants must have attained the age of 55, have money on deposit in the defined contribution plan, and have terminated public service to apply for retirement benefits.

The amount available for defined contribution benefits in the Member-Directed Plan consists of the members' contributions, vested employer contributions, and investment gains or losses resulting from the members' investment selections. Employer contributions and associated investment earnings vest over a five-year period, at a rate of 20% each year. At retirement, members may select one of several distribution options for payment of the vested balance in their individual OPERS accounts. Options include the annuitization of their benefit account (which includes joint and survivor options), partial lump-sum payments (subject to limitations), a rollover of the vested account balance to another financial institution, receipt of entire account balance (net of taxes withheld), or a combination of these options.

Disability Benefits – OPERS administers two disability plans for participants in either the Traditional Pension Plan or Combined Plan. Members in the plan as of July 29, 1992, could elect, by April 7, 1993, coverage under either the original plan or the revised plan. All members who entered OPERS after July 29, 1992 are automatically covered under the revised plan. Under the original plan, a member who becomes disabled before age 60 and has completed five years of total service is eligible for a disability benefit. Benefits are funded by the member and employer contributions and terminate if the member is able to return to work. The revised plan differs in that a member who becomes disabled at any age with five years of total service will be eligible for disability benefits until a determined age. The benefit is funded by reserves accumulated from employer contributions. After the disability benefit ends, the member may apply for a service retirement benefit or a refund of contributions, which are not reduced by the amount of disability benefits received. Members participating in the Member-Directed Plan are not eligible for disability benefits.

Survivor Benefits – Dependents of deceased members who participated in either the Traditional Pension Plan or the Combined Plan may qualify for survivor benefits if the deceased member had at least one and a half years of service credit with the plan, and at least one quarter year of credit within the two and one-half years prior to the date of death. ORC Chapter 145, updated by House Bill 520, and the corresponding Combined Plan document specify the dependents and the conditions under which they qualify for survivor benefits.

Other Benefits – Once a benefit recipient retiring under the Traditional Pension Plan has received benefits for 12 months, the member is eligible for an annual cost-of-living adjustment. This cost-of-living adjustment is calculated on the member's original base retirement benefit at the date of retirement and is not compounded. Members retiring under the Combined Plan receive a cost-of-living adjustment on the defined benefit portion of their retirement benefit. For those who retired prior to January 7, 2013, the cost-of-living adjustment is 3%. For those retiring on or after January 7, 2013, beginning in 2019, the adjustment is based on the average percentage increase in the Consumer Price Index, capped at 3%. A death benefit of $500-$2,500, determined by the number of years of service credit of the retiree, is paid to the beneficiary of a deceased retiree or disability benefit recipient under the Traditional Pension Plan and Combined Plan. Death benefits are not available to beneficiaries of Member-Directed Plan participants.

Money Purchase Annuity – Age-and-service retirees from any of the three pension plans who become re-employed in an OPERS-covered position must contribute the regular contribution rates, which are applied towards a money purchase annuity. The money purchase annuity calculation is based on the accumulated contributions of the retiree for the period of re-employment and an amount of the employer contributions determined by the OPERS Board. Upon termination of service, members over the age of 65 can elect to receive a lump-sum payout or a monthly annuity. Members under age 65 may leave the funds on deposit with OPERS to receive an annuity benefit at age 65, or may elect to receive a refund of their member contributions made during the period of re-employment, plus interest.

<u>Refunds</u> – Members who have terminated service in OPERS-covered employment may file an application for refund of their account. The ORC and applicable plan documents require a two-month waiting period after service termination before the refund may be paid. The acceptance of a refund payment cancels the individual's rights and benefits in OPERS.

Refunds processed for Traditional Pension Plan members include the member's accumulated contributions, interest, and any qualifying employer funds, as determined by the OPERS Board. A Combined Plan member's refund may consist of member contributions for the purchase of service plus interest, qualifying employer funds, as determined by the OPERS Board, and the value of their account in the defined contribution plan consisting of member contributions adjusted by the gains or losses incurred based on their investment selections. Refunds paid to participants in the Member-Directed Plan include member contributions and vested employer contributions adjusted by the gains or losses incurred based on their investment selections.

Contributions – The OPERS funding policy provides for periodic member and employer contributions to all three pension plans at rates established by the OPERS Board, subject to limits set in statute. The rates established for member and employer contributions were approved based upon the recommendations of the OPERS actuary. All contribution rates were within the limits authorized by the ORC.

Member and employer contribution rates, as a percent of covered payroll, were the same for each covered group across all three plans for the year ended December 31, 2021. Within the Traditional Pension Plan and Combined Plan, member and employer contributions (employer contributions only for the Combined Plan) and an actuarially determined rate of return are adequate to accumulate sufficient assets to pay defined benefits when due. Member contributions within the Combined Plan are used to fund the defined contribution benefits and are not used to fund the defined benefit retirement allowance. Employer contribution rates as a level percent of payroll dollars are determined using the entry age actuarial funding method. This formula determines the amount of contributions necessary to fund: (1) the current service cost, representing the estimated amount necessary to pay for defined benefits earned by the members during the current service year; and (2) the prior service cost for service earned prior to the current year and subsequent benefit increases. These contributions represent the amount necessary to fund accrued liabilities for retirement allowances and survivor benefits over a period of time.

The member and employer contribution rates for the State and Local divisions are currently set at the maximums authorized by the ORC of 10.0% and 14.0%, respectively. With the assistance of the OPERS actuary and Board approval, a portion of each employer contribution to OPERS may be set aside for the funding of post-employment health care coverage. For 2022, no portion of the employer contribution rate was allocated to health care for the Traditional Pension Plan and the Combined Plan. The employer contribution as a percent of covered payroll deposited for Member-Directed Plan health care accounts for 2022 was 4.0%. The amount of contributions to OPERS from the Authority during 2021 and 2022 was $182,349 and $191,985, respectively, which represents 100% of the Authority's required contribution. In 2022 and 2021, the Authority did not make any contributions to the Combined Plan, and contributions to the Member-Directed Plan were immaterial.

ORC Chapter 145 assigns authority to the Board to amend the funding policy. As of December 31, 2021, the Board adopted the contribution rates that were recommended by the actuary. The contribution rates were included in a funding policy adopted by the Board in October 2013, and are certified periodically by the Board as required by the ORC.

As of December 31, 2021, the date of the last pension actuarial study, the funding period for all defined benefits of OPERS was 16 years.

Net Pension Liability

The net pension liability was measured as of December 31, 2021, and the total pension liabilities were determined by an actuarial valuation as of that date. The Authority's proportion of the net pension liability was based on both member and employer contributions to OPERS relative to the projected contributions of all participating entities. Following is information related to the Authority's proportionate share of the net pension liability and pension expense:

Proportionate Share of the Net Pension Liability	$ 697,605
CY Proportionate Share	0.008018%
PY Proportionate Share	0.007713%
Change in Proportionate Share	0.000305%
Pension Expense	$ (48,225)

Actuarial Methods and Assumptions

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial-reporting purposes are based on the substantive plan (the plan as understood by the employers and plan members) and include the types of benefits provided at the time of each valuation. The total pension liability was determined by an actuarial valuation as of December 31, 2021, using the following key actuarial assumptions and methods applied to all prior periods included in the measurement in accordance with the requirements of GASB 67. In 2021, the Board's actuarial consultants conducted an experience study for the period 2016 through 2020, comparing assumptions to actual results. The experience study incorporates both a historical review and forward looking projections to determine the appropriate set of assumptions to keep the plan on a path toward full funding. Information from this study led to changes in both demographic and economic assumptions, with most notable being a reduction in the actuarially assumed rate of return from 7.2% down to 6.9%, for the defined benefit investments. Key methods and assumptions used in the latest actuarial valuation, reflecting experience study results, are presented on the following table:

Actuarial Information	Traditional Pension Plan
Measurement and Valuation Date	December 31, 2021
Experience Study	5-Year Period Ended December 31, 2020
Actuarial Cost Method	Individual entry age
Actuarial Assumptions:	
Investment Rate of Return	6.90%
Wage Inflation	2.75%
Projected Salary Increases	2.75% - 10.75% (includes wage inflation at 2.75%)
Cost-of-living Adjustments	Pre-1/7/2013 Retirees: 3.00% Simple Post-1/7/2013 Retirees: 3.00% Simple through 2022, then 2.05% Simple

Pre-retirement mortality rates are based on 130% of the Pub-2010 General Employee Mortality tables (males and females) for State and Local Government divisions. Post-retirement mortality rates are based on 115% of the PubG-2010 Retiree Mortality Tables (males and females) for all divisions. Post-retirement mortality rates for disabled retirees are based on the PubNS-2010 Disabled Retiree Mortality Tables (males and females) for all divisions. For all of the previously described tables, the base year is 2010 and mortality rates for a particular calendar year are determined by applying the MP-2020 mortality improvement scales (males and females) to all of these tables.

The most recent experience study was completed for the five-year period ended December 31, 2020.

During 2021, OPERS managed investments in three investment portfolios: the Defined Benefit portfolio, the Health Care portfolio, and the Defined Contribution portfolio. The Defined Benefit portfolio contains the investment assets of the Traditional Pension Plan, the defined benefit component of the Combined Plan, and the annuitized accounts of the Member-Directed Plan. Within the Defined Benefit Portfolio, contributions into the plans are all recorded at the same time, and benefit payments all occur on the first month. Accordingly, the money-weighted rate of return is considered to be the same for all plans within the portfolio. The annual money-weighted rate of return expressing investment performance, net of investment expenses and adjusted for the changing amounts actually invested, for the Defined Benefit portfolio was a gain of 15.3% for 2021.

The discount rate used to measure the total pension liability was 6.9% for the Traditional Pension Plan, Combined Plan, and Member-Directed Plan. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and those of the contributing employers are made at the contractually required rates, as actuarially determined. Based on those assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments for the Traditional Pension Plan, Combined Plan, and Member-Directed Plan was applied to all periods of projected benefit payments to determine the total pension liability/(asset).

Sensitivity of Net Pension Liability to Changes in the Discount Rate - The following table presents the net pension liability calculated using the discount rate of 6.9% and the expected net pension liability/(asset) if it were calculated using a discount rate that is 1.0% lower or 1.0% higher than the current rate.

Employers Net Pension Liability as of December 31, 2021		**1% Decrease (5.9%)**	**Current Discount Rate (6.9%)**	**1% Increase (7.9%)**
Traditional Pension Plan	$	1,839,352	697,605	(252,421)

The allocation of investment assets within the Defined Benefit portfolio is approved by the OPERS Board as outlined in the annual investment plan. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the defined benefit pension plans. The following table displays the OPERS Board-approved target asset allocation for each major asset class that is included in the Defined Benefit portfolio for 2021 and the weighted average long-term expected real rates of return.

Asset Class	**Target Allocation for 2021**	**Weighted Average Long-Term Expected Real Rate of Return (Geometric)**
Fixed Income	24.00%	1.03%
Domestic Equities	21.00	3.78
Real Estate	11.00	3.66
Private Equity	12.00	7.43
International Equities	23.00	4.88
Risk Parity	5.00	2.92
Other Investments	4.00	2.85
Total	100.00%	4.21

The long-term expected rate of return on defined benefit investment assets was determined using a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation.

Deferred Inflows and Deferred Outflows

At December 31, 2022, the Authority reported deferred inflows of resources and deferred outflows of resources related to pensions from the following sources:

Deferred Inflows of Resources:		
Difference between expected and actual experience	$	15,300
Net difference between projected and actual earnings on pension plan investments		829,776
Total	$	845,076
Deferred Outflows of Resources:		
Differences between expected and actual experience	$	35,563
Change in assumptions		87,235
Change in Authority's proportionate share and difference in employer contributions		65,537
Authority's contributions subsequent to the measurement date		191,985
Total	$	380,320

The $191,985 reported as deferred outflows of resources related to pensions resulting from employer contributions subsequent to the measurement date are recognized as a reduction of the net pension liability in the Authority's financial statements. Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense as disclosed in the following table:

Year Ending December 31		**Traditional Pension Plan Net Deferred Inflows of Resources**
2023	$	(58,288)
2024		(271,341)
2025		(195,114)
2026		(131,998)
Total	$	(656,741)

(12) DEFINED BENEFIT OPEB PLANS

Net OPEB Asset

Other Postemployment Benefits (OPEB) is a component of exchange transactions-–between an employer and its employees—of salaries and benefits for employee services. OPEB are provided to an employee—on a deferred-payment basis—as part of the total compensation package offered by an employer for employee services each financial period.

The net OPEB asset represents the Authority's proportionate share of each OPEB plan's collective actuarial present value of projected benefit payments attributable to past periods of service, net of each OPEB plan's fiduciary net position. The net OPEB asset calculation is dependent on critical long-term variables, including estimated average life expectancies, earnings on investments, cost of living adjustments, and others. While these estimates use the best information available, unknowable future events require adjusting these estimates annually.

Ohio Revised Code limits the Authority's obligation for any liability to annually required payments. The Authority cannot control benefit terms or the manner in which OPEB are financed; however, the Authority does receive the benefit of employees' services in exchange for compensation including OPEB.

GASB Statement No. 75 assumes any liability is solely the obligation of the employer, because they benefit from employee services. OPEB contributions come from these employers and health care plan enrollees which pay a portion of the health care costs in the form of a monthly premium. The Ohio Revised Code permits, but does not require the retirement systems to provide healthcare to eligible benefit recipients. Any change to benefits or funding could significantly affect the net OPEB obligation. Resulting adjustments to the net OPEB obligation would be effective when the changes are legally enforceable. The retirement systems may allocate a portion of the employer contributions to provide for these OPEB benefits.

Plan Description

Plan Description - The Ohio Public Employees Retirement System (OPERS) administers three separate pension plans: the traditional pension plan, a cost-sharing, multiple-employer defined benefit pension plan; the member-directed plan, a defined contribution plan; and the combined plan, a cost-sharing, multiple-employer defined benefit pension plan that has elements of both a defined benefit and defined contribution plan.

OPERS maintains a cost-sharing, multiple-employer defined benefit post-employment health care trust, which funds multiple health care plans including medical coverage, prescription drug coverage, and deposits to a Health Reimbursement Arrangement to qualifying benefit recipients of both the traditional pension and the combined plans. This trust is also used to fund health care for member-directed plan participants, in the form of a Retiree Medical Account (RMA). At retirement or refund, member-directed plan participants may be eligible for reimbursement of qualified medical expenses from their vested RMA balance.

In order to qualify for postemployment health care coverage, age and service retirees under the traditional pension and combined plans must have twenty or more years of qualifying Ohio service credit. Health care coverage for disability benefit recipients and qualified survivor benefit recipients is available. The health care coverage provided by OPERS meets the definition of an OPEB as described in GASB Statement 75. See OPERS' annual report referenced below for additional information.

The Ohio Revised Code permits, but does not require, OPERS to provide health care to its eligible benefit recipients. Authority to establish and amend health care coverage is provided to the Board in Chapter 145 of the Ohio Revised Code.

Disclosures for the health care plan are presented separately in the OPERS financial report. Interested parties may obtain a copy by visiting https://www.opers.org/financial/reports.shtml, by writing to OPERS, 277 East Town Street, Columbus, Ohio 43215-4642, or by calling 1-800-222-7377.

Funding Policy - The Ohio Revised Code provides the statutory authority requiring public employers to fund postemployment health care through their contributions to OPERS. When funding is approved by OPERS' Board of Trustees, a portion of each employer's contribution to OPERS is set aside to fund OPERS health care plans. For 2022, no portion of the employer contribution rate was allocated to health care for the Traditional Pension Plan.

Employer contribution rates are expressed as a percentage of the earnable salary of active members. In 2022, state and local employers contributed at a rate of 14.0% of earnable. This is the maximum employer contribution rate permitted by the Ohio Revised Code. Active member contributions do not fund health care.

With the assistance of the OPERS actuary, the OPERS Board may approve a portion of each employer contribution to OPERS be set aside for the funding of post-employment health care coverage. However, health care funding is subordinate to pension funding. The portion of Traditional Pension Plan and Combined Plan employer contributions allocated to health care was zero in 2022 and 2021, and is expected to remain at that level. The employer contribution as a percentage of covered payroll deposited into the Member-Directed Plan participants' accounts for 2022 was 4.0%. Due to the discretionary nature of health care funding and the potential for frequent changes in allocations, including no funding to health care for some plans, the calculation of proportionate shares of employers is based on total employer contributions.

Employer contribution rates are actuarially determined and are expressed as a percentage of covered payroll. The Authority's contractually required contribution was $0 for 2021 and $0 for 2022.

Net OPEB Asset & OPEB Expense

The net OPEB asset and total OPEB expense for OPERS were determined by an actuarial valuation as of December 31, 2020, rolled forward to the measurement date of December 31, 2021, by incorporating the expected value of health care cost accruals, the actual health care payments, and interest accruals during the year for the defined benefit health care plans. The Authority's proportion of the net OPEB asset was based on the Authority's share of contributions to the retirement plan relative to the contributions of all participating entities. Following is information related to the proportionate share:

	OPERS
Proportion of the Net OPEB Asset/Liability:	
Current Measurement Date	0.009013%
Prior Measurement Date	0.008750%
Change in Proportionate Share	0.000263%
Proportionate Share of the Net OPEB Asset	$ 282,308
OPEB Expense	$ (214,633)

Actuarial Assumptions - OPERS

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future.

Projections of health care costs for financial reporting purposes are based on the substantive plan and include the types of coverage provided at the time of each valuation and the historical pattern of sharing of costs between OPERS and plan members. The total OPEB asset was determined by an actuarial valuation as of December 31, 2020, rolled forward to the measurement date of December 31, 2021.

The actuarial valuation used the following key actuarial assumptions and methods, reflecting experience study results, applied to all prior periods included in the measurement in accordance with the requirements of GASB 74:

Wage Inflation:	
Current Measurement Period	2.75%
Prior Measurement Period	3.25%
Projected Salary Increases:	
Current Measurement Period	2.75% to 10.75%, including wage inflation
Prior Measurement Period	3.25% to 10.75%, including wage inflation
Single Discount Rate:	6.00%
Investment Rate of Return	6.00%
Municipal Bond Rate:	
Current Measurement Period	1.84%
Prior Measurement Period	2.00%
Health Care Cost Trend Rate:	
Current Measurement Period	5.50% initial, 3.50% ultimate in 2034
Prior Measurement Period	8.50% initial, 3.50% ultimate in 2035
Actuarial Cost Method	Individual Entry Age

Pre-retirement mortality rates are based on 130% of the Pub-2010 General Employee Mortality tables (males and females) for State and Local Government divisions. Post-retirement mortality rates are based on 115% of the PubG-2010 Retiree Mortality Tables (males and females) for all divisions. Post-retirement mortality rates for disabled retirees are based on the PubNS-2010 Disabled Retiree Mortality Tables (males and females) for all divisions. For all of the previously described tables, the base year is 2010 and mortality rates for a particular calendar year are determined by applying the MP-2020 mortality improvement scales (males and females) to all of these tables.

The most recent experience study was completed for the five-year period ended December 31, 2020.

During 2021, OPERS managed investments in three investment portfolios: the Defined Benefit portfolio, the Health Care portfolio, and the Defined Contribution portfolio. The Health Care portfolio includes the assets for health care expenses for the Traditional Pension Plan, Combined Plan, and Member-Directed Plan eligible members. Within the Health Care portfolio, contributions into the plans are assumed to be received continuously throughout the year based on actual payroll payable at the time contributions are made, and health care-related payments are assumed to occur mid-year. Accordingly, the money-weighted rate of return is considered to be the same for all plans within the portfolio. The annual money-weighted rate of return expressing investment performance, net of investment expenses and adjusted for the changing amounts actually invested, for the Health Care portfolio was a gain of 14.3% for 2021.

The long-term expected rate of return on defined benefit investment assets was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage, adjusted for inflation.

The allocation of investment assets within the Health Care portfolio is approved by the Board as outlined in the annual investment plan. Assets are managed on a total return basis with a long-term objective of continuing to offer a sustainable health care program for current and future retirees. OPERS' primary goal is to achieve and maintain a fully funded status for benefits provided through the defined pension plans. Health Care is a discretionary benefit. The following table displays the OPERS Board-approved target asset allocation for each major asset class that is included in the Health Care portfolio for 2021 and the weighted average longer-term expected real rates of return:

Asset Class	**Target Allocation for 2021**	**Weighted Average Long-Term Expected Real Rate of Return (Geometric)**
Fixed Income	34.00%	0.91%
Domestic Equities	25.00	3.78
Real Estate Investment Trusts	7.00	3.71
International Equities	25.00	4.88
Risk Parity	2.00	2.92
Other Investments	7.00	1.93
Total	100.00%	3.45

Discount Rate

A single discount rate of 6.00% was used to measure the net OPEB asset on the measurement date of December 31, 2021. Projected benefit payments are required to be discounted to their actuarial present value using a single discount rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the health care fiduciary net position is projected to be sufficient to pay benefits), and (2) a 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 contributions for use with the long-term expected rate are not met). This single discount rate was based on the actuarial assumed rate of return on the health care investment portfolio of 6.00% and a municipal bond rate of 1.84%. The projection of cash flows used to determine this single discount rate assumed that employer contributions will be made at rates equal to the actuarially determined contribution rate. Based on these assumptions, the health care fiduciary net position and future contributions were sufficient to finance health care costs through the year 2121. As a result, the actuarial assumed long-term expected rate of return on health care investments was applied to projected costs through the year 2121, the duration of the projection period through which projected health care payments are fully funded.

Sensitivity of the Authority's Proportionate Share of the Net OPEB Asset to Changes in the Discount Rate

The following table presents the Authority's proportionate share of the net OPEB asset calculated using the single discount rate of 6.00% and the Authority's proportionate share of the expected net OPEB asset if it were calculated using a discount rate that is 1.0% lower or 1.0% higher than the current rate:

		1% Decrease (5.00%)	Single Discount Rate (6.00%)	1% Increase (7.00%)
Authority's proportionate share of the net OPEB asset	$	166,032	282,308	378,844

Sensitivity of the Authority's Proportionate Share of the Net OPEB Asset to Changes in the Health Care Cost Trend Rate

Changes in the health care cost trend rate may also have a significant impact on the net OPEB asset. The following table presents the net OPEB asset calculated using the assumed trend rates and the expected net OPEB asset if it were calculated using a health care cost trend rate that is 1.0% lower or 1.0% higher than the current rate.

Retiree health care valuations use a health care cost trend assumption with changes over several years built into that assumption. The near-term rates reflect increases in the current cost of health care; the trend starting in 2022 is 5.50%. If this trend continues for future years, the projection indicates that years from now virtually all expenditures will be for health care. A more reasonable alternative is the health care cost trend will decrease to a level at, or near, wage inflation. On this basis, the actuaries' project premium rate increases will continue to exceed wage inflation for approximately the next decade, but by less each year, until leveling off at an ultimate rate, assumed to be 3.50% in the most recent valuation.

		1% Decrease	Current Health Care Cost Trend Rate Assumption	1% Increase
Authority's proportionate share of the net OPEB asset	$	285,373	282,308	278,703

Deferred Inflows and Outflows

At December 31, 2022, the Authority reported deferred inflows of resources and deferred outflows of resources related to OPEB from the following sources:

Deferred Inflows of Resources:		
Difference between expected and actual experience	$	42,822
Net difference between projected and actual earnings on OPEB plan investments		134,585
Change in assumptions		114,275
Change in Authority's proportionate share and difference in employer contributions		1,450
	$	293,132
Deferred Outflows of Resources:		
Change in Authority's proportionate share and difference in employer contributions	$	11,070
	$	11,070

Amounts reported as deferred outflows and inflows of resources related to OPEB will be recognized in OPEB expense as disclosed in the following table:

Year Ending December 31		Traditional Pension Plan OPEB Net Deferred Inflows of Resources
2023	$	(170,208)
2024		(63,120)
2025		(29,406)
2026		(19,328)
Total	$	(282,062)

(13) COMMITMENTS

As of December 31, 2022, the Authority has loan commitments to finance LGA construction projects in the following amounts:

Fund		Amount
Other Projects	$	48,760,861
Fresh Water		146,560,456
Water Pollution Control Loan		1,266,049,933
Drinking Water Assistance		559,483,274
	$	2,020,854,524

Loan commitments consist of loan awards that have been encumbered by the Authority but not yet disbursed to the LGAs. The Authority intends to meet these LGA commitments with currently available funds and grant commitments from the U.S. EPA.

(14) TRANSFERS

Interfund transfers for the year ended December 31, 2022 consisted of the following:

Transfers to Other Projects from:		
Fresh Water	$	6,967,505
Transfers from Community Assistance to:		
Fresh Water	$	(7,500,340)
Transfers, net, to (from) Fresh Water from (to):		
Other Projects	$	(6,967,505)
Community Assistance		7,500,340
	$	532,835
Total Transfers, net	$	-

Transfers are used to meet the requirements of certain debt covenants or to fund additional program activities as authorized by the Authority's Board. In the year ended December 31, 2022, the Authority made the following non-routine transfers:

a) $6,967,505 transferred from the Fresh Water Fund to the Other Projects Fund for additional funding for Other Projects Fund loans and grants.

b) $7,500,340 transferred from the Community Assistance Fund to the Fresh Water Fund for additional funding for Fresh Water loans.

(15) CHANGES IN LONG-TERM LIABILITIES

As of December 31, 2022, the Authority has long-term liabilities in the following amounts:

Long-Term Liability	12/31/2021 Balance	Additions	Reductions	12/31/2022 Balance	Due Within One Year	Due in More Than One Year
Compensated Absences	$ 377,269	218,985	175,997	$ 420,257	-	$ 420,257
Borrower Deposits	-	319,543	-	319,543	-	319,543
Net Pension Liability	1,142,151	378,680	823,226	697,605	-	697,605
Revenue Bonds and Notes Payable	5,642,227,427	216,574,260	352,264,185	5,506,537,502	232,788,031	5,273,749,471
Total Long-Term Liabilities	$ 5,643,746,847	217,491,468	353,263,408	$ 5,507,974,907	232,788,031	$ 5,275,186,876

(16) CHANGES IN SHORT-TERM LIABILITIES

As of December 31, 2022, the Authority has the following short-term liability:

Short-Term Liability	12/31/2021 Balance	Additions	Reductions	12/31/2022 Balance
Revenue Notes Payable	$ -	115,000,000	-	$ 115,000,000

OHIO WATER DEVELOPMENT AUTHORITY

Schedule of Proportionate Share of Net Pension Liability
Ohio Public Employees Retirement System

Last Eight Calendar Years*
Unaudited

		2015	2016	2017	2018	2019	2020	2021	2022
Proportion of the net pension liability		0.0095310%	0.0091080%	0.0085060%	0.008748%	0.007756%	0.007459%	0.007713%	0.008018%
Proportionate share of the net pension liability	$	1,149,545	1,577,618	1,931,568	1,372,392	2,124,211	1,474,322	1,142,151	697,605
Covered payroll	$	1,200,805	1,207,158	1,247,362	1,340,687	1,272,812	1,358,368	1,457,890	1,529,620
Proportionate share of the net pension liability as a percentage of covered payroll		95.73%	130.69%	154.85%	102.36%	166.89%	108.54%	78.34%	45.61%
Plan fiduciary net position as a percentage of the total pension liability		86.45%	81.08%	77.25%	84.66%	74.70%	82.17%	86.88%	92.62%

* - Table will begin to cover ten years of data starting with 2015. Amounts presented represent pension amounts as of measurement period, which is one year prior to the date of the financial statements.

Notes to Schedule:

Change in assumptions:

In 2017, changes in assumptions were made based upon an updated experience study that was completed for the five-year period ended December 31, 2015. Significant changes included a reduction of the discount rate from 8.0% to 7.5%, a reduction in the wage inflation rate from 3.75% to 3.25%, and transition from the RP-2000 mortality tables to the RP-2014 mortality tables.

In 2019, a reduction of the discount rate was made from 7.5% to 7.2%.

In 2022, changes in assumptions were made based upon an updated experience study that was completed for the five-year period ended December 31, 2020. Significant changes included a reduction of the discount rate from 7.2% to 6.9%, a reduction in the wage inflation rate from 3.25% to 2.75%, and transition from the RP-2014 mortality tables to Pub-2010 General Employee Mortality tables.

OHIO WATER DEVELOPMENT AUTHORITY

Schedule of Pension Contributions

Ohio Public Employees Retirement System

Last Nine Calendar Years*

Unaudited

		2014	2015	2016	2017	2018	2019	2020	2021	2022
Contractually required contributions	$	140,729	142,358	139,196	146,994	150,591	158,797	175,158	182,349	191,985
Contributions in relation to the contractually required contributions	$	140,729	142,358	139,196	146,994	150,591	158,797	175,158	182,349	191,985
Contribution deficiency (excess)		-	-	-	-	-	-	-	-	-
Covered payroll	$	1,200,805	1,207,158	1,247,362	1,340,687	1,272,812	1,358,368	1,457,890	1,529,620	1,567,866
Contributions as a percentage of covered payroll		11.72%	11.79%	11.16%	10.96%	11.83%	11.69%	12.01%	11.92%	12.24%

* - Table will begin to cover ten years of data starting with 2014.

OHIO WATER DEVELOPMENT AUTHORITY

Schedule of Proportionate Share of Net OPEB Liability/(Asset)
Ohio Public Employees Retirement System

Last Six Calendar Years*
Unaudited

	2017	2018	2019	2020	2021	2022
Proportion of the net OPEB liability/(asset)	0.008506%	0.008875%	0.008219%	0.008342%	0.008750%	0.009013%
Proportionate share of the net OPEB liability/(asset)	$ 853,443	963,778	1,071,526	1,152,246	(155,887)	(282,308)
Covered payroll	$ 1,247,362	1,340,687	1,272,812	1,358,368	1,457,890	1,529,620
Proportionate share of the net OPEB liability/(asset) as a percentage of covered payroll	68.42%	71.89%	84.19%	84.83%	(10.69%)	(18.46%)
Plan fiduciary net position as a percentage of the total OPEB liability	54.05%	54.14%	46.33%	47.80%	115.57%	128.23%

* - Table will begin to cover ten years of data starting with 2017. Amount presented represents OPEB amounts as of measurement period, which is one year prior to the date of the financial statements.

Notes to Schedule:

Change in assumptions:

For 2018, the single discount rate changed from 4.23% to 3.85%.

For 2019, the single discount rate changed from 3.85% to 3.96%. The investment rate of return changed from 6.5% to 6.0% and the health care cost trend rate changed from 7.5% initial to 10.0% initial.

For 2020, the single discount rate changed from 3.96% to 3.16%. The health care cost trend changed from 6.5% to 6.0% and the health care cost trend rate changed from 10.0% initial, 3.25% ultimate in 2029 to 10.5% initial, 3.50% ultimate in 2030.

For 2021, the single discount rate changed from 3.16% to 6.00%. The health care cost trend rate changed from 10.5% initial, 3.5% ultimate in 2030 to 8.50% initial, 3.50% ultimate in 2035.

For 2022, wage inflation & projected salary increases rate changed from 3.25% to 2.75%. Municipal bond rate changed from 2.00% to 1.84%. The healthcare cost trend rate changed from 8.50% initial, 3.5% ultimate in 2035 to 5.50% initial, 3.5% ultimate in 2034.

OHIO WATER DEVELOPMENT AUTHORITY

Schedule of OPEB Contributions

Ohio Public Employees Retirement System

Last Seven Calendar Years*

Unaudited

		2016	2017	2018	2019	2020	2021	2022
Contractually required contributions	$	23,189	11,307	-	-	-	-	-
Contributions in relation to the contractually required contributions	$	23,189	11,307	-	-	-	-	-
Contribution deficiency (excess)		-	-	-	-	-	-	-
Covered payroll	$	1,247,362	1,340,687	1,272,812	1,358,369	1,457,890	1,529,620	1,567,866
Contributions as a percentage of covered payroll		1.86%	0.84%	0.00%	0.00%	0.00%	0.00%	0.00%

* - Table will begin to cover ten years of data starting with 2016.

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CLARK SCHAEFER HACKETT
BUSINESS ADVISORS

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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*

Ohio Water Development Authority
480 South High Street
Columbus, Ohio 43215

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, each major fund, and the aggregate remaining fund information of the Ohio Water Development Authority (the Authority), as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated March 30, 2023.

Report on Internal Control Over Financial Reporting
In planning and performing our audit of the financial statements, we considered the Authority'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 Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority'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 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 were not identified.

Report on Compliance and Other Matters
As part of obtaining reasonable assurance about whether the Authority'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 statement. 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
This 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 Authority'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 Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Clark, Schaefer, Hackett & Co.

Springfield, Ohio
March 30, 2023

OHIO AUDITOR OF STATE
KEITH FABER

OHIO WATER DEVELOPMENT AUTHORITY

FRANKLIN COUNTY

AUDITOR OF STATE OF OHIO CERTIFICATION

This is a true and correct copy of the report, which is required to be filed pursuant to Section 117.26, Revised Code, and which is filed in the Office of the Ohio Auditor of State in Columbus, Ohio.

Certified for Release 5/11/2023

88 East Broad Street, Columbus, Ohio 43215
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